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Alabama Department of Environmental Management
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FEB 11 2026

Jeffrey Miller, Vice President
American Water Enterprise-MSG
American Water Enterprises, LLC
Post Office Box 620397
Fort Rucker, AL 36362

RE: Draft Permit
NPDES Permit No. AL0076821
Fort Rucker Main WWTP
Dale County, Alabama

Dear Mr. Miller:

Transmitted herein is a draft of the referenced permit.

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

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

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

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

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



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

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

Coastal Office
1615 South Broad Street
Mobile, AL 36605
(251) 450-3400
(251) 479-2593 (FAX)

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

Sincerely,

A handwritten signature in black ink that reads "Sandra" followed by a stylized flourish.

Sandra Lee
Municipal Section
Water Division

Enclosure

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



NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

PERMITTEE: AMERICAN WATER ENTERPRISES, LLC
POST OFFICE BOX 620397
FORT RUCKER, AL 36362

FACILITY LOCATION: FORT RUCKER MAIN WWTP (2.5 MGD)
BUILDING 9801 RED CLOUD ROAD
FORT RUCKER, ALABAMA
DALE COUNTY

PERMIT NUMBER: AL0076821

RECEIVING WATERS: CLAYBANK 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
Water Division Chief

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PART I: DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS**A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS****1. DSN 0011: Treated Domestic Wastewater**

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

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq See note (1)	Sample Type	Seasonal See note (2)
Oxygen, Dissolved (DO) (00300) Effluent Gross Value	*****	*****	*****	6.0 Minimum Daily	*****	*****	mg/l	3X Weekly test	Grab	Not Seasonal
pH (00400) Effluent Gross Value	*****	*****	*****	6.0 Minimum Daily	*****	9.0 Maximum Daily	S.U.	3X Weekly test	Grab	Not Seasonal
Solids, Total Suspended (00530) Effluent Gross Value	625 Monthly Average	938 Weekly Average	lbs/day	*****	30.0 Monthly Average	45.0 Weekly Average	mg/l	3X Weekly test	24-Hr Composite	Not Seasonal
Solids, Total Suspended (00530) Raw Sew/Influent	(Report) Monthly Average	(Report) Weekly Average	lbs/day	*****	(Report) Monthly Average	(Report) Weekly Average	mg/l	3X Weekly test	24-Hr Composite	Not Seasonal
Nitrogen, Ammonia Total (As N) (00610) Effluent Gross Value	417 Monthly Average	625 Weekly Average	lbs/day	*****	20.0 Monthly Average	30.0 Weekly Average	mg/l	3X Weekly test	24-Hr Composite	W
Nitrogen, Ammonia Total (As N) (00610) Effluent Gross Value	62.5 Monthly Average	93.8 Weekly Average	lbs/day	*****	3.0 Monthly Average	4.5 Weekly Average	mg/l	3X Weekly test	24-Hr Composite	S
Nitrogen, Kjeldahl Total (As N) (00625) Effluent Gross Value	(Report) Monthly Average	(Report) Weekly Average	lbs/day	*****	(Report) Monthly Average	(Report) Weekly Average	mg/l	Monthly	24-Hr Composite	Not Seasonal
Nitrite Plus Nitrate Total 1 Det. (As N) (00630) Effluent Gross Value	(Report) Monthly Average	(Report) Weekly Average	lbs/day	*****	(Report) Monthly Average	(Report) Weekly Average	mg/l	Monthly	24-Hr Composite	Not Seasonal
Phosphorus, Total (As P) (00665) Effluent Gross Value	(Report) Monthly Average	(Report) Weekly Average	lbs/day	*****	(Report) Monthly Average	(Report) Weekly Average	mg/l	Monthly	24-Hr Composite	Not Seasonal

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

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

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

See Permit Requirements for Stormwater in Part IV.G

(2) S = Summer (May – November)

W = Winter (December - April)

ECS = E. coli Summer (May - October)

ECW = E. coli Winter (November - April)

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

DSN 0011 (Continued): Treated Domestic Wastewater

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

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq See note (1)	Sample Type	Seasonal See note (2)
Copper Total Recoverable (01119) Effluent Gross Value	*****	*****	*****	*****	60.718 Monthly Average	68.812 Maximum Daily	ug/l	Monthly	Grab	Not Seasonal
Flow, In Conduit or Thru Treatment Plant (50050) Effluent Gross Value	(Report) Monthly Average	(Report) Maximum Daily	MGD	*****	*****	*****	*****	Daily	Continuous	Not Seasonal
Chlorine, Total Residual (50060) See note (3) Effluent Gross Value	*****	*****	*****	*****	0.052 Monthly Average	0.090 Maximum Daily	mg/l	3X Weekly test	Grab	Not Seasonal
E. Coli (51040) Effluent Gross Value	*****	*****	*****	*****	548 Monthly Average	2507 Maximum Daily	col/100mL	3X Weekly test	Grab	ECW
E. Coli (51040) Effluent Gross Value	*****	*****	*****	*****	126 Monthly Average	298 Maximum Daily	col/100mL	3X Weekly test	Grab	ECS
BOD, Carbonaceous 05 Day, 20C (80082) Effluent Gross Value	521 Monthly Average	781 Weekly Average	lbs/day	*****	25.0 Monthly Average	37.5 Weekly Average	mg/l	3X Weekly test	24-Hr Composite	W
BOD, Carbonaceous 05 Day, 20C (80082) Effluent Gross Value	250 Monthly Average	375 Weekly Average	lbs/day	*****	12.0 Monthly Average	18.0 Weekly Average	mg/l	3X Weekly test	24-Hr Composite	S
BOD, Carbonaceous 05 Day, 20C (80082) Raw Sew/Influent	(Report) Monthly Average	(Report) Weekly Average	lbs/day	*****	(Report) Monthly Average	(Report) Weekly Average	mg/l	3X Weekly test	24-Hr Composite	Not Seasonal
BOD, Carb-5 Day, 20 Deg C, Percent Remvl (80091) Percent Removal	*****	*****	*****	85.0 Monthly Average Minimum	*****	*****	%	Monthly	Calculated	Not Seasonal
Solids, Suspended Percent Removal (81011) Percent Removal	*****	*****	*****	85.0 Monthly Average Minimum	*****	*****	%	Monthly	Calculated	Not Seasonal

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

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

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

See Permit Requirements for Stormwater in Part IV.G

(2) S = Summer (May – November)

W = Winter (December - April)

ECS = E. coli Summer (May - October)

ECW = E. coli Winter (November - April)

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

2. DSN 001T: Toxicity

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 001T, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq See note (1)	Sample Type	Seasonal See note (2)
Toxicity, Ceriodaphnia Chronic (61426) Effluent Gross Value	*****	0 Single Sample	pass=0;fail=1	*****	*****	*****	*****	See Permit Requirements	24-Hr Composite	Nov
Toxicity, Pimephales Chronic (61428) Effluent Gross Value	*****	0 Single Sample	pass=0;fail=1	*****	*****	*****	*****	See Permit Requirements	24-Hr Composite	Nov

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

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

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

See Permit Requirements for Stormwater in Part IV.G

(2) S = Summer (May – November)

W = Winter (December - April)

ECS = E. coli Summer (May - October)

ECW = E. coli Winter (November - April)

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

3. DSN 002S: Storm Water Runoff

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the Permittee shall monitor from Outfall 002S, which is described more fully in the Permittee's application as a stormwater outfall at the wastewater treatment plant. Such discharge shall be limited and monitored by the Permittee as specified below:

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq See note (1)	Sample Type	Seasonal See note (2)
				(Report) Minimum Daily		(Report) Maximum Daily				
pH (00400) Storm Water	*****	*****	*****	(Report) Minimum Daily	*****	(Report) Maximum Daily	S.U.	Annually	Grab	Not Seasonal
Solids, Total Suspended (00530) Storm Water	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Annually	Grab	Not Seasonal
Oil & Grease (00556) Storm Water	*****	*****	*****	*****	*****	15.0 Maximum Daily	mg/l	Annually	Grab	Not Seasonal
Nitrogen, Ammonia Total (As N) (00610) Storm Water	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Annually	Grab	Not Seasonal
Nitrogen, Kjeldahl Total (As N) (00625) Storm Water	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Annually	Grab	Not Seasonal
Nitrite Plus Nitrate Total 1 Det. (As N) (00630) Storm Water	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Annually	Grab	Not Seasonal
Phosphorus, Total (As P) (00665) Storm Water	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Annually	Grab	Not Seasonal
Flow, In Conduit or Thru Treatment Plant (50050) Storm Water	*****	(Report) Maximum Daily	MGD	*****	*****	*****	*****	Annually	Calculated	Not Seasonal
E. Coli (51040) Storm Water	*****	*****	*****	*****	*****	(Report) Maximum Daily	col/100mL	Annually	Grab	Not Seasonal
BOD, Carbonaceous 05 Day, 20C (80082) Storm Water	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Annually	Grab	Not Seasonal

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

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

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

See Permit Requirements for Stormwater in Part IV.G

(2) S = Summer (May – November)

W = Winter (December - April)

ECS = E. coli Summer (May - October)

ECW = E. coli Winter (November - April)

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

B. DISCHARGE MONITORING AND RECORD KEEPING REQUIREMENTS

1. Representative Sampling

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

2. Measurement Frequency

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

- a. Seven days per week shall mean daily.
- b. Five days per week shall mean any five days of discharge during a calendar weekly period of Sunday through Saturday.
- c. Three days per week shall mean any three days of discharge during a calendar week.
- d. Two days per week shall mean any two days of discharge during a calendar week.
- e. One day per week shall mean any day of discharge during a calendar week.
- f. Two days per month shall mean any two days of discharge during the month that are no less than seven days apart. However, if discharges occur only during one seven-day period in a month, then two days per month shall mean any two days of discharge during that seven day period.
- g. One day per month shall mean any day of discharge during the calendar month.
- h. Quarterly shall mean any day of discharge during each calendar quarter.
- i. The Permittee may increase the frequency of sampling, listed in Provisions I.B.2.a through I.B.2.h; however, all sampling results are to be reported to the Department.

3. Test Procedures

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

- a. For parameters with an EPA established Minimum Level (ML), report the measured value if the analytical result is at or above the ML and report "0" or "*B" for values below the ML. Test procedures for the analysis of pollutants shall conform to 40 CFR Part 136 and guidelines published pursuant to Section 304(h) of the FWPCA, 33 U.S.C. Section 1314(h). If more than one method for analysis of a substance is approved for use, a method having a minimum level lower than the permit limit shall be used. If the minimum level of all methods is higher than the permit limit, the method having the lowest minimum level shall be used and a report of less than the minimum level shall be reported as zero and will constitute compliance, however should EPA approve a method with a lower minimum level during the term of this permit the permittee shall use the newly approved method.
- b. For pollutants parameters without an established ML, an interim ML may be utilized. The interim ML shall be calculated as 3.18 times the Method Detection Level (MDL) calculated pursuant to 40 CFR Part 136, Appendix B.

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

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

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

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

4. **Recording of Results**

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

- a. The facility name and location, point source number, date, time and exact place of sampling;
- b. The name(s) of person(s) who obtained the samples or measurements;
- c. The dates and times the analyses were performed;
- d. The name(s) of the person(s) who performed the analyses;
- e. The analytical techniques or methods used, including source of method and method number; and
- f. The results of all required analyses.

5. **Records Retention and Production**

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

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

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

7. **Monitoring Equipment and Instrumentation**

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

C. **DISCHARGE REPORTING REQUIREMENTS**

1. **Reporting of Monitoring Requirements**

- a. The permittee shall conduct the required monitoring in accordance with the following schedule:
 - (1) **MONITORING REQUIRED MORE FREQUENTLY THAN MONTHLY AND MONTHLY** shall be conducted during the first full month following the effective date of coverage under this permit and every month thereafter.
 - (2) **QUARTERLY MONITORING** shall be conducted at least once during each calendar quarter. Calendar quarters are the periods of January through March, April through June, July through September, and October through December. The permittee shall conduct the quarterly monitoring during the first complete calendar quarter following the effective date of this permit and is then required to monitor once during each quarter thereafter. Quarterly monitoring should be reported on the last DMR due for the quarter (i.e., March, June, September and December DMRs).

- (3) **SEMIANNUAL MONITORING** shall be conducted at least once during the period of January through June and at least once during the period of July through December. The permittee shall conduct the semiannual monitoring during the first complete calendar semiannual period following the effective date of this permit and is then required to monitor once during each semiannual period thereafter. Semiannual monitoring may be done anytime during the semiannual period, unless restricted elsewhere in this permit, but it should be reported on the last DMR due for the month of the semiannual period (i.e., June and December DMRs).
 - (4) **ANNUAL MONITORING** shall be conducted at least once during the period of January through December. The permittee shall conduct the annual monitoring during the first complete calendar annual period following the effective date of this permit and is then required to monitor once during each annual period thereafter. Annual monitoring may be done anytime during the year, unless restricted elsewhere in this permit, but it should be reported on the December DMR.
- b. The permittee shall submit discharge monitoring reports (DMRs) in accordance with the following schedule:
- (1) **REPORTS OF MORE FREQUENTLY THAN MONTHLY AND MONTHLY TESTING** shall be submitted on a monthly basis. The first report is due on the 28th day of the month following the month the permit becomes effective. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period, unless otherwise directed by the Department.
 - (2) **REPORTS OF QUARTERLY TESTING** shall be submitted on a quarterly basis. The first report is due on the 28th day of the month following the first complete calendar quarter the permit becomes effective. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period, unless otherwise directed by the Department.
 - (3) **REPORTS OF SEMIANNUAL TESTING** shall be submitted on a semiannual basis. The reports are due on the 28th day of JANUARY and the 28th day of JULY. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period, unless otherwise directed by the Department.
 - (4) **REPORTS OF ANNUAL TESTING** shall be submitted on an annual basis. Unless specified elsewhere in the permit, the first report is due on the 28th day of JANUARY. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period, unless otherwise directed by the Department.
- c. Except as allowed by Provision I.C.1.c.(1) or (2), the permittee shall submit all Discharge Monitoring Reports (DMRs) required by Provision I.C.1.b. electronically.
- (1) If the permittee is unable to complete the electronic submittal of DMR data due to technical problems originating with the Department's electronic system (this could include entry/submittal issues with an entire set of DMRs or individual parameters), the permittee is not relieved of their obligation to submit DMR data to the Department by the date specified in Provision I.C.1.b., unless otherwise directed by the Department.

If the Department's electronic system is down on the 28th day of the month in which the DMR is due or is down for an extended period of time, as determined by the Department, when a DMR is required to be submitted, the permittee may submit the data in an alternate manner and format acceptable to the Department. Preapproved alternate acceptable methods include faxing, e-mailing, mailing, or hand-delivery of data such that they are received by the required reporting date. Within five calendar days of the Department's electronic system resuming operation, the permittee shall enter the data into the Department's electronic system, unless an alternate timeframe is approved by the Department. A comment should be included on the electronic DMR submittal verifying the original submittal date (date of the fax, copy of dated e-mail, or hand-delivery stamped date), if applicable.
 - (2) The permittee may submit a request to the Department for a temporary electronic reporting waiver for DMR submittals. The waiver request should include the permit number; permittee name; facility/site name; facility address; name, address, and contact information for the responsible official or duly authorized representative; a detailed statement regarding the basis for requesting such a waiver; and the duration for which the waiver is requested. Approved electronic reporting waivers are not transferrable.
 - (3) A permittee with an approved electronic reporting waiver for DMRs may submit hard copy DMRs for the period that the approved electronic reporting waiver request is effective. The permittee shall submit the Department-approved DMR forms to the address listed in Provision I.C.1.e.

- (4) If a permittee is allowed to submit a hard copy DMR, the DMR must be legible and bear an original signature. Photo and electronic copies of the signature are not acceptable and shall not satisfy the reporting requirements of this permit.
 - (5) If the permittee, using approved analytical methods as specified in Provision I.B.2, monitors any discharge from a point source for a limited substance identified in Provision I.A. of this permit more frequently than required by this permit, the results of such monitoring shall be included in the calculation and reporting of values on the DMR and the increased frequency shall be indicated on the DMR.
 - (6) In the event no discharge from a point source identified in Provision I.A. of this permit and described more fully in the permittee's application occurs during a monitoring period, the permittee shall report "No Discharge" for such period on the appropriate DMR.
- d. All reports and forms required to be submitted by this permit, the AWPCA and the Department's Rules and Regulations, shall be electronically signed (or, if allowed by the Department, traditionally signed) by a "responsible official" of the permittee as defined in ADEM Administrative Code Rule 335-6-6-.09 or a "duly authorized representative" of such official as defined in ADEM Administrative Code Rule 335-6-6-.09 and shall bear the following certification:

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

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

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

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

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

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

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

Certified and Registered Mail shall be addressed to:

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

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

2. Noncompliance Notifications and Reports

- a. The Permittee shall notify the Department if, for any reason, the Permittee's discharge:
- (1) Does not comply with any daily minimum or maximum discharge limitation for an effluent characteristic specified in Provision I.A. of this permit which is denoted by an "(X)";
 - (2) Potentially threatens human health or welfare;

- (3) Threatens fish or aquatic life;
- (4) Causes an in-stream water quality criterion to be exceeded;
- (5) Does not comply with an applicable toxic pollutant effluent standard or prohibition established under Section 307(a) of the FWPCA, 33 U.S.C. Section 1317(a);
- (6) Contains a quantity of a hazardous substance that may be harmful to public health or welfare under Section 311(b)(4) of the FWPCA, 33 U.S.C. Section 1321(b)(4);
- (7) Exceeds any discharge limitation for an effluent parameter listed in Part I.A. as a result of an unanticipated bypass or upset; or
- (8) Is an unpermitted direct or indirect discharge of a pollutant to a water of the state. (Note that unpermitted discharges properly reported to the Department under any other requirement are not required to be reported under this provision.)

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

- b. If, for any reason, the Permittee's discharge does not comply with any limitation of this permit, then the Permittee shall submit a written report to the Director or Designee, as provided in Provision I.C.2.c below. This report must be submitted with the next Discharge Monitoring Report required to be submitted by Provision I.C.1 of this permit after becoming aware of the occurrence of such noncompliance.
- c. Except for notifications and reports of notifiable SSOs which shall be submitted in accordance with the applicable Provisions of this permit, the Permittee shall submit the reports required under Provisions I.C.2.a. and b. to the Director or Designee on ADEM Form 421, available on the Department's website (<http://www.adem.state.al.us/DeptForms/Form421.pdf>). The completed Form must document the following information:
 - (1) A description of the discharge and cause of noncompliance;
 - (2) The period of noncompliance, including exact dates, times, and duration of the noncompliance. If the noncompliance is not corrected by the due date of the written report, then the Permittee shall provide an estimated date by which the noncompliance will be corrected; and
 - (3) A description of the steps taken by the Permittee and the steps planned to be taken by the Permittee to reduce or eliminate the noncompliant discharge and to prevent its recurrence.
- d. Immediate notification

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

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

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

D. OTHER REPORTING AND NOTIFICATION REQUIREMENTS

1. Anticipated Noncompliance

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

2. Termination of Discharge

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

3. Updating Information

- a. The permittee shall inform the Director of any change in the permittee's mailing address or telephone number or in the permittee's designation of a facility contact or office having the authority and responsibility to prevent and abate violations of the AWPCA, the Department's Rules and the terms and conditions of this permit, in writing, no later than ten (10) days after such change. Upon request of the Director or his designee, the permittee shall furnish the Director with an update of any information provided in the permit application.
- b. If the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information with a written explanation for the mistake and/or omission.

4. Duty to Provide Information

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

E. SCHEDULE OF COMPLIANCE

1. Compliance with discharge limits

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

COMPLIANCE SHALL BE ATTAINED ON THE EFFECTIVE DATE OF THIS PERMIT

2. Schedule

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

PART II: OTHER REQUIREMENTS, RESPONSIBILITIES, AND DUTIES

A. OPERATIONAL AND MANAGEMENT REQUIREMENTS

1. Facilities Operation and Maintenance

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

2. Best Management Practices

- a. Dilution water shall not be added to achieve compliance with discharge limitations except when the Director or his designee has granted prior written authorization for dilution to meet water quality requirements.
- b. The permittee shall prepare, implement, and maintain a Spill Prevention, Control and Countermeasures (SPCC) Plan in accordance with 40 C.F.R. Section 112 if required thereby.
- c. The permittee shall prepare, submit for approval and implement a Best Management Practices (BMP) Plan for containment of any or all process liquids or solids, in a manner such that these materials do not present a significant potential for discharge, if so required by the Director or his designee. When submitted and approved, the BMP Plan shall become a part of this permit and all requirements of the BMP Plan shall become requirements of this permit.

3. Certified Operator

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

B. OTHER RESPONSIBILITIES

1. Duty to Mitigate Adverse Impacts

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

2. Right of Entry and Inspection

- a. The permittee shall allow the Director, or an authorized representative, upon the presentation of proper credentials and other documents as may be required by law to:
 - (1) Enter upon the permittee's premises where a regulated facility or activity or point source is located or conducted, or where records must be kept under the conditions of the permit;
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permits;
 - (3) Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the permit; and
 - (4) Sample or monitor, for the purposes of assuring permit compliance or as otherwise authorized by the AWPCA, any substances or parameters at any location.

C. BYPASS AND UPSET

1. Bypass

- a. Any bypass is prohibited except as provided in b. and c. below:
- b. A bypass is not prohibited if:
 - (1) It does not cause any discharge limitation specified in Provision I. A. of this permit to be exceeded;

- (2) It enters the same receiving stream as the permitted outfall; and
 - (3) It is necessary for essential maintenance of a treatment or control facility or system to assure efficient operation of such facility or system.
- c. A bypass is not prohibited and need not meet the discharge limitations specified in Provision I. A. of this permit if:
- (1) It is unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (2) There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime (this condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance); and
 - (3) The permittee submits a written request for authorization to bypass to the Director at least ten (10) days prior to the anticipated bypass (if possible), the permittee is granted such authorization, and the permittee complies with any conditions imposed by the Director to minimize any adverse impact on human health or the environment resulting from the bypass.
- d. The permittee has the burden of establishing that each of the conditions of Provision II. C. 1. b. or c. have been met to qualify for an exception to the general prohibition against bypassing contained in a. and an exemption, where applicable, from the discharge limitations specified in Provision I. A. of this permit.

2. Upset

- a. A discharge which results from an upset need not meet the discharge limitations specified in Provision I. A. of this permit if:
- (1) No later than 24-hours after becoming aware of the occurrence of the upset, the Permittee orally reports the occurrence and circumstances of the upset to the Director or his designee; and
 - (2) No later than five (5) days after becoming aware of the occurrence of the upset, the Permittee furnishes the Director with evidence, including properly signed, contemporaneous operating logs, or other relevant evidence, demonstrating that:
 - (i) An upset occurred;
 - (ii) The Permittee can identify the specific cause(s) of the upset;
 - (iii) The Permittee's facility was being properly operated at the time of the upset; and
 - (iv) The Permittee promptly took all reasonable steps to minimize any adverse impact on human health or the environment resulting from the upset.
- b. The permittee has the burden of establishing that each of the conditions of Provision II. C. 2. a. of this permit have been met to qualify for an exemption from the discharge limitations specified in Provision I. A. of this permit.

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

1. Duty to Comply

- a. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the AWPCA and the FWPCA and is grounds for enforcement action, permit termination, revocation and reissuance, suspension, modification, or denial of a permit renewal application.
- b. The necessity to halt or reduce production or other activities in order to maintain compliance with the conditions of the permit shall not be a defense for a permittee in an enforcement action.
- c. The discharge of a pollutant from a source not specifically identified in the permit application for this permit and not specifically included in the description of an outfall in this permit is not authorized and shall constitute noncompliance with this permit.
- d. The permittee shall take all reasonable steps, including cessation of production or other activities, to minimize or prevent any violation of this permit or to minimize or prevent any adverse impact of any permit violation.

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

2. Removed Substances

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

3. Loss or Failure of Treatment Facilities

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

4. Compliance with Statutes and Rules

- a. This permit has been issued under ADEM Administrative Code, Chapter 335-6-6. All provisions of this chapter, that are applicable to this permit, are hereby made a part of this permit. A copy of this chapter may be obtained for a small charge from the Office of General Counsel, Alabama Department of Environmental Management, 1400 Coliseum Boulevard Montgomery, Alabama 36110-2059.
- b. This permit does not authorize the noncompliance with or violation of any Laws of the State of Alabama or the United States of America or any regulations or rules implementing such laws. FWPCA, 33 U.S.C. Section 1319, and Code of Alabama 1975, Section 22-22-14.

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

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

- a. If the permittee intends to continue to discharge beyond the expiration date of this permit, the permittee shall file a complete permit application for reissuance of this permit at least 180 days prior to its expiration. If the permittee does not intend to continue discharge beyond the expiration of this permit, the permittee shall submit written notification of this intent which shall be signed by an individual meeting the signatory requirements for a permit application as set forth in ADEM Administrative Code Rule 335-6-6-.09.
- b. Failure of the permittee to apply for reissuance at least 180 days prior to permit expiration will void the automatic continuation of the expiring permit provided by ADEM Administrative Code Rule 335-6-6-.06 and should the permit not be reissued for any reason any discharge after expiration of this permit will be an unpermitted discharge.

2. Change in Discharge

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

3. Transfer of Permit

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

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

4. Permit Modification and Revocation

- a. This permit may be modified or revoked and reissued, in whole or in part, during its term for cause, including but not limited to, the following:
 - (1) If cause for termination under Provision II. E. 5. of this permit exists, the Director may choose to revoke and reissue this permit instead of terminating the permit;
 - (2) If a request to transfer this permit has been received, the Director may decide to revoke and reissue or to modify the permit; or
 - (3) If modification or revocation and reissuance is requested by the permittee and cause exists, the Director may grant the request.
- b. This permit may be modified during its term for cause, including but not limited to, the following:
 - (1) If cause for termination under Provision II. E. 5. of this permit exists, the Director may choose to modify this permit instead of terminating this permit;
 - (2) There are material and substantial alterations or additions to the facility or activity generating wastewater which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit;
 - (3) The Director has received new information that was not available at the time of permit issuance and that would have justified the application of different permit conditions at the time of issuance;
 - (4) A new or revised requirement(s) of any applicable standard or limitation is promulgated under Sections 301(b)(2)(C), (D), (E), and (F), and 307(a)(2) of the FWPCA;
 - (5) Errors in calculation of discharge limitations or typographical or clerical errors were made;
 - (6) To the extent allowed by ADEM Administrative Code, Rule 335-6-6-.17, when the standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued;
 - (7) To the extent allowed by ADEM Administrative Code, Rule 335-6-6-.17, permits may be modified to change compliance schedules;
 - (8) To agree with a granted variance under 301(c), 301(g), 301(h), 301(k), or 316(a) of the FWPCA or for fundamentally different factors;
 - (9) To incorporate an applicable 307(a) FWPCA toxic effluent standard or prohibition;
 - (10) When required by the reopener conditions in this permit;
 - (11) When required under 40 CFR 403.8(e) (compliance schedule for development of pretreatment program);
 - (12) Upon failure of the state to notify, as required by Section 402(b)(3) of the FWPCA, another state whose waters may be affected by a discharge permitted by this permit;
 - (13) When required to correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions; or
 - (14) When requested by the permittee and the Director determines that the modification has cause and will not result in a violation of federal or state law, regulations or rules; or

5. Termination

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

- a. Violation of any term or condition of this permit;
- b. The permittee's misrepresentation or failure to disclose fully all relevant facts in the permit application or during the permit issuance process or the permittee's misrepresentation of any relevant facts at any time;
- c. Materially false or inaccurate statements or information in the permit application or the permit;

- d. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;
- e. The permittee's discharge threatens human life or welfare or the maintenance of water quality standards;
- f. Permanent closure of the facility generating the wastewater permitted to be discharged by this permit or permanent cessation of wastewater discharge;
- g. New or revised requirements of any applicable standard or limitation that is promulgated under Sections 301(b)(2)(C), (D), (E), and (F), and 307(a)(2) of the FWPCA that the Director determines cannot be complied with by the permittee.
- h. Any other cause allowed by the ADEM Administrative Code, Chapter 335-6-6.

6. **Suspension**

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

7. **Stay**

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

F. COMPLIANCE WITH TOXIC POLLUTANT STANDARD OR PROHIBITION

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

G. NOTICE TO DIRECTOR OF INDUSTRIAL USERS

1. The permittee shall not allow the introduction of wastewater, other than domestic wastewater, from a new indirect discharger prior to approval and permitting, if applicable, of the discharge by the Department.
2. The permittee shall not allow an existing indirect discharger to increase the quantity or change the character of its wastewater, other than domestic wastewater, prior to approval and permitting, if applicable, of the increased discharge by the Department.
3. The permittee shall report to the Department any adverse impact caused or believed to be caused by an indirect discharger on the treatment process, quality of discharged water or quality of sludge. Such report shall be submitted within seven days of the permittee becoming aware of the adverse impacts.

H. PROHIBITIONS

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

1. Pollutants which may create a fire or explosive hazard, including, but not limited to, waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21;
2. Pollutants which may cause corrosive structural damage to the treatment works, but in no case discharges with a pH lower than 5.0;
3. Solid or viscous pollutants in amounts which may cause obstruction to the flow in sewers, or other interference in the treatment works;
4. Any pollutant, including oxygen demanding pollutants (BOD, etc.) of such volume or strength as to cause interference in the treatment works;

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

PART III: ADDITIONAL REQUIREMENTS, CONDITIONS, AND LIMITATIONS

A. CIVIL AND CRIMINAL LIABILITY

1. Tampering

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

2. False Statements

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

3. Permit Enforcement

- a. Any NPDES permit issued or reissued by the Department is a permit for the purpose of the AWPCA and the FWPCA and as such any terms, conditions, or limitations of the permit are enforceable under state and federal law.
- b. Any person required to have a NPDES permit pursuant to ADEM Administrative Code Chapter 335-6-6 and who discharges pollutants without said permit, who violates the conditions of said permit, who discharges pollutants in a manner not authorized by the permit, or who violates applicable orders of the Department or any applicable rule or standard of the Department, is subject to any one or combination of the following enforcement actions under applicable state statutes:
 - (1) An administrative order requiring abatement, compliance, mitigation, cessation, clean-up, and/or penalties;
 - (2) An action for damages;
 - (3) An action for injunctive relief; or
 - (4) An action for penalties.
- c. If the permittee is not in compliance with the conditions of an expiring or expired permit the Director may choose to do any or all of the following provided the permittee has made a timely and complete application for reissuance of the permit:
 - (1) Initiate enforcement action based upon the permit which has been continued;
 - (2) Issue a notice of intent to deny the permit reissuance. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;
 - (3) Reissue the new permit with appropriate conditions; or
 - (4) Take other actions authorized by these rules and AWPCA.

4. Relief from Liability

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

B. OIL AND HAZARDOUS SUBSTANCE LIABILITY

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

C. PROPERTY AND OTHER RIGHTS

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

D. AVAILABILITY OF REPORTS

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

E. EXPIRATION OF PERMITS FOR NEW OR INCREASED DISCHARGES

1. If this permit was issued for a new discharger or new source, this permit shall expire eighteen months after the issuance date if construction of the facility has not begun during the eighteen-month period.
2. If this permit was issued or modified to allow the discharge of increased quantities of pollutants to accommodate the modification of an existing facility, and if construction of this modification has not begun during the eighteen month period after issuance of this permit or permit modification, this permit shall be modified to reduce the quantities of pollutants allowed to be discharged to those levels that would have been allowed if the modification of the facility had not been planned.
3. Construction has begun when the owner or operator has:
 - a. Begun, or caused to begin as part of a continuous on-site construction program:
 - (1) Any placement, assembly, or installation of facilities or equipment; or
 - (2) Significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which are necessary for the placement, assembly, or installation of new source facilities or equipment; or
 - b. Entered into a binding contractual obligation for the purpose of placement, assembly, or installation of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this paragraph.
4. Final plans and specifications for a waste treatment facility at a new source or new discharger, or a modification to an existing waste treatment facility must be submitted to and examined by the Department prior to initiating construction of such treatment facility by the permittee.
5. Upon completion of construction of waste treatment facilities and prior to operation of such facilities, the permittee shall submit to the Department a certification from a registered professional engineer, licensed to practice in the State of Alabama, that the treatment facilities have been built according to plans and specifications submitted to and examined by the Department.

F. COMPLIANCE WITH WATER QUALITY STANDARDS

1. On the basis of the permittee's application, plans, or other available information, the Department has determined that compliance with the terms and conditions of this permit should assure compliance with the applicable water quality standards.
2. Compliance with permit terms and conditions notwithstanding, if the permittee's discharge(s) from point sources identified in Provision I. A. of this permit cause or contribute to a condition in contravention of state water quality standards, the Department may require abatement action to be taken by the permittee in emergency situations or modify the permit pursuant to the Department's Rules, or both.
3. If the Department determines, on the basis of a notice provided pursuant to this permit or any investigation, inspection or sampling, that a modification of this permit is necessary to assure maintenance of water quality standards or compliance with other provisions of the AWPCA or FWPCA, the Department may require such modification and, in cases of emergency, the Director may prohibit the discharge until the permit has been modified.

G. GROUNDWATER

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

H. DEFINITIONS

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

23. **Grab Sample** – means a single influent or effluent portion which is not a composite sample. The sample(s) shall be collected at the period(s) most representative of the discharge.
24. **Indirect Discharger** – means a nondomestic discharger who discharges pollutants to a publicly owned treatment works or a privately owned treatment facility operated by another person.
25. **Industrial User** – means those industries identified in the Standard Industrial Classification manual, Bureau of the Budget 1967, as amended and supplemented, under the category “Division D – Manufacturing” and such other classes of significant waste producers as, by regulation, the Director deems appropriate.
26. **MGD** – means million gallons per day.
27. **Monthly Average** – means the arithmetic mean of all the composite or grab samples taken for the daily discharges collected in one month period. The monthly average for flow is the arithmetic mean of all flow measurements taken in a one month period.
28. **New Discharger** – means a person, owning or operating any building, structure, facility, or installation:
 - a) From which there is or may be a discharge of pollutants;
 - b) That did not commence the discharge of pollutants prior to August 13, 1979, and which is not a new source; and
 - c) Which has never received a final effective NPDES permit for dischargers at that site.
29. **NH3-N** – means the pollutant parameter ammonia, measured as nitrogen.
30. **Notifiable sanitary sewer overflow** - means an overflow, spill, release or diversion of wastewater from a sanitary sewer system that:
 - a) Reaches a surface water of the State; or
 - b) May imminently and substantially endanger human health based on potential for public exposure including but not limited to close proximity to public or private water supply wells or in areas where human contact would be likely to occur.
31. **Permit application** - means forms and additional information that is required by ADEM Administrative Code Rule 335-6-6-.08 and applicable permit fees.
32. **Point source** - means "any discernible, confined and discrete conveyance, including but not limited to any pipe, channel, ditch, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, . . . from which pollutants are or may be discharged." Section 502(14) of the FWPCA, 33 U.S.C. Section 1362(14).
33. **Pollutant** - includes for purposes of this permit, but is not limited to, those pollutants specified in Code of Alabama 1975, Section 22-22-1(b)(3) and those effluent characteristics specified in Provision I. A. of this permit.
34. **Privately Owned Treatment Works** – means any devices or system which is used to treat wastes from any facility whose operator is not the operator of the treatment works, and which is not a “POTW”.
35. **Publicly Owned Treatment Works (POTW)** – means a wastewater collection and treatment facility owned by the State, municipality, regional entity composed of two or more municipalities, or another entity created by the State or local authority for the purpose of collecting and treating municipal wastewater.
36. **Receiving Stream** – means the “waters” receiving a “discharge” from a “point source”.
37. **Severe property damage** - means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
38. **Significant Source** – means a source which discharges 0.025 MGD or more to a POTW or greater than five percent of the treatment work’s capacity, or a source which is a primary industry as defined by the U.S. EPA or which discharges a priority or toxic pollutant.
39. **TKN** – means the pollutant parameter Total Kjeldahl Nitrogen.
40. **TON** – means the pollutant parameter Total Organic Nitrogen.
41. **TRC** – means Total Residual Chlorine.

42. **TSS** – means the pollutant parameter Total Suspended Solids.
43. **24HC** – means 24-hour composite sample, including any of the following:
 - a) The mixing of at least 8 equal volume samples collected at constant time intervals of not more than 2 hours over a period of 24 hours;
 - b) A sample collected over a consecutive 24-hour period using an automatic sampler composite to one sample. As a minimum, samples shall be collected hourly and each shall be no more than one twenty-fourth (1/24) of the total sample volume collected;
 - c) A sample collected over a consecutive 24-hour period using an automatic composite sampler composited proportional to flow.
44. **Upset** - means an exceptional incident in which there is an unintentional and temporary noncompliance with technology-based permit discharge limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
45. **Waters** - means "[a]ll waters of any river, stream, watercourse, pond, lake, coastal, ground or surface water, wholly or partially within the state, natural or artificial. This does not include waters which are entirely confined and retained completely upon the property of a single individual, partnership or corporation unless such waters are used in interstate commerce." Code of Alabama 1975, Section 22-22-1(b)(2). Waters "include all navigable waters" as defined in Section 502(7) of the FWPCA, 22 U.S.C. Section 1362(7), which are within the State of Alabama.
46. **Week** - means the period beginning at twelve midnight Saturday and ending at twelve midnight the following Saturday.
47. **Weekly (7-day and calendar week) Average** – is the arithmetic mean of all samples collected during a consecutive 7-day period or calendar week, whichever is applicable. The calendar week is defined as beginning on Sunday and ending on Saturday. Weekly averages shall be calculated for all calendar weeks with Saturdays in the month. If a calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for the calendar week shall be included in the data for the month that contains the Saturday.

I. SEVERABILITY

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

PART IV: SPECIFIC REQUIREMENTS, CONDITIONS, AND LIMITATIONS

A. SLUDGE MANAGEMENT PRACTICES

1. Applicability

- a. Provisions of Provision IV.A. apply to a sewage sludge generated or treated in treatment works that is applied to agricultural and non-agricultural land, or that is otherwise distributed, marketed, incinerated, or disposed in landfills or surface disposal sites.
- b. Provisions of Provision IV.A. do not apply to:
 - (1) Sewage sludge generated or treated in a privately owned treatment works operated in conjunction with industrial manufacturing and processing facilities and which receive no domestic wastewater.
 - (2) Sewage sludge that is stored in surface impoundments located at the treatment works prior to ultimate disposal.

2. Submitting Information

- a. If applicable, the Permittee must submit annually with its Municipal Water Pollution Prevention (MWPP) report the following:
 - (1) Type of sludge stabilization/digestion method;
 - (2) Daily or annual sludge production (dry weight basis);
 - (3) Ultimate sludge disposal practice(s).
- b. The Permittee shall provide sludge inventory data to the Director as requested. These data may include, but are not limited to, sludge quantity and quality reported in Provision IV.A.2.a as well as other specific analyses required to comply with State and Federal laws regarding solid and hazardous waste disposal.
- c. The Permittee shall give prior notice to the Director of at least 30 days of any change planned in the Permittee's sludge disposal practices.

3. Reopener or Modification

- a. Upon review of information provided by the Permittee as required by Provision IV.A.2. or, based on the results of an on-site inspection, the permit shall be subject to modification to incorporate appropriate requirements.
- b. If an applicable "acceptable management practice" or if a numerical limitation for a pollutant in sewage sludge promulgated under Section 405 of FWPCA is more stringent than the sludge pollutant limit or acceptable management practice in this permit. This permit shall be modified or revoked or reissued to conform to requirements promulgated under Section 405. The Permittee shall comply with the limitations no later than the compliance deadline specified in applicable regulations as required by Section 405 of FWPCA.

B. EFFLUENT TOXICITY LIMITATIONS AND BIOMONITORING REQUIREMENTS FOR CHRONIC TOXICITY

1. Chronic Toxicity Test

- a. The permittee shall perform short-term chronic toxicity tests on the wastewater at Outfall 001.
- b. The samples shall be diluted using appropriate control water to the Instream Waste Concentration (IWC) which is **22 percent** effluent. The IWC is the actual concentration of effluent, after mixing, in the receiving stream during a 7-day, 10-year low flow period.
- c. Any test result that shows a statistically significant reduction in survival, growth, or reproduction between the control and test samples at the 95% confidence level indicates chronic toxicity and shall constitute noncompliance with this permit.

2. General Test Requirements

- a. A minimum of three (3) 24-hour composite samples shall be obtained for use in the above biomonitoring tests. Samples shall be collected every other day so that the laboratory receives water samples on the first, third, and fifth day of the seven-day test period. The holding time for each composite sample shall not exceed 36 hours. The control water shall be a water prepared in the laboratory in accordance with the EPA procedure described in EPA

821-R-02-013 (most current edition) or another control water selected by the Permittee and approved by the Department.

- b. Test results shall be deemed unacceptable and the Permittee shall rerun the tests as soon as practical within the monitoring period for the following:
 - (1) For testing with *P. promelas*: effluent toxicity tests with control survival of less than 80% or if dry weight per surviving control organism is less than 0.25 mg;
 - (2) For testing with *C. dubia*: if the number of young per surviving control organism is less than 15 or if less than 60% of surviving control females produce three broods; or
 - (3) If the other requirements of the EPA Test Procedure are not met.
- c. In the event of an invalid test, upon subsequent completion of a valid test, the results of all tests, valid and invalid, are to be reported to the Department along with an explanation of the tests performed and the test results.
- d. Toxicity tests shall be conducted for the duration of this permit in the month of **NOVEMBER**. Should results from the Annual Toxicity test indicate that Outfall 001 exhibits chronic toxicity, then the Permittee must conduct the follow-up testing described in Part IV.B.4.a. In addition, the Permittee may then also be required to conduct toxicity testing in the months of **FEBRUARY, MAY, AUGUST, and NOVEMBER**.

3. Reporting Requirements

- a. The Permittee shall notify the Department in writing within 48 hours after toxicity has been demonstrated by the scheduled test(s).
- b. Biomonitoring test results obtained during each monitoring period shall be summarized and reported using the appropriate Discharge Monitoring Report (DMR) form approved by the Department. In accordance with Section 2 of this part, an effluent toxicity report containing the information in Sections 2 and 6 shall be included with the DMR. The test results must be submitted to the Department no later than 28 days after the month that tests were performed.

4. Additional Testing Requirements

- a. If chronic toxicity is indicated (i.e., noncompliance with permit limit), then the Permittee must perform two additional valid chronic toxicity tests in accordance with these procedures to determine the extent and duration of the toxic condition. The toxicity tests shall run consecutively beginning on the first calendar week following the date that the Permittee became aware of the permit noncompliance. The results of these follow-up tests shall be submitted to the Department no later than 28 days following the month the tests were performed.
- b. After evaluation of the results of the follow-up tests, the Department will determine if additional action is appropriate and may require additional testing and/or toxicity reduction measures. The permittee may be required to perform a Toxicity Identification Evaluation (TIE) and/or a Toxicity Reduction Evaluation (TRE). The TIE/TRE shall be performed in accordance with the most recent protocols and guidance outlined by EPA (e.g., EPA/600/2-88/062, EPA/600/R-92/080, EPA/600/R-91-003, EPA/600/R-92/081, EPA/833/B-99/022, and/or EPA/600/6-91/005F)

5. Test Methods

The tests shall be performed in accordance with the latest edition of the "EPA Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms." The Larval Survival and Growth Test, Method 1000.0, shall be used for the fathead minnow (*Pimephales promelas*) test and the Survival and Reproduction Test, Method 1002.0, shall be used for the cladoceran (*Ceriodaphnia dubia*) test.

6. Effluent Toxicity Testing Reports

The following information shall be submitted with each DMR unless otherwise directed by the Department. The Department may at any times suspend or reinstate this requirement or may decrease or increase the frequency of submittals.

- a. Introduction
 - (1) Facility name, location and county
 - (2) Permit number
 - (3) Toxicity testing requirements of permit

- (4) Name of receiving water body
 - (5) Contract laboratory information (if tests are performed under contract)
 - (i) Name of firm
 - (ii) Telephone number
 - (iii) Address
 - (6) Objective of test
- b. Plant Operations
- (1) Discharge Operating schedule (if other than continuous)
 - (2) Volume of discharge during sample collection to include Mean daily discharge on sample collection dates (MGD, CFS, GPM)
 - (3) Design flow of treatment facility at time of sampling
- c. Source of Effluent and Dilution Water
- (1) Effluent samples
 - (2) Sampling point
 - (3) Sample collection dates and times (to include composite sample start and finish times)
 - (4) Sample collection method
 - (5) Physical and chemical data of undiluted effluent samples (water temperature, pH, alkalinity, hardness, specific conductance, total residual chlorine (if applicable), etc.)
 - (6) Lapsed time from sample collection to delivery
 - (7) Lapsed time from sample collection to test initiation
 - (8) Sample temperature when received at the laboratory
 - (9) Dilution Water
 - (10) Source
 - (11) Collection/preparation date(s) and time(s)
 - (12) Pretreatment (if applicable)
 - (13) Physical and chemical characteristics (water temperature, pH, alkalinity, hardness, specific conductance, etc.)
- d. Test Conditions
- (1) Toxicity test method utilized
 - (2) End point(s) of test
 - (3) Deviations from referenced method, if any, and reason(s)
 - (4) Date and time test started
 - (5) Date and time test terminated
 - (6) Type and volume of test chambers
 - (7) Volume of solution per chamber
 - (8) Number of organisms per test chamber
 - (9) Number of replicate test chambers per treatment
 - (10) Test temperature, pH, and dissolved oxygen as recommended by the method (to include ranges)
 - (11) Specify if aeration was needed
 - (12) Feeding frequency, amount, and type of food

(13) Specify if (and how) pH control measures were implemented

(14) Light intensity (mean)

e. Test Organisms

- (1) Scientific name
- (2) Life stage and age
- (3) Source
- (4) Disease(s) treatment (if applicable)

f. Quality Assurance

- (1) Reference toxicant utilized and source
- (2) Date and time of most recent chronic reference toxicant test(s), raw data, and current control chart(s). (The most recent chronic reference toxicant test shall be conducted within 30 days of the routine.)
- (3) Dilution water utilized in reference toxicant test
- (4) Results of reference toxicant test(s) (NOEC, IC25, etc.); report concentration-response relationship and evaluate test sensitivity
- (5) Physical and chemical methods utilized

g. Results

- (1) Provide raw toxicity data in tabular form, including daily records of affected organisms in each concentration (including controls) and replicate
- (2) Provide table of endpoints: NOECs, IC25s, PASS/FAIL, etc. (as required in the applicable NPDES permit)
- (3) Indicate statistical methods used to calculate endpoints
- (4) Provide all physical and chemical data required by method
- (5) Results of test(s) (NOEC, IC25, PASS/FAIL, etc.), report concentration-response relationship (definitive test only), report percent minimum significant difference (PMSD) calculated for sublethal endpoints determined by hypothesis testing.

h. Conclusions and Recommendations

- (1) Relationship between test endpoints and permit limits
- (2) Actions to be taken

Adapted from "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms", Fourth Edition, October 2002 (EPA 821-R-02-013), Section 10, Report Preparation.

C. TOTAL RESIDUAL CHLORINE (TRC) REQUIREMENTS

1. If chlorine is not utilized for disinfection purposes, TRC monitoring under Part I of this Permit is not required. If TRC monitoring is not required (conditional monitoring), "*9" should be reported on the DMR forms.
2. Testing for TRC shall be conducted according to either the amperometric titration method or the DPD colorimetric method as specified in Section 408(C) or (E), Standards Methods for the Examination of Water and Wastewater, 18th edition. If the analytical result is less than the detection level or a value otherwise indicated in this permit, the Permittee shall report on the DMR form "*B" or "0". The Permittee shall then be considered to be in compliance with the daily maximum concentration limit for TRC.
3. This permit contains a maximum allowable TRC level in the effluent. The Permittee is responsible for determining the minimum TRC level needed in the chlorine contact chamber to comply with E.coli limits. The effluent shall be dechlorinated if necessary to meet the maximum allowable effluent TRC level.
4. The sample collection point for effluent TRC shall be at a point downstream of the chlorine contact chamber (downstream of dechlorination, if applicable). The exact location is to be approved by the Director.

D. PLANT CLASSIFICATION

The Permittee shall report to the Director within 30 days of the 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. SSO and Surface Water Assessment

- (1) Identification of locations within the collection system at which an SSO is likely to occur (e.g., based upon historical SSOs, lift stations where electricity may be lost, etc.)
- (2) A map of the general collection system area, including identification of surface waterbodies and the location(s) of public drinking water source(s). Mapping of all collection system piping, pump stations, etc. is not required; however, if this information is already available, it should be included.
- (3) Identification of surface waterbodies within the collection system area which are classified as Swimming according to ADEM Admin. Code chap. 335-6-11. References available to assist in this requirement include the following: <http://adem.alabama.gov/alEnviroRegLaws/files/Division6Vol1.pdf> and <http://adem.alabama.gov/wqmap>.
- (4) Identification of surface waterbodies within the collection system area which are not classified as Swimming as indicated in paragraph c above, but are known locally as areas where swimming occurs or as areas that are heavily recreated

d. 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
- e. 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
- f. 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)
 - (i) 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
- g. Standard Procedures shall be developed by the Permittee and shall include, at a minimum
 - (1) General SSO Response Procedures (e.g., procedures for dispatching staff to assess/correct an SSO; procedures for routine SSO corrective actions such as those for sewer blockages, overflowing manholes, line breakages, pump station power failure, etc.; procedures for disinfection of affected area, if applicable);
 - (2) Procedures for collection and proper disposal of the SSO, if feasible.
 - (3) General procedures for coordinating instream water quality monitoring, including, but not limited to, procedures for mobilizing staff, collecting samples, and typical test methods should the Department or the Permittee determine monitoring is appropriate following an SSO. Identification of a contractor who will collect and analyze the sample(s) may be listed in lieu of the procedures.
 - (4) References to other documents (such as Standard Operating Procedures for SSO Responses) may be acceptable for this section; however, the referenced document shall be identified and shall be reviewed at a frequency of at least that required by the Administrative Procedures Section.
- h. Date of the SSO Response Plan, dates of all modifications and/or reviews, the title and signature of the reviewer(s) for each date and the signature of the responsible official or the appropriate designee.

2. SSO Response Plan Implementation

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

3. Department Review of the SSO Response Plan

- a. When requested by the Director or his designee, the Permittee shall make the SSO Response Plan available for review by the Department.
- b. Upon review, the Director or his designee may notify the Permittee that the SSO Response Plan is deficient and require modification of the Plan.
- c. Within thirty days of receipt of notification, or an alternate timeframe as approved by the Department, the Permittee shall modify any SSO Response Plan deficiency identified by the Director or his designee and shall certify to the Department that the modification has been made.

4. SSO Response Plan Administrative Procedures

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

- b. The Permittee shall make a copy of the SSO Response Plan available to the public upon written request within 30 days of such request. The Permittee may redact information which may present security issues, such as location of public water supplies, identification of specific details of vulnerabilities, employee information, etc.
- c. The Permittee shall provide training for any personnel required to implement the SSO Response Plan and shall retain at the facility documentation of such training. This documentation shall be available for inspection by the Department. Training shall be provided for existing personnel prior to the date by which implementation of the SSO Response Plan is required and for new personnel as soon as possible. Should significant revisions be made to the SSO Response Plan, training regarding the revisions shall be conducted as soon as possible.
- d. The Permittee shall complete a review and evaluation of the SSO Response Plan at least once every three years. Documentation of the SSO Response Plan review and evaluation shall be signed and dated by the responsible official or the appropriate designee as part of the SSO Response Plan.

F. POLLUTANT SCANS

The Permittee shall sample and analyze for the pollutants listed in 40 CFR 122 Appendix J Table 2. The Permittee shall provide data from a minimum of three samples collected within the four and one-half years prior to submitting a permit application. Samples must be representative of the seasonal variation in the discharge from each outfall.

G. MAJOR SOURCE STORMWATER REQUIREMENTS

1. Prohibitions

- a. The Permittee shall not allow the discharge of non-storm water into permitted storm water outfall(s) unless said discharge is already subject to an NPDES permit.
- b. Pollutants removed in the course of treatment or control shall be disposed in a manner that complies with all applicable Department rules and regulations.

2. Operational and Management Practices

The permittee shall prepare and implement a Storm Water Pollution Prevention (SWPP) Plan within one year of the effective date of this permit.

- a. In the SWPP Plan, the Permittee shall:
 - (1) Assess the treatment plant site by developing and presenting site drainage maps, materials inventory, and best management operational practices. The plan shall also include a description of all spill or leak sources;
 - (2) Describe mechanisms and procedures to prevent the contact of sewage sludge, screenings, raw or partially treated wastewater, or any other waste product or pollutant with storm water discharged from the facility;
 - (3) Provide for daily inspection on workdays of any structures that function to prevent storm water pollution or that remove pollutants from storm water;
 - (4) Provide for daily inspection of the facility in general to ensure that the SWPP Plan is continually implemented and effective;
 - (5) Include a Best Management Practices (BMP) Plan that, as a minimum, addresses housekeeping, preventative maintenance, spill prevention and response, and non-storm water discharges;
 - (6) Describe mechanisms and procedures to provide sediment control sufficient to prevent or control storm water pollution storm water by particles resulting from soil or sediment migration from the site due to significant clearing, grading, or excavation activities;
 - (7) Designate by position or name the person or persons responsible for the day to day implementation of the SWPP Plan; and
 - (8) Bear the signature of an individual meeting signatory requirements as defined in ADEM Administrative Code, Rule 335-6-6-.09.
- b. The Director or his designee may notify the permittee at any time that the SWPP Plan is deficient and will require correction of the deficiency. The permittee shall correct any SWPP Plan deficiency identified by the Director or his designee within 30 days of receipt of notification and shall certify to the Department that the correction has been made and implemented.

c. Administrative Procedures

- (1) A copy of the SWPP Plan shall be maintained at the facility and shall be available for inspection by the Department.
- (2) A log of daily inspections required by Provision IV.G.2.a.(3.) of the permit shall be maintained at the facility and shall be made available for inspection by the Department upon request. The log shall contain records of all inspections performed and each daily entry shall be signed by the person performing the inspection.
- (3) The Permittee shall provide training for any personnel required to implement the SWPP Plan and shall retain documentation of such training at the facility. Training records for all personnel shall be available for inspection by the Department. Training shall be performed prior to the date implementation is required.

3. Monitoring Requirements

- a. Storm water discharged through each storm water outfall shall be sampled once per calendar year, using first flush grab samples (FFGS) collected during the first 30 minutes of discharge.
- b. The total volume of storm water discharged for the event must be monitored, including the date and duration (in hours) and rainfall (in inches) for the storm event(s) sampled. The duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event must be a minimum of 72 hours. This information must be recorded as part of the sampling procedure and records retained in accordance with Provision I.B.5. of this permit. The volume may be measured using flow measurement devices or may be estimated using any method approved in writing by the Department.

EDWARD F. POOLOS
DIRECTOR

JEFFERY W. KITCHENS
DEPUTY DIRECTOR



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

KAY IVEY
GOVERNOR

FACT SHEET

APPLICATION FOR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT TO DISCHARGE POLLUTANTS TO WATERS OF THE STATE OF ALABAMA

Date Prepared: October 9, 2025

By: Sandra Lee

NPDES Permit No. AL0076821

1. Name and Address of Applicant:

American Water Enterprises, LLC
Post Office Box 620397
Fort Rucker, AL 36362

2. Name and Address of Facility:

Fort Rucker Main WWTP
Building 9801 Red Cloud Road
Fort Rucker, AL 36362

3. Description of Applicant's Type of Facility and/or Activity Generating the Discharge:

Discharge Type(s): Surface Water
Treatment Method(s): Mechanical (WWTP)

4. Applicant's Receiving Waters

Feature ID	Receiving Water	Classification
001	Claybank Creek	Fish and Wildlife (F&W)
002	Claybank Creek	Fish and Wildlife (F&W)

For the Outfall latitude and longitude see the permit application.

5. Permit Conditions:

See attached Rationale and Draft Permit.

6. PROCEDURES FOR THE FORMULATION OF FINAL DETERMINATIONS

a. Comment Period

The Alabama Department of Environmental Management proposes to issue this NPDES permit subject to the limitations and special conditions outlined above. This determination is tentative.

Interested persons are invited to submit written comments on the draft permit to the following address:

Daphne Y. Lutz, Chief
ADEM-Water Division
1400 Coliseum Blvd
[Mailing Address: Post Office Box 301463; Zip 36130-1463]
Montgomery, Alabama 36110-2400
(334) 271-7823
water-permits@adem.alabama.gov

All comments received prior to the closure of the public notice period (see public notice for date) will be considered in the formulation of the final determination with regard to this permit.

b. Public Hearing

A written request for a public hearing may be filed within the public notice period and must state the nature of the issues proposed to be raised in the hearing. A request for a hearing should be filed with the Department at the following address:

Daphne Y. Lutz, Chief
ADEM-Water Division
1400 Coliseum Blvd
[Mailing Address: Post Office Box 301463; Zip 36130-1463]
Montgomery, Alabama 36110-2400
(334) 271-7823
water-permits@adem.alabama.gov

The Director shall hold a public hearing whenever it is found, on the basis of hearing requests, that there exists a significant degree of public interest in a permit application or draft permit. The Director may hold a public hearing whenever such a hearing might clarify one or more issues involved in the permit decision. Public notice of such a hearing will be made in accordance with ADEM Admin. Code r. 335-6-6-.21.

c. Issuance of the Permit

All comments received during the public comment period shall be considered in making the final permit decision. At the time that any final permit decision is issued, the Department shall prepare a response to comments in accordance with ADEM Admin. Code r. 335-6-6-.21. **The permit record, including the response to comments, will be available to the public via the eFile System <http://app.adem.alabama.gov/eFile/> or an appointment to review the record may be made by writing the Permits and Services Division at the above address.**

Unless a request for a stay of a permit or permit provision is granted by the Environmental Management Commission, the proposed permit contained in the Director's determination shall be issued and effective, and such issuance will be the final administrative action of the Alabama Department of Environmental Management.

d. Appeal Procedures

As allowed under ADEM Admin. Code chap. 335-2-1, any person aggrieved by the Department's final administrative action may file a request for hearing to contest such action. Such requests should be received by the Environmental Management Commission within thirty days of issuance of the permit. Requests should be filed with the Commission at the following address:

**Alabama Environmental Management Commission
1400 Coliseum Blvd
[Mailing Address: Post Office Box 301463; Zip 36130-1463]
Montgomery, Alabama 36110-2400**

All requests must be in writing and shall contain the information provided in ADEM Admin. Code r. 335-2-1-.04.

NPDES PERMIT RATIONALE

NPDES Permit No: **AL0076821**

Date: October 9, 2025

Permit Applicant: American Water Enterprises, LLC
Post Office Box 620397
Fort Rucker, AL 36362

Location: **Fort Rucker Main WWTP**
Building 9801 Red Cloud Road
Fort Rucker, AL 36362

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

Basis for Limitations: Water Quality Model: CBOD₅, NH₃N
Reissuance with no modification: pH, DO, CBOD₅, NH₃N, TSS, E. Coli, TRC, Copper, E. Coli, TSS Percent Removal, CBOD₅ Percent Removal
Instream calculation at 7Q10: ~19%
Toxicity based: NA
Secondary Treatment Levels: TSS, TSS Percent Removal, CBOD₅ Percent Removal
Other (described below): pH, E. Coli, Copper, TRC

Design Flow (MGD): 2.5 MGD

Major: Yes

Description of Discharge:

Feature ID	Description	Receiving Water	Waterbody Use Classification	303(d)	TMDL
001	Treated Domestic Wastewater	Claybank Creek	Fish and Wildlife (F&W)	Yes	No
002	Storm Water Runoff	Claybank Creek	Fish and Wildlife (F&W)	Yes	No

Discussion: This permit is a reissuance due to expiration.

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 9.0 s.u. and the daily minimum is 6.0 s.u. The monitoring frequency is three times per week. Flow will be monitored continuously, seven days per week.

The discharge limits for 5 Day Carbonaceous Biochemical Oxygen Demand (CBOD₅) and Total Ammonia as Nitrogen (NH₃N), 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 January 31, 2020. The summer (May – November) monthly average limits for CBOD₅ and NH₃N, are 12.0 mg/l and 3.0 mg/l, respectively. The winter (December – April) monthly average limits for CBOD₅ and NH₃N, are 25.0 and 20.0, respectively. The updated WLA does not require a minimum DO limitation; however, to prevent backsliding the minimum DO limitation of 6.0 mg/L will be continued. The monitoring frequency will be three times per week. A minimum percent removal of 85 percent is imposed for CBOD₅ 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 three times per week. 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. The segment of Claybank Creek containing the discharge 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 three times per week.

The Municipal Section, in consultation with the Department's Water Quality Branch, has conducted a narrative nutrient reasonable potential analysis. Based on a review of the facility's current levels of nutrients in the discharge and current assessments of the available information, the Permittee is required to monitor monthly and report effluent test results for Total Kjeldahl Nitrogen (TKN), Nitrite plus Nitrate (NO₂+NO₃), and Total Phosphorus (TP). 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 additional nutrient limits on this discharge.

The Total Residual Chlorine (TRC) calculations were conducted to ensure that acute and chronic toxic concentrations of TRC in the receiving stream are not exceeded. Toxicity calculations indicate a higher limit may be protective; however, to prevent backsliding, the current TRC limitations will be continued. Daily maximum and monthly average TRC limitations of 0.090 mg/L and 0.052 mg/L, respectively, are being imposed at Outfall 0011. The monitoring frequency will be three times per week. 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.

Because this facility is a major municipal discharger, chronic toxicity testing with two species (*Ceriodaphnia* and *Pimephales*) is being imposed on this permit. Toxicity testing is imposed for both survival and life-cycle impairment (i.e., growth and reproduction). Chronic toxicity at the IWC of 22 percent is required once per year during the month of November. Calculations of the receiving stream indicate that a lower IWC may be protective; however, to prevent backsliding, the current IWC will be continued. Should the results show chronic toxicity, the permittee would have to conduct follow-up testing as described in Part IV.B of the permit.

ADEM completed a numeric Reasonable Potential Analysis (RPA) of the data submitted in Part D of the Permittee's application (Per 40 CFR Part 122 Appendix J – Table 2) and discharge monitoring reports (DMRs). The RPA indicates that the discharge may have a reasonable potential to contribute to copper excursions of Alabama's in-stream water quality standards. The RPA indicates that higher limitations than the current limitations for copper may be protective; however, to avoid backsliding the current limitations will be continued. Total Recoverable Copper monitoring will be included in the permit with a daily maximum limitation of 68.812 ug/l and a monthly average limitation of 60.718 ug/l. The monitoring frequency will be once per month. There was no available background data for the receiving stream.

The receiving stream is Claybank Creek, a Tier I waterbody. Claybank Creek is on the current 303(d) list for impaired waterbodies for pathogens (*E. Coli*). The *E. Coli* limits imposed in the permit are consistent with Alabama's water quality standards. The discharge from the Permittee is not expected to contribute additional pathogens impairment to Claybank Creek. There are no approved TMDLs for 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.

Annual stormwater monitoring for outfalls 002S will be required for Flow, pH, TSS, NH₃-N, CBOD₅, TKN, NO₃-NO₂-N, TP, Oil and Grease, and E. Coli.

Prepared by: Sandra Lee

TOXICITY AND DISINFECTION RATIONALE

Facility Name:	Fort Rucker Main WWTP	
NPDES Permit Number:	AL0076821	
Receiving Stream:	Claybank Creek	
Facility Design Flow (Q _w):	2,500 MGD	
Receiving Stream 7Q ₁₀ :	17,100 cfs	
Receiving Stream 1Q ₁₀ :	12,825 cfs	(Estimated at 0.75 * 7Q₁₀)
Winter Headwater Flow (WHF):	34.16 cfs	
Summer Temperature for CCC:	30 deg. Celsius	
Winter Temperature for CCC:	20 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 Ratio (SDR) is calculated using the 7Q₁₀ for all stream classifications.

$$\text{Stream Dilution Ratio (SDR)} = \frac{Q_w}{7Q_{10} + Q_w} = 18.45\%$$

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.

$$\begin{aligned} \text{Limiting Dilution} &= \frac{Q_w}{7Q_{10} + Q_w} \\ &= 18.45\% \quad \text{Effluent-Dominated, CCC Applies} \end{aligned}$$

$$\begin{aligned} \text{Criterion Maximum Concentration (CMC):} & \quad \text{CMC} = 0.411 / (1 + 10^{(7.204 - \text{pH})}) + 58.4 / (1 + 10^{(\text{pH} - 7.204)}) \\ \text{Criterion Continuous Concentration (CCC):} & \quad \text{CCC} = [0.0577 / (1 + 10^{(7.688 - \text{pH})}) + 2.487 / (1 + 10^{(\text{pH} - 7.688)})] * \text{Min}[2.85, 1.45 * 10^{(0.028 * (25 - T))}] \end{aligned}$$

	<u>CMC</u>	<u>CCC</u>
Allowable Summer Instream NH ₃ -N:	36.09 mg/l	2.18 mg/l
Allowable Winter Instream NH ₃ -N:	36.09 mg/l	4.15 mg/l

$$\begin{aligned} \text{Summer NH}_3\text{-N Toxicity Limit} &= \frac{[(\text{Allowable Instream NH}_3\text{-N}) * (7Q_{10} + Q_w)] - [(\text{Headwater NH}_3\text{-N}) * (7Q_{10})]}{Q_w} \\ &= 11.4 \text{ mg/l NH}_3\text{-N at 7Q}_{10} \end{aligned}$$

$$\begin{aligned} \text{Winter NH}_3\text{-N Toxicity Limit} &= \frac{[(\text{Allowable Instream NH}_3\text{-N}) * (\text{WHF} + Q_w)] - [(\text{Headwater NH}_3\text{-N}) * (\text{WHF})]}{Q_w} \\ &= 39.9 \text{ mg/l NH}_3\text{-N at Winter Flow} \end{aligned}$$

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.

	<u>DO-based NH₃-N limit</u>	<u>Toxicity-based NH₃-N limit</u>
Summer	3.00 mg/l NH₃-N	11.40 mg/l NH₃-N
Winter	20.00 mg/l NH₃-N	39.90 mg/l NH₃-N

Summer: The DO based limit of 3.00 mg/l NH₃-N applies.

Winter: The DO based limit of 20.00 mg/l NH₃-N applies.

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.

Chronic toxicity testing is required

$$\text{Instream Waste Concentration (IWC)} = \frac{Q_w}{7Q_{10} + Q_w} = 18.45\%$$

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.**

	<u>Stream Standard</u> (colonies/100ml)	<u>Effluent Limit</u> (colonies/100ml)
<u>E. Coli (applies to Non-coastal and Shellfish Harvesting Coastal)</u>		
Monthly limit as monthly average (November through April):	548	548
Monthly limit as monthly average (May through October):	126	126
Daily Max (November through April):	2507	2507
Daily Max (May through October):	298	298
<u>Enterococci (applies to Coastal)</u>		
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: 0.060 mg/l (chronic) (0.011)/(SDR)
Maximum allowable TRC in effluent: 0.103 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:

10/14/2025

Waste Load Allocation Summary

Page 1

REQUEST INFORMATION

Request Number: 3647

From: Sandy Lee In Branch/Section: Municipal
Date Submitted: 9/12/2019 Date Required: 10/12/2019 FUND Code: 605
Date Permit application received by NPDES program: 9/3/2019

Receiving Waterbody: Claybank Creek
Previous Stream Name:

Facility Name: Fort Rucker Main WWTP (Name of Discharger-WQ will use to file)

Previous Discharger Name:

River Basin: Choctawhatchee Outfall Latitude: 31.338705 (decimal degrees)

*County: Dale Outfall Longitude: -85.740936 (decimal degrees)

Permit Number: AL0076821 Permit Type: Permit Reissuance

Permit Status: Active

Type of Discharger: SEMIPUBLIC/PRIVATE

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

If yes, impacting dischargers names:
Enterprise Northeast WWTP
Cairns WWTP
Daleville Westside WWTP

Impacting dischargers permit numbers:
AL0020061
AL0076813
AL0062448

Existing Discharge Design Flow: 2.5 MGD

Proposed Discharge Design Flow: 2.5 MGD

Note: The flow rates given should be those requested for modeling.

Comments included

Yes No

Information Verified By: BCH

Year File Was Created: 1988

Response ID Number: 1724

Lat/Long Method: GPS

12 Digit HUC Code: 031402010903

Use Classification: F&W

Site Visit Completed? Yes No

Date of Site Visit: 10/24/2019

Waterbody Impaired? Yes No

Date of WLA Response: 1/31/2020

Antidegradation Yes No

Approved TMDL?

Yes No

Waterbody Tier Level: Tier I

Use Support Category: 3

Approval Date of TMDL:

Waste Load Allocation Information

Modeled Reach Length: 15.83 Miles

Date of Allocation: 1/31/2020

Name of Model Used: SWQM

Allocation Type: 2 Seasons

Model Completed by: Brian Haigler

Type of Model Used: Desk-top

Allocation Developed by: Water Quality Branch

Waste Load Allocation Summary

Annual Effluent Limits	Conventional Parameters				Other Parameters			
	Qw	2.5	MGD	MGD	Qw	2.5	MGD	MGD
	Season	Summer	Season	Winter	Season		Season	
	From	May	From	Dec	From		From	
	Through	Nov	Through	Apr	Through		Through	
CBOD5			CBOD5	12 mg/l	CBOD5	25 mg/l	TP	
NH3-N			NH3-N	3	NH3-N	20	TN	
TKN			TKN		TKN		TSS	
D.O.			D.O.		D.O.			

"Monitor Only" Parameters for Effluent:		Parameter	Frequency	Parameter	Frequency
		TP	Monthly	DO	Monthly
		TKN	Monthly		
		NO2+NO3-N	Monthly		

Water Quality Characteristics Immediately Upstream of Discharge						
Parameter	Summer			Winter		
CBODu	2	mg/l		2	mg/l	
NH3-N	0.11	mg/l		0.11	mg/l	
Temperature	30	°C		20	°C	
pH	7	su		7	su	

Hydrology at Discharge Location				Method Used to Calculate	
Drainage Area Qualifier Exact	Drainage Area	159.94	sq mi	ADEM Estimate w/USGS Gage Data	
	Stream 7Q10	17.1	cfs	75% of 7Q10	
	Stream 1Q10	12.825	cfs	ADEM Estimate w/USGS Gage Data	
	Stream 7Q2	34.16	cfs	ADEM Estimate w/USGS Gage Data	
	Annual Average	216.76	cfs	ADEM Estimate w/USGS Gage Data	

Comments and/or Notations Harrand Creek with Enterprise NE WWTP (AL0020061) input was from 5/7/2010 Enterprise #4 (NE)
 UT to Claybank Creek with Daleville Westside WWTP (AL0062448) input was from 4/14/2016 Daleville Westside WWTP WLA
 UT to Claybank Creek with Cairns WWTP (AL0076813) input was from 5/6/2009 Fort Rucker Cairns WWTP WLA

$Q_d * C_d + Q_{d2} * C_{d2} + Q_s * C_s = Q_r * C_r$							Enter Max Daily Discharge as reported by Applicant (C _d) Max	Enter Avg Daily Discharge as reported by Applicant (C _d) Ave	Partition Coefficient (Stream / Lake)
ID	Pollutant	Carcinogen Yes*	Type	Background from upstream source (C _{d2}) Daily Max	Background from upstream source (C _{d2}) Monthly Ave	Background Instream (C _s) Daily Max			
1	Arsimony		Metals	0	0	0	0	0	-
2	Arsenic**	YES	Metals	0	0	0	0	0	0.574
3	Beryllium		Metals	0	0	0	0	0	-
4	Cadmium**		Metals	0	0	0	0	0	0.236
5	Chromium / Chromium III**		Metals	0	0	0	0	0	0.210
6	Chromium / Chromium VI**		Metals	0	0	0	0	0	-
7	Copper**		Metals	0	0	0	0	81.8	14.42
8	Lead**		Metals	0	0	0	0	0.00676	0.00556
9	Mercury**		Metals	0	0	0	0	1.9	1.6
10	Nickel**		Metals	0	0	0	0	0	0.505
11	Selenium		Metals	0	0	0	0	0	-
12	Silver		Metals	0	0	0	0	0	-
13	Thallium		Metals	0	0	0	0	0	-
14	Zinc**		Metals	0	0	0	0	38.1	30.5
15	Cyanide		Metals	0	0	0	0	8.9	5.1
16	Total Phenolic Compounds		Metals	0	0	0	0	108000	103000
17	Hardness (As CaCO3)		Metals	0	0	0	0	0	-
18	Acrolein		VOC	0	0	0	0	0	-
19	Acrylonitrile*	YES	VOC	0	0	0	0	0	-
20	Aldrin	YES	VOC	0	0	0	0	0	-
21	Bromzene*	YES	VOC	0	0	0	0	0	-
22	Bromoform*	YES	VOC	0	0	0	0	0	-
23	Carbon Tetrachloride*	YES	VOC	0	0	0	0	0	-
24	Chlordane	YES	VOC	0	0	0	0	0	-
25	Chlorobenzene		VOC	0	0	0	0	0	-
26	Chlorodibromo-Methane*	YES	VOC	0	0	0	0	0	-
27	Chloroethane		VOC	0	0	0	0	0	-
28	2-Chloro-Ethylvinyl Ether		VOC	0	0	0	0	0	-
29	Chloroform*	YES	VOC	0	0	0	0	15.5	12.3
30	4,4'-DDD	YES	VOC	0	0	0	0	0	-
31	4,4'-DDE	YES	VOC	0	0	0	0	0	-
32	4,4'-DDT	YES	VOC	0	0	0	0	0	-
33	Dichlorobromo-Methane*	YES	VOC	0	0	0	0	1.29	1.2
34	1,1-Dichloroethane		VOC	0	0	0	0	0	-
35	1,2-Dichloroethane*	YES	VOC	0	0	0	0	0	-
36	Trans-1,2-Dichloro-Ethylene		VOC	0	0	0	0	0	-
37	1,1-Dichloroethylene*	YES	VOC	0	0	0	0	0	-
38	1,2-Dichloropropane		VOC	0	0	0	0	0	-
39	1,3-Dichloro-Propylene		VOC	0	0	0	0	0	-
40	Dieldrin	YES	VOC	0	0	0	0	0	-
41	Ethylbenzene		VOC	0	0	0	0	0	-
42	Methyl Bromide		VOC	0	0	0	0	0	-
43	Methyl Chloride		VOC	0	0	0	0	0	-
44	Methylene Chloride*	YES	VOC	0	0	0	0	0	-
45	1,1,1,2-Tetrachloro-Ethane*	YES	VOC	0	0	0	0	0	-
46	Tetrachloro-Ethylene*	YES	VOC	0	0	0	0	0	-
47	Toluene		VOC	0	0	0	0	0	-
48	Toxaphene	YES	VOC	0	0	0	0	0	-
49	Tributyltin (TBT)	YES	VOC	0	0	0	0	0	-
50	1,1,1-Trichloroethane		VOC	0	0	0	0	0	-
51	1,1,1-Trichloroethane*	YES	VOC	0	0	0	0	0	-
52	Trichloroethylene*	YES	VOC	0	0	0	0	0	-
53	Vinyl Chloride*	YES	VOC	0	0	0	0	0	-
54	p-Chloro-m-Cresol		Acids	0	0	0	0	0	-
55	2-Chlorophenol		Acids	0	0	0	0	0	-
56	2,4-Dichlorophenol		Acids	0	0	0	0	0	-
57	2,4-Dimethylphenol		Acids	0	0	0	0	0	-
58	4,6-Dinitro-O-Cresol		Acids	0	0	0	0	0	-
59	2,4-Dinitrophenol		Acids	0	0	0	0	0	-
60	4,6-Dinitro-2-methylphenol	YES	Acids	0	0	0	0	0	-
61	Dioxin (2,3,7,8-TCDD)	YES	Acids	0	0	0	0	0	-
62	2-Nitrophenol		Acids	0	0	0	0	0	-
63	4-Nitrophenol		Acids	0	0	0	0	0	-
64	Pentachlorophenol*	YES	Acids	0	0	0	0	0	-
65	Phenol		Acids	0	0	0	0	0	-
66	2,4,6-Trichlorophenol*	YES	Acids	0	0	0	0	0	-
67	Aceaphthene		Bases	0	0	0	0	0	-
68	Acenaphthylene		Bases	0	0	0	0	0	-
69	Anthracene		Bases	0	0	0	0	0	-
70	Benidine		Bases	0	0	0	0	0	-
71	Benzo(A)Anthracene*	YES	Bases	0	0	0	0	0	-
72	Benzo(A)Pyrene*	YES	Bases	0	0	0	0	0	-
73	3,4-Benzo-Fluoranthene		Bases	0	0	0	0	0	-
74	Benzo(G)Fluorene		Bases	0	0	0	0	0	-
75	Benzo(K)Fluoranthene		Bases	0	0	0	0	0	-
76	Bis (2-Chloroethyl) Methane		Bases	0	0	0	0	0	-
77	Bis (2-Chloroethyl)-Ether*	YES	Bases	0	0	0	0	0	-
78	Bis (2-Chloroisopropyl) Ether		Bases	0	0	0	0	0	-
79	Bis (2-Ethylhexyl) Phthalate*	YES	Bases	0	0	0	0	0	-
80	4-Bromophenyl Phenyl Ether		Bases	0	0	0	0	0	-
81	Butyl Benzyl Phthalate		Bases	0	0	0	0	0	-
82	2-Chloronaphthalene		Bases	0	0	0	0	0	-
83	4-Chlorophenyl Phenyl Ether		Bases	0	0	0	0	0	-
84	Chrysene*	YES	Bases	0	0	0	0	0	-
85	Di-N-Butyl Phthalate		Bases	0	0	0	0	0	-
86	Di-N-Octyl Phthalate		Bases	0	0	0	0	0	-
87	Dibenz(A,H)Anthracene*	YES	Bases	0	0	0	0	0	-
88	1,2-Dichlorobenzene		Bases	0	0	0	0	0	-
89	1,3-Dichlorobenzene		Bases	0	0	0	0	0	-
90	1,4-Dichlorobenzene		Bases	0	0	0	0	0	-
91	3,3-Dichlorobenzidine*	YES	Bases	0	0	0	0	0	-
92	Diethyl Phthalate		Bases	0	0	0	0	0	-
93	Dimethyl Phthalate		Bases	0	0	0	0	0	-
94	2,4-Dinitrotoluene*	YES	Bases	0	0	0	0	0	-
95	2,6-Dinitrotoluene		Bases	0	0	0	0	0	-
96	1,2-Diphenylhydrazine		Bases	0	0	0	0	0	-
97	Endosulfan (alpha)	YES	Bases	0	0	0	0	0	-
98	Endosulfan (beta)	YES	Bases	0	0	0	0	0	-
99	Endosulfan sulfate	YES	Bases	0	0	0	0	0	-
100	Erdrin	YES	Bases	0	0	0	0	0	-
101	Erdrin Aldehyde	YES	Bases	0	0	0	0	0	-
102	Fluoranthene		Bases	0	0	0	0	0	-
103	Fluorene		Bases	0	0	0	0	0	-
104	Heptachlor	YES	Bases	0	0	0	0	0	-
105	Heptachlor Epoxide	YES	Bases	0	0	0	0	0	-
106	Hexachlorobenzene*	YES	Bases	0	0	0	0	0	-
107	Hexachlorobutadiene*	YES	Bases	0	0	0	0	0	-
108	Hexachlorocyclohexane (alpha)	YES	Bases	0	0	0	0	0	-
109	Hexachlorocyclohexane (beta)	YES	Bases	0	0	0	0	0	-
110	Hexachlorocyclohexane (gamma)	YES	Bases	0	0	0	0	0	-
111	Hexachlorocyclopentadiene		Bases	0	0	0	0	0	-
112	Hexachloroethane		Bases	0	0	0	0	0	-
113	Indeno(1,2,3-CK)Pyrene*	YES	Bases	0	0	0	0	0	-
114	Isophorone		Bases	0	0	0	0	0	-
115	Naphthalene		Bases	0	0	0	0	0	-
116	Nitrobenzene		Bases	0	0	0	0	0	-
117	N-Nitrosodi-N-Propylamine*	YES	Bases	0	0	0	0	0	-
118	N-Nitrosodi-N-Methylamine*	YES	Bases	0	0	0	0	0	-
119	N-Nitrosodi-N-Phenylamine*	YES	Bases	0	0	0	0	0	-
120	PCB-1016	YES	Bases	0	0	0	0	0	-
121	PCB-1221	YES	Bases	0	0	0	0	0	-
122	PCB-1232	YES	Bases	0	0	0	0	0	-
123	PCB-1242	YES	Bases	0	0	0	0	0	-
124	PCB-1248	YES	Bases	0	0	0	0	0	-
125	PCB-1254	YES	Bases	0	0	0	0	0	-
126	PCB-1260	YES	Bases	0	0	0	0	0	-
127	Phenanthrene		Bases	0	0	0	0	0	-
128	Pyrene		Bases	0	0	0	0	0	-
129	1,2,4-Trichlorobenzene		Bases	0	0	0	0	0	-

2.5	Enter Q _d = wastewater discharge flow from facility (MGD)
3.8680725	Q _d = wastewater discharge flow (cfs) (this value is calculated from the MGD)
0	Enter flow from upstream discharge Q _{d2} = background stream flow in MGD above point of discharge
0	Q _{d2} = background stream flow from upstream source (cfs)
17.1	Enter TQ10, Q _s = background stream flow in cfs above point of discharge
12.825	Enter or estimated, TQ10, Q _s = background stream flow in cfs above point of discharge (TQ10 estimated at 75% of TQ10)
216.76	Enter Mean Annual Flow, Q _s = background stream flow in cfs above point of discharge
34.16	Enter TQ2, Q _s = background stream flow in cfs above point of discharge (for LWF class streams)
Enter to Last	Enter C _s = background in-stream pollutant concentration in µg/l (assuming this is zero "0" unless there is data)
Q _d + Q _{d2} + Q _s	Q _s = resultant in-stream flow, after discharge
Calculated on other	C _s = resultant in-stream pollutant concentration in µg/l in the stream (after complete mixing occurs)
50	Enter, Background Hardness above point of discharge (assumed 50 South of Birmingham and 100 North of Birmingham)
7.80 s.u.	Enter, Background pH above point of discharge
YES	Enter, Is discharge to a stream? *YES* Other option would be to a Lake. (This changes the partition coefficients for the metals)

** Using Partition Coefficients

February 9, 2008

Freshwater F&W classification		Max Daily Discharge as reported by Applicant (C _{max})	Freshwater Acute (µg/l) Q ₁ = 1Q10				Avg Daily Discharge as reported by Applicant (C _{avg})	Freshwater Chronic (µg/l) Q ₁ = 7Q10				Human Health Consumption Fish only (µg/l) Carcinogen Q ₁ = Annual Average Non-Carcinogen Q ₁ = 7Q10						
ID	Pollutant		RP?	Carcinogen yes	Background from upstream source Daily Max	Water Quality Criteria (C _c)		Draft Permit Limit (C _{perm})	20% of Draft Permit Limit	RP?	Background from upstream source Monthly Ave	Water Quality Criteria (C _c)	Draft Permit Limit (C _{perm})	20% of Draft Permit Limit	RP?	Water Quality Criteria (C _c)	Draft Permit Limit (C _{perm})	20% of Draft Permit Limit
1	Antimony			0	0	0	0		0	0	0	0		3.73E+02	2.02E+03	4.05E+02	No	
2	Arsenic		YES	0	362.324	2556.282	511.256	No	0	0	261.324	1416.587	263.317	No	3.02E+01	1.73E+01	3.46E+00	No
3	Beryllium			0	0	0	0		0	0	0	0		0	0	0		
4	Cadmium			0	4.347	18.760	3.732	No	0	0	0.644	3.489	0.698	No	0	0	0	
5	Chromium/ Chromium III			0	1537.913	6637.024	1327.405	No	0	0	300.081	1064.437	216.887	No	0	0	0	
6	Chromium/ Chromium VI			0	18.000	69.050	13.810	No	0	0	11.000	39.629	11.828	No	0	0	0	
7	Copper			81.8	18.026	77.795	15.559	Yes	0	14.42	12.769	89.200	13.840	Yes	0	0	0	
8	Lead			0	146.281	831.333	126.287	No	0	0	5.701	30.803	6.161	No	0	0	0	
9	Mercury			0.00676	2.400	10.357	2.071	No	0	0.00556	0.012	0.095	0.013	No	4.24E-02	2.30E-01	4.69E-02	No
10	Nickel			1.9	915.824	2228.084	445.219	No	0	1.6	57.292	310.570	62.114	No	9.93E+02	5.38E+03	1.08E+03	No
11	Selenium			0	20.000	86.312	17.262	No	0	0	5.000	27.104	5.421	No	2.43E+03	1.32E+04	2.64E+03	No
12	Silver			0	0.978	4.214	0.843	No	0	0	0	0	0	No	0	0	0	
13	Thallium			0	0	0	0		0	0	0	0		0	0	0		
14	Zinc			38.1	187.388	851.768	170.353	No	0	30.5	188.863	1078.550	215.730	No	1.49E+04	8.07E+04	1.61E+04	No
15	Cyanide			8.8	22.000	94.943	18.989	No	0	5.1	5.200	26.158	5.638	No	9.33E+03	5.08E+04	1.01E+04	No
16	Total Phenolic Compounds			0	108000	0	0		0	103000	0	0		0	0	0		
17	Hardness (As CaCO3)			0	0	0	0		0	0	0	0		0	0	0		
18	Acrolein			0	0	0	0		0	0	0	0		5.43E+02	2.04E+01	5.88E+00	No	
19	Acrylonitrile			0	0	0	0		0	0	0	0		1.44E-01	8.22E+00	1.64E+00	No	
20	Aldrin		YES	0	3.000	12.947	2.560	No	0	0	0	0		2.94E-05	1.88E-03	3.35E-04	No	
21	Benzene		YES	0	0	0	0		0	0	0	0		1.96E+01	8.83E+02	1.77E+02	No	
22	Bromoforn		YES	0	0	0	0		0	0	0	0		7.88E+01	4.48E+03	8.98E+02	No	
23	Carbon Tetrachloride		YES	0	0	0	0		0	0	0	0		9.57E-01	5.48E+01	1.09E+01	No	
24	Chlordane		YES	0	0	0	0		0	0	0	0		4.73E-04	2.70E-02	5.39E-03	No	
25	Dieldrin		YES	0	0	0	0		0	0	0	0		9.85E+02	4.91E+03	9.82E+02	No	
26	Dibromobromo-Methane		YES	0	0	0	0		0	0	0	0		7.41E+00	4.23E+02	8.45E+01	No	
27	Chloroethane			0	0	0	0		0	0	0	0		0	0	0		
28	2-Chloro-Ethyl Vinyl Ether			0	0	0	0		0	0	0	0		0	0	0		
29	ChloroForm		YES	0	15.5	0	0		0	12.3	0	0		1.02E+03	5.82E+03	1.16E+03	No	
30	4,4' - DDD		YES	0	0	0	0		0	0	0	0		1.81E-04	1.03E-02	2.07E-03	No	
31	4,4' - DDE		YES	0	0	0	0		0	0	0	0		1.26E-04	7.30E-03	1.46E-03	No	
32	4,4' - DDT		YES	0	0	0	0		0	0	0	0		1.28E-04	7.30E-03	1.46E-03	No	
33	Dichlorobromo-Methane		YES	0	1.29	1.100	4.747	0.949	No	0	0.001	0.005	0.001	No	1.00E+01	5.72E+02	1.14E+02	No
34	1, 1-Dichloroethane			0	0	0	0		0	1.2	0	0		0	0	0		
35	1, 2-Dichloroethane		YES	0	0	0	0		0	0	0	0		3.14E+01	1.22E+03	2.44E+02	No	
36	Trans-1, 2-Dichloro-Ethylene			0	0	0	0		0	0	0	0		5.01E+03	3.20E+04	6.40E+03	No	
37	1, 1-Dichloroethylene		YES	0	0	0	0		0	0	0	0		4.17E+03	2.38E+05	4.75E+04	No	
38	1, 2-Dichloropropane			0	0	0	0		0	0	0	0		8.48E+00	4.80E+01	9.21E+00	No	
39	1, 3-Dichloro-Propylene			0	0	0	0		0	0	0	0		1.23E+01	6.88E+01	1.33E+01	No	
40	Dieldrin		YES	0	0	0.240	1.038	0.207	No	0	0.056	0.304	0.061	No	3.12E-05	1.78E-03	3.56E-04	No
41	Ethylbenzene			0	0	0	0		0	0	0	0		1.34E+03	6.75E+03	1.35E+03	No	
42	Methyl Bromide			0	0	0	0		0	0	0	0		6.71E+02	4.72E+03	9.44E+02	No	
43	Methyl Chloride			0	0	0	0		0	0	0	0		0	0	0		
44	Methylene Chloride		YES	0	0	0	0		0	0	0	0		3.65E+02	1.97E+04	3.94E+03	No	
45	1, 1, 1, 2-Tetrachloro-Ethane		YES	0	0	0	0		0	0	0	0		2.33E+00	1.33E+02	2.66E+01	No	
46	Tetrachloro-Ethane		YES	0	0	0	0		0	0	0	0		1.92E+00	1.08E+02	2.16E+01	No	
47	Toluene			0	0	0	0		0	0	0	0		6.72E+03	4.73E+04	9.46E+03	No	
48	Toxaphene		YES	0	0	0.730	3.150	0.630	No	0	0.002	0.001	0.000	No	1.80E-04	9.24E-03	1.85E-03	No
49	Tributyltin (TBT)		YES	0	0	0.880	1.985	0.397	No	0	0	0.380	0.078	No	0	0	0	
50	1, 1, 1-Trichloroethane			0	0	0	0		0	0	0	0		0	0	0		
51	1, 1, 2-Trichloroethane		YES	0	0	0	0		0	0	0	0		9.18E+00	5.19E+02	1.04E+02	No	
52	Trichloroethylene		YES	0	0	0	0		0	0	0	0		1.79E+01	9.88E+02	1.98E+02	No	
53	Vinyl Chloride		YES	0	0	0	0		0	0	0	0		1.42E+00	8.13E+01	1.63E+01	No	
54	p-Chloro-m-Cresol			0	0	0	0		0	0	0	0		0	0	0		
55	2-Chlorophenol			0	0	0	0		0	0	0	0		6.71E+01	4.72E+02	9.44E+01	No	
56	2, 4-Dichlorophenol			0	0	0	0		0	0	0	0		1.72E+02	9.32E+02	1.86E+02	No	
57	4-Dimethylphenol			0	0	0	0		0	0	0	0		4.88E+02	2.70E+03	5.39E+02	No	
58	4, 6-Dinitro-2-Cresol			0	0	0	0		0	0	0	0		0	0	0		
59	2, 4-Dinitrophenol			0	0	0	0		0	0	0	0		3.11E+03	1.88E+04	3.37E+03	No	
60	4,6-Dinitro-2-methylphenol		YES	0	0	0	0		0	0	0	0		1.88E+02	9.44E+03	1.89E+03	No	
61	Dioxin (2,3,7,8-TCDD)		YES	0	0	0	0		0	0	0	0		2.67E-08	1.52E-06	3.04E-07	No	
62	2-Nitrophenol			0	0	0	0		0	0	0	0		0	0	0		
63	4-Nitrophenol			0	0	0	0		0	0	0	0		0	0	0		
64	Pentachlorophenol		YES	0	0	6.723	37.648	7.529	No	0	6.693	36.279	7.258	No	1.77E+00	1.01E+02	2.02E+01	No
65	Phenol			0	0	0	0		0	0	0	0		8.00E+05	2.71E+06	5.42E+05	No	
66	2, 4, 6-Trichlorophenol		YES	0	0	0	0		0	0	0	0		1.41E+00	8.07E+01	1.61E+01	No	
67	Acenaphthene			0	0	0	0		0	0	0	0		5.78E+02	3.14E+03	6.27E+02	No	
68	Acenaphthylene			0	0	0	0		0	0	0	0		0	0	0		
69	Anthracene			0	0	0	0		0	0	0	0		2.33E+04	1.26E+05	2.53E+04	No	
70	Benzidine			0	0	0	0		0	0	0	0		1.18E-04	6.28E-04	1.26E-04	No	
71	Benzo(A)Anthracene		YES	0	0	0	0		0	0	0	0		1.07E-02	6.08E-01	1.22E-01	No	
72	Benzo(A)Pyrene		YES	0	0	0	0		0	0	0	0		1.07E-02	6.08E-01	1.22E-01	No	
73	Benzo(b)fluoranthene			0	0	0	0		0	0	0	0		1.07E-02	5.78E-02	1.16E-02	No	
74	Benzo(GH)Perylene			0	0	0	0		0	0	0	0		0	0	0		
75	Benzo(K)Fluoranthene			0	0	0	0		0	0	0	0		1.07E-02	5.78E-02	1.16E-02	No	
76	Bis (2-Chloroethyl) Methane			0	0	0	0		0	0	0	0		6.34E+02	5.01E+03	1.00E+03	No	
77	Bis (2-Chloroethyl)-Ether		YES	0	0	0	0		0	0	0	0		3.07E-01	1.79			

Fort Rucker Main WWTP (AL0076821) – Outfall 0011

Total Recoverable Copper DMR Data

Monitor Pd End Date	Monthly Average (ug/L)	Daily Maximum (ug/L)
10/31/20	16.2	16.2
11/30/20	17.5	17.5
12/31/20	14.1	14.1
1/31/21	12	12
2/28/21	14.8	14.8
3/31/21	32	32
4/30/21	18	18
5/31/21	17.5	17.5
6/30/21	14.9	14.9
7/31/21	16.2	16.2
8/31/21	14.8	14.8
9/30/21	13.8	13.8
10/31/21	12.9	12.9
11/30/21	15.9	15.9
12/31/21	10.1	10.1
1/31/22	11.9	11.9
2/28/22	15	15
3/31/22	12.4	12.4
4/30/22	10.4	10.4
5/31/22	11.7	11.7
6/30/22	14.5	14.5
7/31/22	12.2	12.2
8/31/22	12.5	12.5
9/30/22	13.4	13.4
10/31/22	12.7	12.7
11/30/22	12.7	12.7
12/31/22	10.8	10.8
1/31/23	10	10
2/28/23	12	12
3/31/23	9.1	9.1
4/30/23	11.4	11.4
5/31/23	13.3	13.3
6/30/23	16.3	16.3
7/31/23	11.2	11.2
8/31/23	10.2	10.2
9/30/23	13.6	13.6
10/31/23	81.8	81.8
11/30/23	17.333	17.333
12/31/23	12.1	12.1

1/31/24	11.7	11.7
2/29/24	9.4	9.4
3/31/24	11.2	11.2
4/30/24	12.1	12.1
5/31/24	13	13
6/30/24	12.5	12.5
7/31/24	8.9	8.9
8/31/24	10.9	10.9
9/30/24	12.5	12.5
10/31/24	16.4	16.4
11/30/24	11	11
12/31/24	10.2	10.2
1/31/25	11	11
2/28/25	10	10
3/31/25	12	12
4/30/25	8.9	8.9
5/31/25	12	12
6/30/25	17	17
7/31/25	13	13
8/31/25	16	16
9/30/25	11	11
10/31/25	9.6	9.6
11/30/25	14.2	14.2
12/31/25	17.4	17.4
	Monthly Average	14.42
	Maximum	81.8

Lee, Sandra

From: Stacy Bedsole <Stacy.Bedsole@amwater.com>
Sent: Thursday, February 5, 2026 2:07 PM
To: Lee, Sandra
Subject: RE: Fort Rucker Main WWTP permit application

Good afternoon, Sandra,

Following up on our conversation for the responsible official for permit signatures.

Sean Wheatley is no longer the responsible official for permits. Jeffrey Miller is our responsible official for permits and his information is below.

Jeffrey Miller
Vice President, American Water Enterprises, LLC
813-352-6987
jeffrey.miller@amwater.com

Thank you, Sandra

Stacy Bedsole

Stacy Bedsole
General Manager
American Water, Military Services Group
9801 Red Cloud Rd
Fort Rucker, AL 36362
C - (334) 237-2147
O - (334) 503-1761



From: Stacy Bedsole
Sent: Friday, January 30, 2026 7:41 AM
To: 'Lee, Sandra' <SLee@adem.alabama.gov>
Cc: Michael C Lynn <Michael.Lynn@amwater.com>; Amy N Hudspeth <Amy.Hudspeth@amwater.com>; Bill O Graves <William.Graves@amwater.com>; Katie Jamriska <Katie.Jamriska@amwater.com>
Subject: RE: Fort Rucker Main WWTP permit application

Good morning, Sandra,

Attached are the revised forms 2A, 2S, and 2F with the signatures required to complete the permit renewal application for AL0076821. Please reach out with any questions or concerns.

NPDES Individual Permit - Modification/Reissuance - Municipal (Form 188)

version 1.14

(Submission #: HQB-0QAG-MQXNA, version 1)

Details

Submission ID HQB-0QAG-MQXNA

Form Input

General Instructions

NPDES Individual Permit Modification and Reissuance Form ♦ Publicly-Owned Treatment Works (POTW), Other Treatment Works Treating Domestic Sewage (TWTDS), and Public Water Supply Treatment Plants

IF YOU ARE APPLYING FOR A PERMIT MODIFICATION, PLEASE CONTACT YOUR ASSIGNED PERMIT CONTACT TO DISCUSS THE TYPE OF MODIFICATION YOU SHOULD APPLY FOR BEFORE COMPLETING THIS FORM.

This form should be used to submit the following permit requests for permitted Publicly-Owned Treatment Works (POTW), Other Treatment Works Treating Domestic Sewage (TWTDS), and Public Water Supply Treatment Plants:

(1) Permit Transfers

(2) Permittee/Facility Name Changes

(3) Minor Modifications

This modification may not be used for changes that would result in changes to permit conditions

(4) Major Modifications (No Effluent Limit Change)

(5) Major Modifications (Effluent Limit Change)

(6) Reissuances

Reissuance of a permit due to approaching expiration

Revocation and Reissuance of permit prior to its scheduled expiration

Please complete all questions and attach all necessary documentation as prompted throughout the application process. Incomplete or incorrect information will delay processing.

Applicable Fees:

Permit Transfers and/or Permittee/Facility Name Changes

\$800

Minor Modifications

\$800

Major Modifications (No Effluent Limit Change)

\$3,140 (Major Sources)

\$2,250 (Minor Sources or Public Water Supply Treatment Plants)

Major Modifications (Effluent Limit Change)

\$7,060 (Major Sources)

\$4,290 (Minor Sources or Public Water Supply Treatment Plants)

Reissuances

\$7,060 (Major Sources)

\$4,290 (Minor Sources or Public Water Supply Treatment Plants)

For assistance, please click here to determine the permit engineer responsible for the site or call (334) 271-7810.

Processing Information

Purpose of Application

Reissuance of Permit Due to Approaching Expiration

Please indicate if the Permittee is applying for a permit transfer and/or name change in addition to permit modification or reissuance:

None

Action Type

Reissuance

Briefly describe any planned changes at the facility that are included in this reissuance application:

None

Do you have additional contacts associated with this site?

Yes

Permit Information

Permit Number

AL0076821

Current Permittee Name

American Water Enterprises, LLC

Permittee

Permittee Name

American Water Enterprises, LLC

Mailing Address

Post Office Box 620397

Fort Novosel, AL 36362

Is the Operator the same as the Permittee?

No

NOTE:

If the contracted Operator is a company instead of an individual, please provide the contact information for the primary point of contact for the contracted company.

Operator

Prefix

Mr.

First Name Last Name

William Graves

Organization Name

American Water Enterprises, LLC

Phone Type Number Extension

Business 3345031761

Email

william.graves@amwater.com

Address

Building 9801

Red Cloud Rd.

Fort Novosel, AL 36362

Has the Operator's scope of responsibility changed?

No

Responsible Official**Prefix**

Mr.

First Name Last Name

Sean Wheatley

Title

President American Water Enterprise-MSG

Organization Name

American Water Enterprises, LLC

Phone Type Number Extension

Business 8569554012

Email

Sean.Wheatley@amwater.com

Mailing Address

PO Box 620397

Fort Novosel, AL 36362

Existing Permit Contacts

Affiliation Type	Contact Information	Remove?
Permittee	American Water Enterprises, LLC	Keep
Emergency Contact, DMR Contact, Environmental Contact	Ronald Callahan, American Waters Enterprises, LLC	Remove
Notification Recipient, Responsible Official	Stephen Curtis, American Water Enterprises, LLC	Remove

Facility/Site Information**Facility/Site Name**

Fort Novosel Main WWTP

Organization/Ownership Type

LLC

The Facility/Site Address is the physical location of the treatment plant. Do not enter a PO Box. Do not enter the address of the office of the Permittee if different from the treatment plant.

Facility/Site Physical Location Address

Building 9801 Red Cloud Road

Fort Novosel, AL 36362

Facility/Site County

Dale

Facility/Site Contact

Prefix

Mr.

First Name Last Name

Stacy Bedsole

Title

General Manager

Organization Name

American Water Enterprises, LLC

Phone Type Number Extension

Business 3345031761

Email

Stacy.Bedsole@amwater.com

Note

Detailed directions should be included if a street address is not available.

Detailed Directions to the Facility/Site

Google Earth

Please refer to the link below for Lat/Long map instruction help.

[Map Instruction Help](#)

Facility/Site Front Gate Latitude and Longitude

31.33831200000000,-85.73865800000000

Building 9801 Red Cloud Road, Fort Rucker, AL

Primary SIC Code

4952-Sewerage Systems

Primary NAICS Code

221320-Sewage Treatment Facilities

Emergency Contact

Prefix

Mr.

First Name Last Name

Stacy Bedsole

Title

General Manager

Phone Type Number Extension

Business 3345031761

Email

Stacy.Bedsole@amwater.com

Does the facility have a designated Environmental Contact who is different than the Facility Contact or Emergency Contact listed above?

Yes

Environmental Contact

Prefix

Mrs.

First Name Last Name

Amy Hudspeth

Title

Environmental and Safety Specialist

Phone Type Number Extension

Business 3345031761

Email

Amy.Hudspeth@amwater.com

Additional Contacts (1 of 7)

Additional Contacts: DMR Contact

Contact Type

DMR Contact

Contact

Prefix

Mr.

First Name Last Name

William Graves

Title

Chief Wastewater Operator

Organization Name

American Water Enterprises, LLC

Phone Type Number Extension

Business 3345031761

Email

William.Graves@amwater.com

Address

Building 9801

Red Cloud Rd.

Fort Novosel, AL 36362

Additional Contacts (2 of 7)

Additional Contacts: Collection System Operator

Contact Type

Collection System Operator

Contact**Prefix**

Mr.

First Name	Last Name
Michael	Lynn

Title

SR. Operation Supervisor

Organization Name

American Water Enterprises, LLC

Phone Type	Number	Extension
Business	3345031761	

Email

Michael.Lynn@amwater.com

Address

Building 9801

Red Cloud Rd.

Fort Novosel, AL 36362

Additional Contacts (3 of 7)**Additional Contacts: Collection System Operator****Contact Type**

Collection System Operator

Contact**Prefix**

Mr.

First Name	Last Name
Dana	Roberts

Title

Wastewater Operator

Organization Name

American Water Enterprises, LLC

Phone Type	Number	Extension
Business	3345031761	

Email

Dana.Roberts@amwater.com

Address

Building 9801

Red Cloud Rd.

Fort Novosel, AL 36362

Additional Contacts (4 of 7)**Additional Contacts: Collection System Operator****Contact Type**

Collection System Operator

Contact

Prefix

Mr.

First Name Last Name

Anthony Rodriquez

Title

Wastewater Operator

Organization Name

American Water Enterprises, LLC

Phone Type Number Extension

Business 3345031761

Email

Anthony.Rodriguez@amwater.com

Address

Building 9801

Red Cloud Rd.

Fort Novosel, AL 36362

Additional Contacts (5 of 7)

Additional Contacts: DMR Contact

Contact Type

DMR Contact

Contact

Prefix

Mrs.

First Name Last Name

Amy Hudspeth

Title

Environmental and Safety Specialist

Organization Name

American Water Enterprises, LLC

Phone Type Number Extension

Business 3345031761

Email

Amy.Hudspeth@amwater.com

Address

Building 9801

Red Cloud Rd.

Fort Novosel, AL 36362

Additional Contacts (6 of 7)

Additional Contacts: Emergency Contact

Contact Type

Emergency Contact

Contact

Prefix

Mr.

First Name Last Name

Michael Lynn

Title

Senior Operation Supervisor

Organization Name

American Water Enterprises, LLC

Phone Type Number Extension

Business 3345031761

Email

Michael.Lynn@amwater.com

Address

Building 9801

Red Cloud Rd.

Fort Novosel, AL 36362

Additional Contacts (7 of 7)

Additional Contacts: DMR Contact

Contact Type

DMR Contact

Contact

Prefix

Mr.

First Name Last Name

Michael Lynn

Title

Senior Operation Supervisor

Organization Name

American Water Enterprises, LLC

Phone Type Number Extension

Business 3345031761

Email

Michael.Lynn@amwater.com

Address

Building 9801

Red Cloud Rd.

Fort Novosel, AL 36362

Enforcement History

Has the applicant been issued any Notices of Violation, Orders (Consent or Administrative/Unilateral), or Judicial Actions (Complaint, Settlement Agreement, Consent Decree, or Court Order) concerning water pollution or other permit violations within the State of Alabama in the past five years?

No

Wastewater Treatment & Discharge Information

Please indicate which type of operations occur at this facility:

Treatment Works Treating Domestic Sewage

What treatment type is used at this facility:

Mechanical (WWTP)

What discharge options are used at this facility:

Surface Water

What is the Total Design Flow (in millions of gallons per day, MGD) for this facility?

2.5

What is the facility's total 2-Year Actual Average Flow (in millions of gallons per day, MGD)?

0.586

Does this facility have any current or proposed stormwater outfalls from the treatment facility?

Yes

Process Flow Schematic

[FIG 1 FLOW DIAGRAM.pdf - 04/01/2025 09:12 AM](#)

Comment

NONE PROVIDED

Do you share an outfall with another facility?

No

Indicate if automatic sampling equipment or continuous wastewater flow metering equipment is being operated at this facility:

Current	Yes/No
Continuous Wastewater Flow Metering Equipment	Yes
Automatic Sampling Equipment	Yes

Indicate if installation of automatic sampling equipment or continuous wastewater flow metering equipment is planned at this facility:

Planned	Yes/No
Continuous Wastewater Flow Metering Equipment	No
Automatic Sampling Equipment	No

Schematic Diagram

[FIG 4.pdf - 04/01/2025 10:23 AM](#)

Comment

NONE PROVIDED

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)?

No

Treatment Methods (TWTDS)

Treatment Level

Secondary Treatment [e.g., suspended growth biological treatment; attached growth and combined biological treatment].

Preliminary Treatment (e.g., grit removal, flow equalization, screening)

Primary Treatment (e.g., primary clarification, chemically-enhanced primary treatment)

Wastewater Disinfection Technology Information

Chlorination

Dechlorination

Please select all POTW Treatment Categories that apply.

- Activated Sludge Process & Modifications
- Disinfection
- Dechlorination
- Clarification
- Equalization
- Aeration
- Sedimentation

Please select all unit operations that apply for Activated Sludge Process & Modifications:

Activated Sludge, Conventional

Please select all unit operations that apply for Aeration:

- Aeration (pre-treatment)
- Aeration (general)
- Aeration (post-treatment)

Please select all unit operations that apply for Clarification:

Clarification, Secondary

Please select all unit operations that apply for Disinfection:

Disinfection, Liquid Chlorine

Please select all unit operations that apply for Equalization:

Equalization, At POTW

Please select all unit operations that apply for Preliminary Treatment:

- Grit Removal
- Screen, Mechanical Bar

Please select all unit operations that apply for Sedimentation:

Sedimentation

Waste Storage & Disposal Information

Any storage of solids or liquids at the facility that have any potential for accidental discharge to a water of the state?

No

Collection System Information

Collection Systems

Collection System ID	Collection System Name	Owner Type of Collection System	Population of Collection System
NONE PROVIDED	Fort Novosel	Privately owned (Owned by private individual or organization).	19,500

Industrial Indirect Discharge Contributors

Does this wastewater treatment system receive or plan to receive industrial source wastewater contributions?

No

Coastal Zone Information

Is the discharge(s) located within the 10-foot elevation contour and within the limits of Mobile or Baldwin County?

No

Anti-Degradation Evaluation

Does this modification/reissuance include a new or increased discharge that began after April 3, 1991?

No

Has an Anti-Degradation Analysis been previously conducted and submitted to the Department for the new or increased discharge referenced above?

No

EPA Application Forms

All Applicants must submit certain EPA permit application forms. More than one application form may be required from a POTW or other TWTDS depending on the number and types of discharges or outfalls.

The EPA application forms must be submitted as follows:

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

The EPA application forms are found on the Department's website [here](#).

EPA Form 2A

[2A American Water revised.pdf - 03/27/2025 02:45 PM](#)

Comment

NONE PROVIDED

EPA Form 2F

[2F American Water revised.pdf - 04/01/2025 10:19 AM](#)

Comment

NONE PROVIDED

EPA form 2S

[2S American Water revised.pdf - 04/01/2025 10:59 AM](#)

Comment

NONE PROVIDED

Other attachments (as needed)

NONE PROVIDED

Comment

NONE PROVIDED

Topographic Map

Attach topographic map here.

[FIG 2.pdf - 03/25/2025 07:58 AM](#)

Comment

NONE PROVIDED

Engineering Report/BMP Plan Requirements

Engineering Report/BMP Plan Requirements

NONE PROVIDED

Comment

NONE PROVIDED

Outfalls (1 of 1)

Outfall: 001

Do you want to remove this outfall from the modified/reissued permit?

No

Outfall Identifier

001

Is this Outfall equipped with a diffuser?

No

What is this Outfall's 2-Year Average Flow (in millions of gallons per day, MGD)?

0.514

Receiving Water

Claybank Creek

Does the discharge enter the named receiving water via an unnamed tributary?

NONE PROVIDED

Please refer to the link below for Lat/Long map instruction help.

[Map Instruction Help](#)

Location of Outfall or Discharge Point/Receiving Water

31.33870500000000, -85.74093600000001

Are the location coordinates above still correct for this outfall?

Yes

[A list of the 303\(d\) impaired waters can be found here.](#)

303(d) Segment?

No

[A list of waters subject to a TMDL can be found here.](#)

TMDL Segment?

No

NOTE

If a TMDL Compliance Schedule is requested, the following should be attached as supporting documentation: (1) Justification for the requested Compliance Schedule (e.g., time for design and installation of control equipment, etc.); (2) Monitoring results for the pollutant(s) of concern which have not previously been submitted to the Department (sample collection dates, analytical results (mass and concentration), methods utilized, and MDL/ML, etc. should be submitted as available); (3) Requested interim limitations, if applicable; (4) Date of final compliance with the TMDL limitations; and (5) Any other additional information available to support the requested compliance schedule.

TMDL Attachments

NONE PROVIDED

Comment

NONE PROVIDED

Stormwater Outfall(s) (1 of 1)

Stormwater Outfall: 002

Do you want to remove this outfall from the modified/reissued permit?

No

Stormwater Outfall Identifier

002

Receiving Water

Claybank Creek

Does the discharge enter the named receiving water via an unnamed tributary?

NONE PROVIDED

Please refer to the link below for Lat/Long map instruction help.

[Map Instruction Help](#)

Location of Outfall or Discharge Point/Receiving Water

31.33722200000000, -85.73388900000001

Are the location coordinates above still correct for this stormwater outfall?

Yes

303(d) Segment?

No

TMDL Segment?

No

Fee

Fee

7060

Note: Additional Fees may be assessed after the review of the application is complete. These fees may include any of the following:

Modeling with Data Collection (10 Stations) - \$60,390

Modeling with Data Collection (5 Stations) - \$49,315

Modeling - desktop - \$4,855

Review of Model Performed by Others - \$2,705

Seasonal Limits - \$4,855/additional season

Biomonitoring & Toxicity Limits - \$1,015

Please contact your area engineer if you have any questions about which additional fees may be assessed for this application.

Application Preparer

Application Preparer

Prefix

Mr.

First Name Last Name

Lyn Buntin

Title

NONE PROVIDED

Organization Name

Poly, Inc.

Phone Type Number Extension

Business 3349442472

Email

lbuntin@poly-inc.com

Address

P O Box 837

Dothan, AL 36302

Agreements and Signature(s)

SUBMISSION AGREEMENTS

- I am the owner of the account used to perform the electronic submission and signature.
- I have the authority to submit the data on behalf of the facility I am representing.
- I agree that providing the account credentials to sign the submission document constitutes an electronic signature equivalent to my written signature.
- I have reviewed the electronic form being submitted in its entirety, and agree to the validity and accuracy of the information contained within it to the best of my knowledge.

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

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

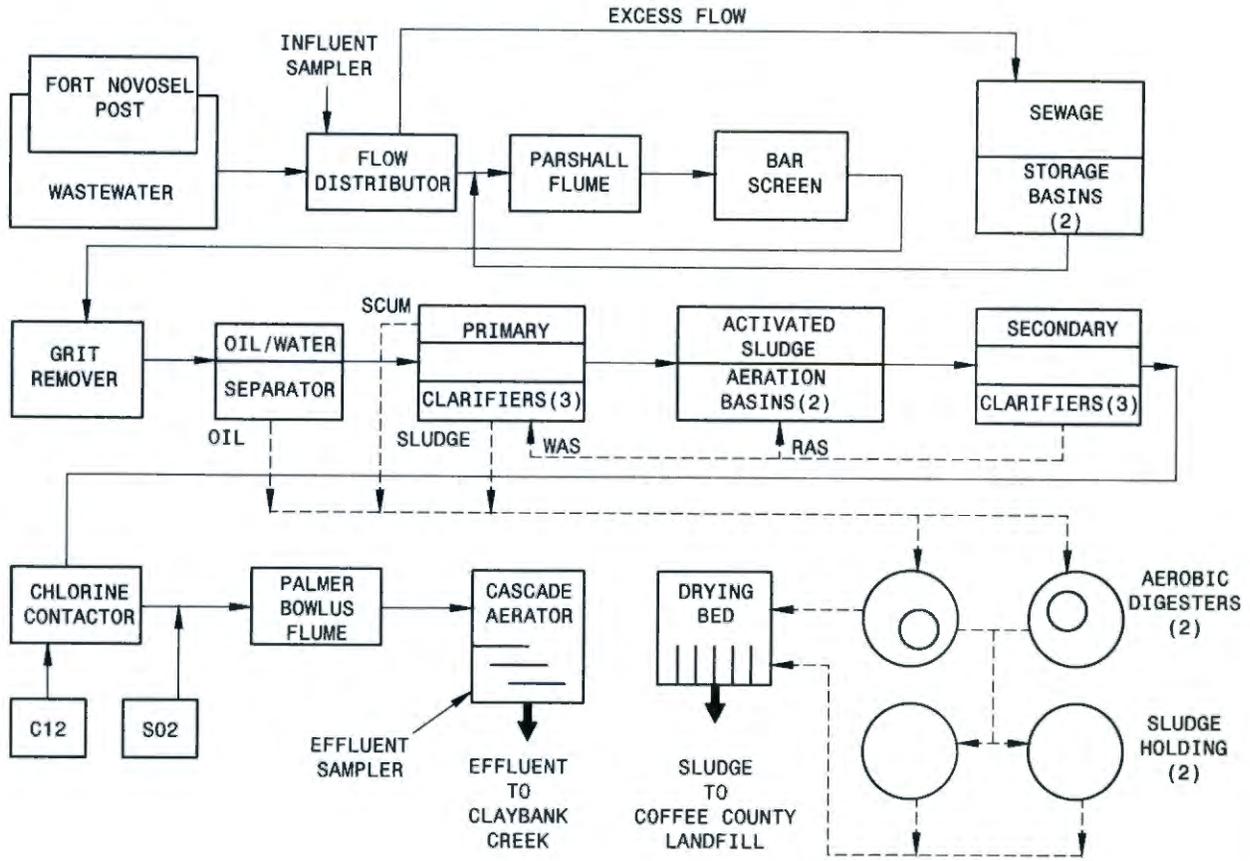
335-6-6-.09 SIGNATORIES TO PERMIT APPLICATIONS AND REPORTS.

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

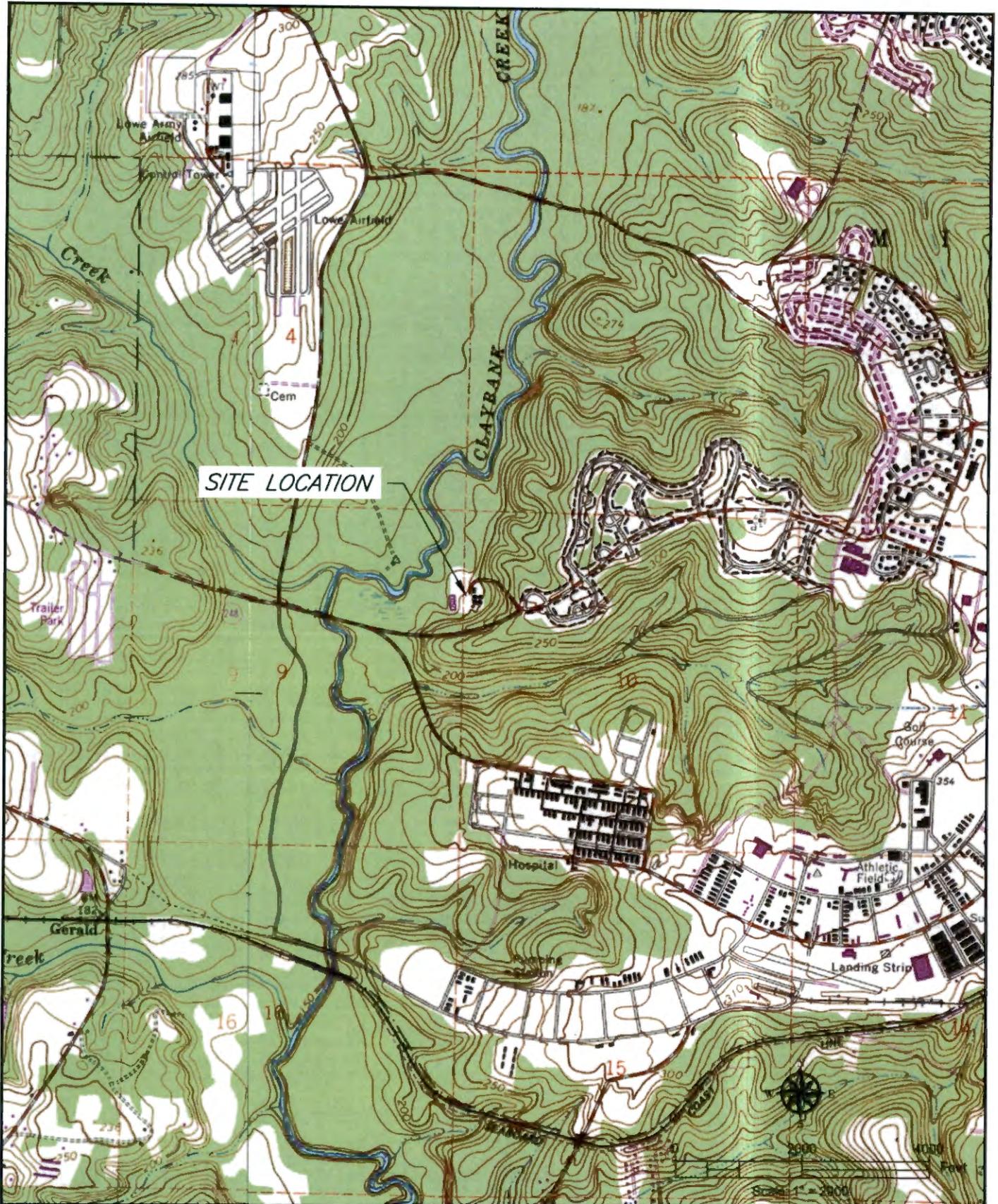
- (a) In the case of a corporation, by a principal executive officer of at least the level of vice president, or a manager assigned or delegated in accordance with corporate procedures, with such delegation submitted in writing if required by the Department, who is responsible for manufacturing, production, or operating facilities and is authorized to make management decisions which govern the operation of the regulated facility;*
- (b) In the case of a partnership, by a general partner;*
- (c) In the case of a sole proprietorship, by the proprietor; or*
- (d) In the case of a municipal, state, federal, or other public entity, by either a principal executive officer, or ranking elected official.*

Signed stacy bedsole on 04/02/2025 at 9:53 AM
By

FORT NOVOSEL - WASTEWATER TREATMENT PROCESS FLOW DIAGRAM



SHEET No. <b style="font-size: 24px;">1	FORT RUCKER MAIN PLANT NPDES WASTEWATER TREATMENT PROCESS FLOW DIAGRAM	POLY, INC. 1935 Highland Avenue Dothan, AL 36303 334-793-4700 102 Sunset Lane 117 Gemini Cir., Ste. 418 Shalmar, FL 32579 Birmingham, AL 35209 850-608-1100 205-913-0330 WWW.POLY-INC.COM	DESIGNED BY: DRAWN BY: DATE: MARCH 2025 ENG / ARCH / SURVEYOR OF RECORD: REGISTRATION No. Cert. of Auth. No. FL GA. ARCHITECT CA-0480 AAJ2003561 001118 ENGINEER CA-78-E CA-1818 001118 These drawings are copyrighted and the property of Poly, Inc. Any use, partial or full reproduction is prohibited except by written Agreement with Poly, Inc.	
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SHEET No.
2
PROJECT No.
74-177

FORT RUCKER
MAIN PLANT NPDES

SITE LOCATION MAP

POLY, INC.
1935 Hasland Avenue
Dobson, AL 36303
334-793-4700
102 Sunset Lane 117 Gemini Cir. Ste. 418
Shalmar, FL 32579 Birmingham, AL 35208
850-608-1100 205-913-0330
WWW.POLY-INC.COM

DESIGNED BY:	DRAWN BY:	DATE:
ENG / ARCH / SURVEYOR OF RECORD		MARCH 2025
Cert. of Auth. No.	FL GA	REGISTRATION No.
ARCHITECT CA-0488 AA-C00155 001118		
ENGINEER CA-78-E CA-1818 001118		

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SHEET No.
3
PROJECT No.
74-177

FORT RUCKER
MAIN PLANT NPDES

AERIAL SITE MAP

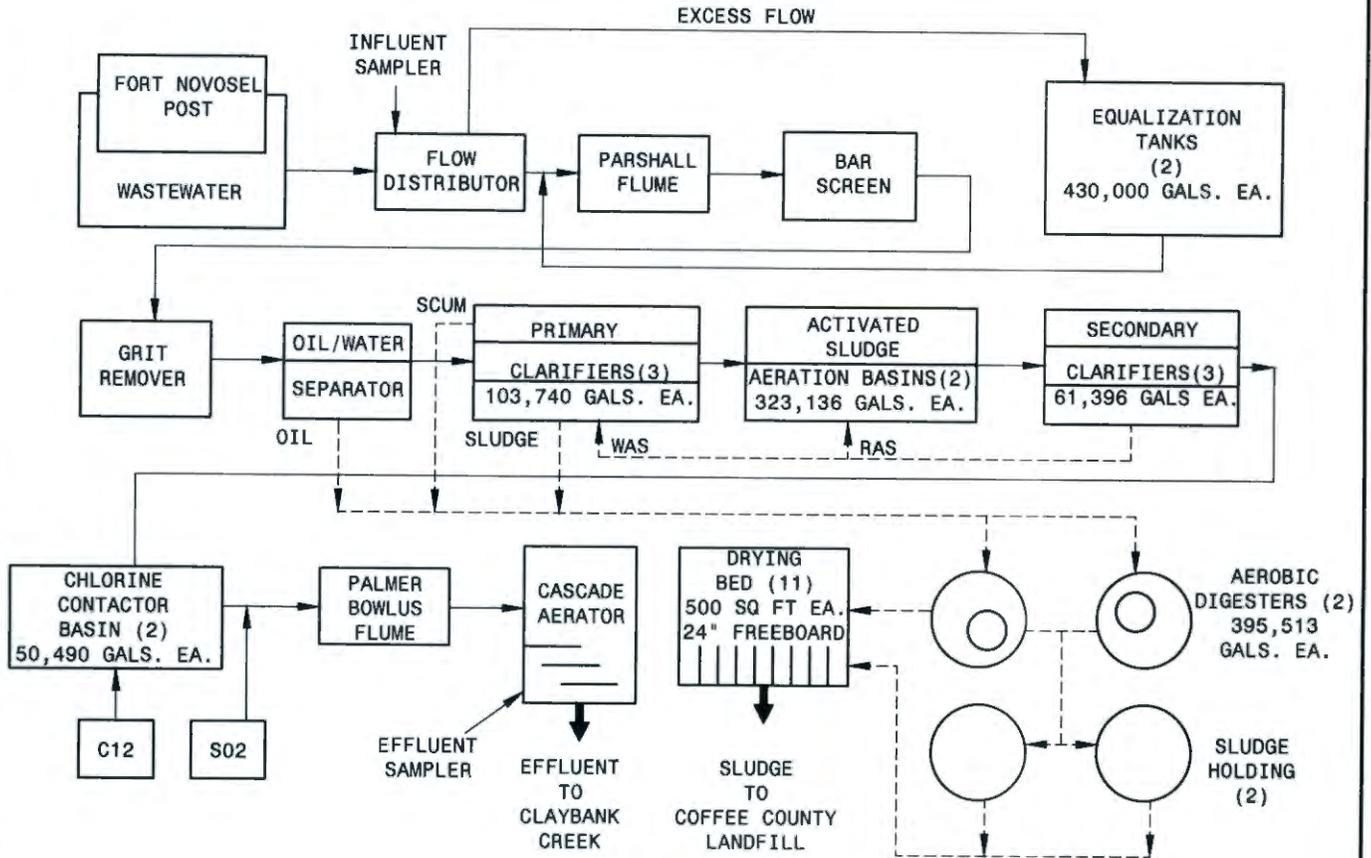
POLY, INC.
1935 Headland Avenue
Dothan, AL 36303
334-793-4700
102 Sunset Lane, 117 Gemini Cir., Ste. 418
Shalmer, FL 32579 Birmingham, AL 35209
850-606-1100 208-913-0330
WWW.POLY-INC.COM

DESIGNED BY:	DRAWN BY:	DATE:
ENG / ARCH / SURVEYOR OF RECORD:		MARCH 2025
REGISTRATION No.:		
Dist. of Auth. No.:	FL	GA
ARCHITECT	CA-0460	AA-C00155 001118
ENGINEER	CA-78-E	CA-1818 001118

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FORT NOVOSEL - WASTEWATER TREATMENT PROCESS FLOW DIAGRAM



SHEET No. <b style="font-size: 24px;">4	FORT RUCKER MAIN PLANT NPDES	<b style="font-size: 18px;">POLY, INC. 1935 Headland Avenue Dothan, AL 36303 334-793-4700 <small>102 Sunset Lane 117 Gemini Cir., Ste. 418 Shalimar, FL 32579 Birmingham, AL 35209 850-698-1100 205-913-0330 WWW.POLY-INC.COM</small>	DESIGNED BY: _____ DRAWN BY: _____ DATE: MARCH 2025 ENG / ARCH / SURVEYOR OF RECORD: _____ REGISTRATION No: _____ Cert. of Auth. No: _____ <small>AL FL GA ARCHITECT CA-0480 AAC001551 001118 ENGINEER CA-75-E CA-1818 001118</small>	These drawings are copyrighted and the property of Poly-Inc. Any use, partial or full reproduction is prohibited except by written Agreement with Poly-Inc.	
PROJECT No. 74-177	WASTEWATER TREATMENT PROCESS FLOW DIAGRAM				

FT. NOVOSEL MAIN PLANT PROCESS ANALYSIS COMPARISON TO TEN STATES STANDARDS

Average Daily Flow 2.5 MGD
Max Day flow - ADF x 1.5 3.75 MGD

Influent BOD5 240 mg/L
BOD5 removal in Pri Clar 30%
Aeration Tank BOD5 168 mg/L

Process

Influent Bar Screen 6 MGD OK

Primary Settling Basins

Qty 3
Length 78 ft
Width 18 ft
SWD 12 ft
Area each 1404 sf
Weir length 18 ft

	for ADF	Calculated Loading (each)	Calculated Loading (total)	Max Allowed	
Surface Loading	1000 gpd/sf	594 gpd/sf	1,781 gpd/sf	4,212,000	OK
Weir Overflow rate	73,300 gpd/ft	46,296 gpd/ft	138,889 gpd/ft	3,958,200	OK

Secondary Clarifiers

Qty 4
Length 59.5 ft
Width 12.5 ft
SWD 12 ft
Area each 743.75 sf
Weir length 62 ft

	for PHF	Calculated Loading (each)	Calculated Loading (total)	Max Allowed	
Surface Loading	1000 gpd/sf	2,206 gpd	8,824 gpd	2,975,000 gpd	OK
Peak Solids Loading Rate	50 lb/day/sf	221 lb/day/sf	883 lb/day/sf	148,750 lb/day	OK
Weir overflow rate	30000 gpd/ft	26,462 gpd	105,847 gpd	7,440,000 gpd	OK

Design Basis for Peak Solids Loading

MLSS 3000 mg/L
RAS 75% of FF 2.8125 MGD
Infl Flow 3.75 MGD
Total flow 6.5625 MGD

Aeration Basins

Qty 2
Length 180 ft
Width 20 ft
SWD 12.5 ft
Area each 3600 sf
Volume each 45000 cf

	Allowed	Calculated	
Organic Loading	40 lb BOD5/day/1000cf	39	OK

Chlorine Contact Tank

Qty 1
Length 45 ft
Width 24 ft
SWD 8 ft
Volume 64,600 gallons

	Required	Calculated	
Detention time at ADF	30 minutes	37 minutes	OK
Detention time at PHF	15 minutes	25 minutes	OK

SHEET No.
4
PROJECT No.
74-177

FORT RUCKER
MAIN PLANT NPDES

WASTEWATER TREATMENT PROCESS
PROCESS ANALYSIS

POLY, INC.
1935 Headland Avenue
Dothan, AL 36303
334-793-4700
102 Sunset Lane 117 Gemini Cir., Ste. 418
Shalimar, FL 32579 Birmingham, AL 35209
850-609-1100 205-915-0330
WWW.POLY-INC.COM

DESIGNED BY:	DRAWN BY:	DATE:
AL	FL	MARCH 2025
ENG / ARCH / SURVEYOR OF RECORD:		REGISTRATION No.:
Cert. of Auth. No.		
ARCHITECT	CA-0480	AA-C001561 001118
ENGINEER	CA-7942	CA-1812 001118

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EPA Identification Number	NPDES Permit Number AL0076821	Facility Name Fort Rucker Main Treatment Plant	OMB No. 2040-0004 Expires 07/31/2026
Form 2A NPDES		U.S. Environmental Protection Agency Application for NPDES Permit to Discharge Wastewater NEW AND EXISTING PUBLICLY OWNED TREATMENT WORKS	

SECTION 1. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS (40 CFR 122.21(J)(1) AND (9))

Facility Information	<u>1.1</u>	Facility name Fort Rucker Main WWTP		
	Mailing address (street or P.O. box) Post Office Box 620397			
	City or town Fort Rucker		State Alabama	ZIP code 36362
	Contact name (first and last) Stacy Bedsole	Title General Manager	Phone number 3345031761	Email address Stacy.bedsole@amwater.com
	Location address (street, route number, or other specific identifier) <input checked="" type="checkbox"/> Same as mailing address 9801 Red Cloud Rd.			
	City or town Fort Rucker		State AL	ZIP code 36362
	<u>1.2</u>	Is this application for a facility that has yet to commence discharge? <input type="checkbox"/> Yes → See instructions on data submission requirements for new dischargers. <input checked="" type="checkbox"/> No		
Applicant Information	<u>1.3</u>	Is applicant different from entity listed under Item 1.1 above? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 1.4.		
	Applicant name American Water Enterprises, LLC			
	Applicant address (street or P.O. box) 1 Water Street			
	City or town Camden		State NJ	ZIP code 08102
	Contact name (first and last) Jeffrey Miller	Title Vice President	Phone number (813) 352-6987	Email address Jeffrey.Miller@amwater.com
	<u>1.4</u>	Is the applicant the facility's owner, operator, or both? (Check only one response.) <input type="checkbox"/> Owner <input type="checkbox"/> Operator <input checked="" type="checkbox"/> Both		
<u>1.5</u>	To which entity should the NPDES permitting authority send correspondence? (Check only one response.) <input checked="" type="checkbox"/> Facility <input type="checkbox"/> Applicant <input type="checkbox"/> Facility and applicant (they are one and the same)			
Existing Environmental Permits	<u>1.6</u>	Indicate below any existing environmental permits. (Check all that apply and print or type the corresponding permit number for each.)		
	Existing Environmental Permits			
	<input checked="" type="checkbox"/>	NPDES (discharges to surface water) AL0076821	<input type="checkbox"/>	RCRA (hazardous waste)
	<input type="checkbox"/>	PSD (air emissions)	<input type="checkbox"/>	Nonattainment program (CAA)
	<input type="checkbox"/>	Ocean dumping (MPRSA)	<input type="checkbox"/>	Dredge or fill (CWA Section 404)
		<input type="checkbox"/>	UIC (underground injection control)	
		<input type="checkbox"/>	NESHAPs (CAA)	
		<input type="checkbox"/>	Other (specify)	

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Collection System and Population Served	1.7	Provide the collection system information requested below for the treatment works.			
		Municipality Served	Population Served	Collection System Type (indicate percentage)	Ownership Status
		Fort Novosel	19500	<u>100</u> % separate sanitary sewer <input type="checkbox"/> % combined storm and sanitary sewer <input type="checkbox"/> Unknown	<input checked="" type="checkbox"/> Own <input checked="" type="checkbox"/> Maintain <input type="checkbox"/> Own <input type="checkbox"/> Maintain <input type="checkbox"/> Own <input type="checkbox"/> Maintain
				<u> </u> % separate sanitary sewer <u> </u> % combined storm and sanitary sewer <input type="checkbox"/> Unknown	<input type="checkbox"/> Own <input type="checkbox"/> Maintain <input type="checkbox"/> Own <input type="checkbox"/> Maintain <input type="checkbox"/> Own <input type="checkbox"/> Maintain
				<u> </u> % separate sanitary sewer <u> </u> % combined storm and sanitary sewer <input type="checkbox"/> Unknown	<input type="checkbox"/> Own <input type="checkbox"/> Maintain <input type="checkbox"/> Own <input type="checkbox"/> Maintain <input type="checkbox"/> Own <input type="checkbox"/> Maintain
				<u> </u> % separate sanitary sewer <u> </u> % combined storm and sanitary sewer <input type="checkbox"/> Unknown	<input type="checkbox"/> Own <input type="checkbox"/> Maintain <input type="checkbox"/> Own <input type="checkbox"/> Maintain <input type="checkbox"/> Own <input type="checkbox"/> Maintain
		Total Population Served	19500		
		Total percentage of each type of sewer line (in miles)		Separate Sanitary Sewer System 100.00 %	Combined Storm and Sanitary Sewer %
Indian Country	1.8	Is the treatment works located in Indian Country? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
	1.9	Does the facility discharge to a receiving water that flows through Indian Country? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Design and Actual Flow Rates	1.10	Provide design <i>and</i> actual flow rates in the designated spaces.			Design Flow Rate 2.5 mgd
		Annual Average Flow Rates (Actual)			
		Two Years Ago	Last Year	This Year	
		0.484 mgd	0.543 mgd	0.591 mgd	
		Maximum Daily Flow Rates (Actual)			
	Two Years Ago	Last Year	This Year		
	0.555 mgd	0.606 mgd	0.609 mgd		
Discharge Points by Type	1.11	Provide the total number of effluent discharge points to waters of the United States by type.			
		Total Number of Effluent Discharge Points by Type			
		Treated Effluent	Untreated Effluent	Combined Sewer Overflows	Bypasses
	1				

Outfalls Other Than to Waters of the United States

1.12 Does the POTW discharge wastewater to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the United States?

 Yes No → SKIP to Item 1.14.

1.13 Provide the location of each surface impoundment and associated discharge information in the table below.

Surface Impoundment Location and Discharge Data

Location	Average Daily Volume Discharged to Surface Impoundment	Continuous or Intermittent (check one)
	gpd	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
	gpd	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
	gpd	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

1.14 Is wastewater applied to land?

 Yes No → SKIP to Item 1.16.

1.15 Provide the land application site and discharge data requested below.

Land Application Site and Discharge Data

Location	Size	Average Daily Volume Applied	Continuous or Intermittent (check one)
	acres	gpd	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
	acres	gpd	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
	acres	gpd	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

1.16 Is effluent transported to another facility for treatment prior to discharge?

 Yes No → SKIP to Item 1.21.

1.17 Describe the means by which the effluent is transported (e.g., tank truck, pipe).

1.18 Is the effluent transported by a party other than the applicant?

 Yes No → SKIP to Item 1.20.

1.19 Provide information on the transporter below.

Transporter Data

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

Outfalls and Other Discharge or Disposal Methods

EPA Identification Number		NPDES Permit Number		Facility Name		OMB No. 2040-0004		
		AL0076821		American Water Enterprises, LLC		Expires 07/31/2026		
Outfalls and Other Discharge or Disposal Methods Continued	1.20	In the table below, indicate the name, address, contact information, NPDES number, and average daily flow rate of the receiving facility.						
	Receiving Facility Data							
	Facility name				Mailing address (street or P.O. box)			
	City or town			State		ZIP code		
	Contact name (first and last)				Title			
	Phone number				Email address			
NPDES number of receiving facility (if any) <input type="checkbox"/> None				Average daily flow rate mgd				
Outfalls and Other Discharge or Disposal Methods Continued	1.21	Is the wastewater disposed of in a manner other than those already mentioned in Items 1.14 through 1.21 that do not have outlets to waters of the United States (e.g., underground percolation, underground injection)?						
	<input type="checkbox"/> Yes						<input checked="" type="checkbox"/> No → SKIP to Item 1.23.	
	1.22	Provide information in the table below on these other disposal methods.						
	Information on Other Disposal Methods							
	Disposal Method Description	Location of Disposal Site	Size of Disposal Site	Annual Average Daily Discharge Volume	Continuous or Intermittent (check one)			
			acres	gpd	<input type="checkbox"/> Continuous			
			acres	gpd	<input type="checkbox"/> Intermittent			
			acres	gpd	<input type="checkbox"/> Continuous			
					<input type="checkbox"/> Intermittent			
Variance Requests	1.23	Do you intend to request or renew one or more of the variances authorized at 40 CFR 122.21(n)? (Check all that apply. Consult with your NPDES permitting authority to determine what information needs to be submitted and when.)						
	<input type="checkbox"/> Discharges into marine waters (CWA Section 301(h))		<input type="checkbox"/> Water quality related effluent limitation (CWA Section 302(b)(2))				<input checked="" type="checkbox"/> Not applicable	
Contractor Information	1.24	Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor?						
	<input type="checkbox"/> Yes						<input checked="" type="checkbox"/> No → SKIP to Section 2.	
	1.25	Provide location and contact information for each contractor in addition to a description of the contractor's operational and maintenance responsibilities.						
	Contractor Information							
			Contractor 1	Contractor 2	Contractor 3			
	Contractor name (company name)							
	Mailing address (street or P.O. box)							
	City, state, and ZIP code							
	Contact name (first and last)							
	Phone number							
Email address								
Operational and maintenance responsibilities of contractor								

SECTION 2. ADDITIONAL INFORMATION (40 CFR 122.21(J)(1) AND (2))

Design Flow	Outfalls to Waters of the United States					
	2.1	Does the treatment works have a design flow greater than or equal to 0.1 mgd? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Section 3.				
Inflow and Infiltration	2.2	Provide the treatment works' current average daily volume of inflow and infiltration.			Average Daily Volume of Inflow and Infiltration 0.00 gpd	
	Indicate the steps the facility is taking to minimize inflow and infiltration. The sewer system has been lined.					
Topographic Map	2.3	Have you attached a topographic map to this application that contains all the required information? (See instructions for specific requirements.) <input checked="" type="checkbox"/> Yes				
Flow Diagram	2.4	Have you attached a process flow diagram or schematic to this application that contains all the required information? (See instructions for specific requirements.) <input checked="" type="checkbox"/> Yes				
Scheduled Improvements and Schedules of Implementation	2.5	Are improvements to the facility scheduled? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Section 3.				
	Briefly list and describe the scheduled improvements.					
	1.					
	2.					
	3.					
	4.					
2.6	Provide scheduled or actual dates of completion for improvements.					
Scheduled or Actual Dates of Completion for Improvements						
	Scheduled Improvement (from above)	Affected Outfalls (list outfall number)	Begin Construction (MM/DD/YYYY)	End Construction (MM/DD/YYYY)	Begin Discharge (MM/DD/YYYY)	Attainment of Operational Level (MM/DD/YYYY)
	1.					
	2.					
	3.					
	4.					
2.7	Have appropriate permits/clearances concerning other federal/state requirements been obtained? Briefly explain your response. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None required or applicable					
Explanation:						

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SECTION 3. INFORMATION ON EFFLUENT DISCHARGES (40 CFR 122.21(J)(3) TO (5))

Description of Outfalls	3.1	Provide the following information for each outfall. (Attach additional sheets if you have more than three outfalls.)		
		Outfall Number <u> 1 </u>	Outfall Number _____	Outfall Number _____
	State	AL		
	County	Dale		
	City or town	Fort Novosel		
	Distance from shore	ft.	ft.	ft.
	Depth below surface	ft.	ft.	ft.
	Average daily flow rate	0.521 mgd	mgd	mgd
	Latitude	N 31.338411		
	Longitude	E 85.739979		
Seasonal or Periodic Discharge Data	3.2	Do any of the outfalls described under Item 3.1 have seasonal or periodic discharges? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 3.4.		
	3.3	If so, provide the following information for each applicable outfall.		
		Outfall Number _____	Outfall Number _____	Outfall Number _____
	Number of times per year discharge occurs			
	Average duration of each discharge (specify units)			
	Average flow of each discharge	mgd	mgd	mgd
Months in which discharge occurs				
Diffuser Type	3.4	Are any of the outfalls listed under Item 3.1 equipped with a diffuser? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 3.6.		
	3.5	Briefly describe the diffuser type at each applicable outfall.		
		Outfall Number _____	Outfall Number _____	Outfall Number _____
Waters of the U.S.	3.6	Does the treatment works discharge or plan to discharge wastewater to waters of the United States from one or more discharge points? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Section 6.		

Receiving Water Description	<u>3.7</u>	Provide the receiving water and related information (if known) for each outfall.		
		Outfall Number 1 _____	Outfall Number _____	Outfall Number _____
	Receiving water name	Claybank Creek		
	Name of watershed, river, or stream system			
	Natural Resources Conservation Service 14-digit watershed code			
	Name of state management/river basin			
	U.S. Geological Survey 8-digit hydrologic cataloging unit code			
	Critical low flow (acute)	cfs	cfs	cfs
	Critical low flow (chronic)	cfs	cfs	cfs
	Total hardness at critical low flow	mg/L of CaCO ₃	mg/L of CaCO ₃	mg/L of CaCO ₃
Treatment Description	<u>3.8</u>	Provide the following information describing the treatment provided for discharges from each outfall.		
		Outfall Number 1 _____	Outfall Number _____	Outfall Number _____
	Highest Level of Treatment (check all that apply per outfall)	<input checked="" type="checkbox"/> Primary <input type="checkbox"/> Equivalent to secondary <input checked="" type="checkbox"/> Secondary <input type="checkbox"/> Advanced <input type="checkbox"/> Other (specify) _____	<input type="checkbox"/> Primary <input type="checkbox"/> Equivalent to secondary <input type="checkbox"/> Secondary <input type="checkbox"/> Advanced <input type="checkbox"/> Other (specify) _____	<input type="checkbox"/> Primary <input type="checkbox"/> Equivalent to secondary <input type="checkbox"/> Secondary <input type="checkbox"/> Advanced <input type="checkbox"/> Other (specify) _____
	Design Removal Rates by Outfall			
	BOD ₅ or CBOD ₅	85 %	%	%
	TSS	85 %	%	%
	Phosphorus	<input checked="" type="checkbox"/> Not applicable %	<input type="checkbox"/> Not applicable %	<input type="checkbox"/> Not applicable %
	Nitrogen	<input checked="" type="checkbox"/> Not applicable %	<input type="checkbox"/> Not applicable %	<input type="checkbox"/> Not applicable %
Other (specify) _____	<input type="checkbox"/> Not applicable %	<input type="checkbox"/> Not applicable %	<input type="checkbox"/> Not applicable %	

Treatment Description Continued	<u>3.9</u>	Describe the type of disinfection used for the effluent from each outfall in the table below. If disinfection varies by season, describe in the table below.		
		Outfall Number <u>1</u>	Outfall Number _____	Outfall Number _____
	Disinfection type	Sodium Hypochlorite		
	Seasons used	All seasons		
	Dechlorination used?	<input type="checkbox"/> Not applicable <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No

Effluent Testing Data	<u>3.10</u>	Have you completed monitoring for all Table A parameters and attached the results to the application package? <input checked="" type="checkbox"/> Yes				
	<u>3.11</u>	Have you conducted any WET tests during the 4.5 years prior to the date of the application on any of the facility's discharges or on any receiving water near the discharge points? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 3.13.				
	<u>3.12</u>	Indicate the number of acute and chronic WET tests conducted since the last permit reissuance of the facility's discharges by outfall number or of the receiving water near the discharge points.				
			Outfall Number <u>1</u>	Outfall Number _____	Outfall Number _____	
			Acute	Chronic	Acute	Chronic
		Number of tests of discharge water		5		
		Number of tests of receiving water				
	<u>3.13</u>	Does the treatment works have a design flow greater than or equal to 0.1 mgd? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 3.16.				
	<u>3.14</u>	Does the POTW use chlorine for disinfection, use chlorine elsewhere in the treatment process, or otherwise have reasonable potential to discharge chlorine in its effluent? <input checked="" type="checkbox"/> Yes → Complete Table B, including chlorine. <input type="checkbox"/> No → Complete Table B, omitting chlorine.				
	<u>3.15</u>	Have you completed monitoring for all applicable Table B pollutants and attached the results to this application package? <input checked="" type="checkbox"/> Yes				
<u>3.16</u>	Does one or more of the following conditions apply? <ul style="list-style-type: none"> • The facility has a design flow greater than or equal to 1 mgd. • The POTW has an approved pretreatment program or is required to develop such a program. • The NPDES permitting authority has informed the POTW that it must sample for the parameters in Table C, must sample other additional parameters (Table D), or submit the results of WET tests for acute or chronic toxicity for each of its discharge outfalls (Table E). <input checked="" type="checkbox"/> Yes → Complete Tables C, D, and E as applicable. <input type="checkbox"/> No → SKIP to Section 4.					
<u>3.17</u>	Have you completed monitoring for all Table C pollutants and attached the results to this application package? <input checked="" type="checkbox"/> Yes					
<u>3.18</u>	Have you completed monitoring for all Table D pollutants required by your NPDES permitting authority and attached the results to this application package? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No additional sampling required by NPDES permitting authority.					

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Effluent Testing Data Continued	<u>3.19</u>	Has the POTW conducted either (1) minimum of four quarterly WET tests for one year preceding this permit application or (2) at least four annual WET tests in the past 4.5 years? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → Complete tests and Table E and SKIP to Item 3.26.				
	<u>3.20</u>	Have you previously submitted the results of the above tests to your NPDES permitting authority? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → Provide results in Table E and SKIP to Item 3.26.				
	<u>3.21</u>	Indicate the dates the data were submitted to your NPDES permitting authority and provide a summary of the results.				
		<table border="1"> <thead> <tr> <th>Date(s) Submitted (MM/DD/YYYY)</th> <th>Summary of Results</th> </tr> </thead> <tbody> <tr> <td>12/18/2024</td> <td>12/15/2022, 12/19/2023; 12/18/2024 All tests passed for both species, C. dubia and P. promelas.</td> </tr> </tbody> </table>	Date(s) Submitted (MM/DD/YYYY)	Summary of Results	12/18/2024	12/15/2022, 12/19/2023; 12/18/2024 All tests passed for both species, C. dubia and P. promelas.
	Date(s) Submitted (MM/DD/YYYY)	Summary of Results				
	12/18/2024	12/15/2022, 12/19/2023; 12/18/2024 All tests passed for both species, C. dubia and P. promelas.				
	<u>3.22</u>	Regardless of how you provided your WET testing data to the NPDES permitting authority, did any of the tests result in toxicity? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 3.26.				
	<u>3.23</u>	Describe the cause(s) of the toxicity:				
<u>3.24</u>	Has the treatment works conducted a toxicity reduction evaluation? <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 3.26.					
<u>3.25</u>	Provide details of any toxicity reduction evaluations conducted.					
<u>3.26</u>	Have you completed Table E for all applicable outfalls and attached the results to the application package? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> Not applicable because previously submitted information to the NPDES permitting authority.					

SECTION 4. INDUSTRIAL DISCHARGES AND HAZARDOUS WASTES (40 CFR 122.21(J)(6) AND (7))

Industrial Discharges and Hazardous Wastes	<u>4.1</u>	Does the POTW receive discharges from SIUs or NSCIUs? (See instructions for definitions of SIUs and NSCIUs.) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 4.7.				
	<u>4.2</u>	Indicate the number of SIUs and NSCIUs that discharge to the POTW.				
		<table border="1"> <thead> <tr> <th>Number of SIUs</th> <th>Number of NSCIUs</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> </tbody> </table>	Number of SIUs	Number of NSCIUs		
	Number of SIUs	Number of NSCIUs				
	<u>4.3</u>	Does the POTW have an approved pretreatment program? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
<u>4.4</u>	Have you submitted either of the following to the NPDES permitting authority that contains information substantially identical to that required in Table F: (1) a pretreatment program annual report submitted within one year of the application or (2) a pretreatment program? <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 4.6.					
<u>4.5</u>	Identify the title and date of the annual report or pretreatment program referenced in Item 4.4. SKIP to Item 4.7.					
<u>4.6</u>	Have you completed and attached Table F to this application package? <input type="checkbox"/> Yes					



Industrial Discharges and Hazardous Wastes Continued	<u>4.7</u>	Does the POTW receive, or has it been notified that it will receive, by truck, rail, or dedicated pipe, any wastes that are regulated as RCRA hazardous wastes pursuant to 40 CFR 261? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 4.9.		
	<u>4.8</u>	If yes, provide the following information:		
	Hazardous Waste Number	Waste Transport Method (check all that apply)	Annual Amount of Waste Received	Units
		<input type="checkbox"/> Truck <input type="checkbox"/> Rail <input type="checkbox"/> Dedicated pipe <input type="checkbox"/> Other (specify) _____		
		<input type="checkbox"/> Truck <input type="checkbox"/> Rail <input type="checkbox"/> Dedicated pipe <input type="checkbox"/> Other (specify) _____		
		<input type="checkbox"/> Truck <input type="checkbox"/> Rail <input type="checkbox"/> Dedicated pipe <input type="checkbox"/> Other (specify) _____		
	<u>4.9</u>	Does the POTW receive, or has it been notified that it will receive, wastewaters that originate from remedial activities, including those undertaken pursuant to CERCLA and Sections 3004(7) or 3008(h) of RCRA? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Section 5.		
	<u>4.10</u>	Does the POTW receive (or expect to receive) less than 15 kilograms per month of non-acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e)? <input type="checkbox"/> Yes → SKIP to Section 5. <input type="checkbox"/> No		
	<u>4.11</u>	Have you reported the following information in an attachment to this application: identification and description of the site(s) or facility(ies) at which the wastewater originates; the identities of the wastewater's hazardous constituents; and the extent of treatment, if any, the wastewater receives or will receive before entering the POTW? <input type="checkbox"/> Yes		

SECTION 5. COMBINED SEWER OVERFLOWS (40 CFR 122.21(J)(8))

CSO Map and Diagram	<u>5.1</u>	Does the treatment works have a combined sewer system? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Section 6.
	<u>5.2</u>	Have you attached a CSO system map to this application? (See instructions for map requirements.) <input type="checkbox"/> Yes
	<u>5.3</u>	Have you attached a CSO system diagram to this application? (See instructions for diagram requirements.) <input type="checkbox"/> Yes

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CSO Outfall Description	5.4	For each CSO outfall, provide the following information. (Attach additional sheets as necessary.)		
		CSO Outfall Number ____	CSO Outfall Number ____	CSO Outfall Number ____
	City or town			
	State and ZIP code			
	County			
	Latitude			
	Longitude			
	Distance from shore	ft.	ft.	ft.
Depth below surface	ft.	ft.	ft.	
CSO Monitoring	5.5	Did the POTW monitor any of the following items in the past year for its CSO outfalls?		
		CSO Outfall Number ____	CSO Outfall Number ____	CSO Outfall Number ____
	Rainfall	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
	CSO flow volume	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
	CSO pollutant concentrations	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Receiving water quality	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
	CSO frequency	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Number of storm events	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
CSO Events in Past Year	5.6	Provide the following information for each of your CSO outfalls.		
		CSO Outfall Number ____	CSO Outfall Number ____	CSO Outfall Number ____
	Number of CSO events in the past year	events	events	events
	Average duration per event	hours <input type="checkbox"/> Actual or <input type="checkbox"/> Estimated	hours <input type="checkbox"/> Actual or <input type="checkbox"/> Estimated	hours <input type="checkbox"/> Actual or <input type="checkbox"/> Estimated
	Average volume per event	million gallons <input type="checkbox"/> Actual or <input type="checkbox"/> Estimated	million gallons <input type="checkbox"/> Actual or <input type="checkbox"/> Estimated	million gallons <input type="checkbox"/> Actual or <input type="checkbox"/> Estimated
Minimum rainfall causing a CSO event in last year	inches of rainfall <input type="checkbox"/> Actual or <input type="checkbox"/> Estimated	inches of rainfall <input type="checkbox"/> Actual or <input type="checkbox"/> Estimated	inches of rainfall <input type="checkbox"/> Actual or <input type="checkbox"/> Estimated	

CSO Receiving Waters	<u>5.7</u>	Provide the information in the table below for each of your CSO outfalls.			
		CSO Outfall Number ____	CSO Outfall Number ____	CSO Outfall Number ____	
		Receiving water name			
		Name of watershed/ stream system			
		Natural Resources Conservation Service 14- digit watershed code (if known)	<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown
		Name of state management/river basin			
		U.S. Geological Survey 8-Digit Hydrologic Unit Code (if known)	<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown
		Description of known water quality impacts on receiving stream by CSO (see instructions for examples)			

SECTION 6. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(A) AND (D))

Checklist and Certification Statement	<u>6.1</u>	In Column 1 below, mark the sections of Form 2A that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to provide attachments.			
		Column 1	Column 2		
		<input checked="" type="checkbox"/> Section 1: Basic Application Information for All Applicants	<input type="checkbox"/> w/ variance request(s)	<input type="checkbox"/> w/ additional attachments	
		<input checked="" type="checkbox"/> Section 2: Additional Information	<input checked="" type="checkbox"/> w/ topographic map <input checked="" type="checkbox"/> w/ additional attachments	<input checked="" type="checkbox"/> w/ process flow diagram	
		<input checked="" type="checkbox"/> Section 3: Information on Effluent Discharges	<input checked="" type="checkbox"/> w/ Table A <input checked="" type="checkbox"/> w/ Table B <input checked="" type="checkbox"/> w/ Table C	<input type="checkbox"/> w/ Table D <input type="checkbox"/> w/ Table E <input type="checkbox"/> w/ additional attachments	
		<input type="checkbox"/> Section 4: Industrial Discharges and Hazardous Wastes	<input type="checkbox"/> w/ SIU and NSCIU attachments <input type="checkbox"/> w/ additional attachments	<input type="checkbox"/> w/ Table F	
		<input type="checkbox"/> Section 5: Combined Sewer Overflows	<input type="checkbox"/> w/ CSO map <input type="checkbox"/> w/ CSO system diagram	<input type="checkbox"/> w/ additional attachments	
		<input checked="" type="checkbox"/> Section 6: Checklist and Certification Statement	<input type="checkbox"/> w/ attachments		

	<u>6.2</u>	Provide the following certification. (See instructions to determine the appropriate person to sign the application.)	
		Certification Statement	
		<i>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.</i>	
		Name (print or type first and last name) Jeffrey Miller	Official title Vice President, Operations
	Signature 	Date signed 01/29/2026	



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TABLE A. EFFLUENT PARAMETERS FOR ALL POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method ¹	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Biochemical oxygen demand <input type="checkbox"/> BOD ₅ or <input checked="" type="checkbox"/> CBOD ₅ (report one)	7.51	mg/L	4.05	mg/L	36	SM 5210 B.2011	0.01 mg/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Fecal coliform E. coli	7	mpn/100 mL	28	mpn/100 mL	36	mColibblue 24	0 mpn/100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Design flow rate	2.5	mgd	2.5	mgd			
pH (minimum)	6.09	SU					
pH (maximum)	7.50	SU					
Temperature (winter)	18.9	degrees C	16.3	degrees C			
Temperature (summer)	28.2	degrees C	27.5	degress C			
Total suspended solids (TSS)	9.25	mg/L	3.45	mg/L	36	SM 2540 D.2011	0.1 mg/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL

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

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

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method ¹	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Ammonia (as N)	0.74	mg/L	0.38	mg/L	36	4500-NH3 D 2011	0.01 mg/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Chlorine (total residual, TRC) ²	0.05	mg/L	0.00	mg/L	36	SM4500 H-B	0.05 mg/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Dissolved oxygen	9.02	mg/L	7.56	mg/L	36	SM 4500 O-G	0 mg/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Nitrate/nitrite	32.40	mg/L	19.51	mg/L	36	Easy (I-R)	0.01 mg/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Kjeldahl nitrogen	3.95	mg/L	0.76	mg/L	36	4500 D	0.01 mg/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Oil and grease	1.65	mg/L	0.825	mg/L	2	5520 B	0.1 mg/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Phosphorus	10.80	mg/L	4.97	mg/L	36	4500 P E	0.01 mg/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Total dissolved solids	388	mg/L	368	mg/L	3	5210 C	0.1 mg/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL

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

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

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EPA Identification Number	NPDES Permit Number AL0076821	Facility Name Fort Rucker Main Treatment Plant	Outfall Number 1
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TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method ¹	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Metals, Cyanide, and Total Phenols							
Hardness (as CaCO ₃)	108	mg/L	103	mg/L	3	M 2340 C-1997 (201)	2.6 mg/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Antimony, total recoverable	<1.0	ug/L	<1.0	ug/L	3	EPA 200.8	1.0 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Arsenic, total recoverable	<1.0	ug/L	<1.0	ug/L	3	EPA 200.8	1.0 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Beryllium, total recoverable	<1.0	ug/L	<1.0	ug/L	3	EPA 200.8	1.0 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Cadmium, total recoverable	<1.0	ug/L	<1.0	ug/L	3	EPA 200.8	1.0 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Chromium, total recoverable	<2.0	ug/L	<2.0	ug/L	3	EPA 200.8	2.0 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Copper, total recoverable	13.3	ug/L	12.6	ug/L	4	EPA 200.8	1.0 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Lead, total recoverable	<1.0	ug/L	<1.0	ug/L	3	EPA 200.8	1.0 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Mercury, total recoverable	6.76	ng/L	5.56	ng/L	2	1631E	0.500 ng/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Nickel, total recoverable	1.9	ug/L	1.6	ug/L	3	EPA 200.8	1.0 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Selenium, total recoverable	<2.0	ug/L	<2.0	ug/L	3	EPA 200.8	2.0 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Silver, total recoverable	<1.0	ug/L	<1.0	ug/L	3	EPA 200.8	1.0 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Thallium, total recoverable	<1.0	ug/L	<1.0	ug/L	3	EPA 200.8	1.0 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Zinc, total recoverable	38.1	ug/L	30.5	ug/L	3	EPA 200.8	5.0 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Cyanide	0.0089	mg/L	0.0051	mg/L	3	Kelada-01	0050 mg/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Total phenolic compounds	<0.0050	mg/L	<0.0050	mg/L	3	420.4	0050 mg/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Volatile Organic Compounds							
Acrolein	<10.0	ug/L	<10.0	ug/L	3	EPA 624.1	10.0 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Acrylonitrile	<20.0	ug/L	<20.0	ug/L	3	EPA 624.1	20.0 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Benzene	<1.00	ug/L	<1.00	ug/L	3	EPA 624.1	1.00 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Bromoform	<1.00	ug/L	<1.00	ug/L	3	EPA 624.1	1.00 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL

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TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method ¹	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Carbon tetrachloride	<1.00	ug/L	<1.00	ug/L	3	EPA 624.1	1.00 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Chlorobenzene	<1.00	ug/L	<1.00	ug/L	3	EPA 624.1	1.00 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Chlorodibromomethane	<1.00	ug/L	<1.00	ug/L	3	EPA 624.1	1.00 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Chloroethane	<1.00	ug/L	<1.00	ug/L	3	EPA 624.1	1.00 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
2-chloroethylvinyl ether	<5.00	ug/L	<5.00	ug/L	3	EPA 624.1	5.00 ug/L <input type="checkbox"/> ML <input type="checkbox"/> MDL
Chloroform	15.50	ug/L	12.30	ug/L	3	EPA 624.1	1.00 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Dichlorobromomethane	1.29	ug/L	1.20	ug/L	3	EPA 624.1	1.00 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
1,1-dichloroethane	<1.00	ug/L	<1.00	ug/L	3	EPA 624.1	1.00 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
1,2-dichloroethane	<1.00	ug/L	<1.00	ug/L	3	EPA 624.1	1.00 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
trans-1,2-dichloroethylene	<1.00	ug/L	<1.00	ug/L	3	EPA 624.1	1.00 ug/L <input type="checkbox"/> ML <input type="checkbox"/> MDL
1,1-dichloroethylene	<1.00	ug/L	<1.00	ug/L	3	EPA 624.1	1.00 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
1,2-dichloropropane	<1.00	ug/L	<1.00	ug/L	3	EPA 624.1	1.00 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
1,3-dichloropropylene	<1.00	ug/L	<1.00	ug/L	3	EPA 624.1	1.00 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Ethylbenzene	<1.00	ug/L	<1.00	ug/L	3	EPA 624.1	1.00 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Methyl bromide	<1.00	ug/L	<1.00	ug/L	3	EPA 624.1	1.00 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Methyl chloride	<1.00	ug/L	<1.00	ug/L	3	EPA 624.1	1.00 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Methylene chloride	<1.00	ug/L	<1.00	ug/L	3	EPA 624.1	1.00 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
1,1,2,2-tetrachloroethane	<1.00	ug/L	<1.00	ug/L	3	EPA 624.1	1.00 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Tetrachloroethylene	<1.00	ug/L	<1.00	ug/L	3	EPA 624.1	1.00 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Toluene	<1.00	ug/L	<1.00	ug/L	3	EPA 624.1	1.00 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
1,1,1-trichloroethane	<1.00	ug/L	<1.00	ug/L	3	EPA 624.1	1.00 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
1,1,2-trichloroethane	<1.00	ug/L	<1.00	ug/L	3	EPA 624.1	1.00 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL

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TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method ¹	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Trichloroethylene	<1.00	ug/L	<1.00	ug/L	3	EPA 624.1	1.00 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Vinyl chloride	<1.00	ug/L	<1.00	ug/L	3	EPA 624.1	1.00 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Acid-Extractable Compounds							
p-chloro-m-cresol	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
2-chlorophenol	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
2,4-dichlorophenol	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
2,4-dimethylphenol	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
4,6-dinitro-o-cresol	<46.3	ug/L	<46.3	ug/L	3	EPA 625.1	46.3 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
2,4-dinitrophenol	<46.3	ug/L	<46.3	ug/L	3	EPA 625.1	46.3 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
2-nitrophenol	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
4-nitrophenol	<46.3	ug/L	<46.3	ug/L	3	EPA 625.1	46.3 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Pentachlorophenol	<46.3	ug/L	<46.3	ug/L	3	EPA 625.1	46.3 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Phenol	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
2,4,6-trichlorophenol	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Base-Neutral Compounds							
Acenaphthene	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Acenaphthylene	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Anthracene	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Benzidine	<92.6	ug/L	<92.6	ug/L	3	EPA 625.1	92.6 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Benzo(a)anthracene	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Benzo(a)pyrene	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
3,4-benzofluoranthene	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL

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TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method ¹	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Benzo(ghi)perylene	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Benzo(k)fluoranthene	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Bis (2-chloroethoxy) methane	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Bis (2-chloroethyl) ether	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Bis (2-chloroisopropyl) ether	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Bis (2-ethylhexyl) phthalate	<9.26	ug/L	<9.26	ug/L	3	EPA 625.1	9.26 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
4-bromophenyl phenyl ether	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Butyl benzyl phthalate	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
2-chloronaphthalene	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
4-chlorophenyl phenyl ether	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Chrysene	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
di-n-butyl phthalate	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
di-n-octyl phthalate	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Dibenzo(a,h)anthracene	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
1,2-dichlorobenzene	<1.00	ug/L	<1.00	ug/L	3	EPA 624.1	1.00 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
1,3-dichlorobenzene	<1.00	ug/L	<1.00	ug/L	3	EPA 624.1	1.00 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
1,4-dichlorobenzene	<1.00	ug/L	<1.00	ug/L	3	EPA 624.1	1.00 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
3,3-dichlorobenzidine	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Diethyl phthalate	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Dimethyl phthalate	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
2,4-dinitrotoluene	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
2,6-dinitrotoluene	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL

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TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method ¹	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
1,2-diphenylhydrazine	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Fluoranthene	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Fluorene	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Hexachlorobenzene	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Hexachlorobutadiene	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Hexachlorocyclo-pentadiene	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Hexachloroethane	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Indeno(1,2,3-cd)pyrene	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Isophorone	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Naphthalene	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Nitrobenzene	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
N-nitrosodi-n-propylamine	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
N-nitrosodimethylamine	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
N-nitrosodiphenylamine	<9.26	ug/L	<9.26	ug/L	3	EPA 625.1	9.26 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Phenanthrene	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Pyrene	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
1,2,4-trichlorobenzene	<4.63	ug/L	<4.63	ug/L	3	EPA 625.1	4.63 ug/L <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL

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

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EPA Identification Number	NPDES Permit Number AL0076821	Facility Name American Water Enterprises, LLC	Outfall Number 1
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TABLE E. EFFLUENT MONITORING FOR WHOLE EFFLUENT TOXICITY

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

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

EPA Identification Number	NPDES Permit Number AL0076821	Facility Name American Water Enterprises, LLC	Outfall Number 1
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TABLE E. EFFLUENT MONITORING FOR WHOLE EFFLUENT TOXICITY

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

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

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TABLE E. EFFLUENT MONITORING FOR WHOLE EFFLUENT TOXICITY						
The table provides response space for one whole effluent toxicity sample. Copy the table to report additional test results.						
	Test Number _____		Test Number _____		Test Number _____	
Acute Test Results Continued						
Other (describe)						
Chronic Test Results						
NOEC		%		%		%
IC ₂₅		%		%		%
Control percent survival		%		%		%
Other (describe)						
Quality Control/Quality Assurance						
Is reference toxicant data available?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Was reference toxicant test within acceptable bounds?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
What date was reference toxicant test run (MM/DD/YYYY)?						
Other (describe)						

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EPA Identification Number

NPDES Permit Number

Facility Name

OMB No. 2040-0004

AL0076821

American Water Enterprises, LLC

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TABLE F. INDUSTRIAL DISCHARGE INFORMATION

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

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

EPA Identification Number

NPDES Permit Number

Facility Name

AL0076821

American Water Enterprises, LLC

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TABLE F. INDUSTRIAL DISCHARGE INFORMATION

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

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

Form 2F NPDES		U.S Environmental Protection Agency Application for NPDES Permit to Discharge Wastewater STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY

SECTION 1. OUTFALL LOCATION (40 CFR 122.21(G)(1))

Outfall Location	1.1	Provide information on each of the facility's outfalls in the table below		
		Outfall Number	Receiving Water Name	Latitude
		002S	Claybank Creek	N 31.338265
				W 85.738375

SECTION 2. IMPROVEMENTS (40 CFR 122.21(G)(6))

Improvements	2.1	Are you presently required by any federal, state, or local authority to meet an implementation schedule for constructing, upgrading, or operating wastewater treatment equipment or practices or any other environmental programs that could affect the discharges described in this application? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Section 3.			
	2.2	Briefly identify each applicable project in the table below.			
		Brief Identification and Description of Project	Affected Outfalls (list outfall numbers)	Source(s) of Discharge	Final Compliance Dates
					Required Projected
	2.3	Have you attached sheets describing any additional water pollution control programs (or other environmental projects that may affect your discharges) that you now have underway or planned? (optional item) <input type="checkbox"/> Yes <input type="checkbox"/> No			

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SECTION 3. SITE DRAINAGE MAP (40 CFR 122.26(C)(1)(I)(A))

Site Drainage Map	3.1	Have you attached a site drainage map containing all required information to this application? (See instructions for specific guidance.)
		<input checked="" type="checkbox"/> Yes

SECTION 4. POLLUTANT SOURCES (40 CFR 122.26(C)(1)(I)(B))

Pollutant Sources	4.1	Provide information on the facility's pollutant sources in the table below.																										
		<table border="1"> <thead> <tr> <th>Outfall Number</th> <th>Impervious Surface Area (within a mile radius of the facility)</th> <th>Total Surface Area Drained (within a mile radius of the facility)</th> </tr> </thead> <tbody> <tr> <td>0025</td> <td>25000</td> <td>37000</td> </tr> <tr> <td></td> <td><i>specify units</i></td> <td><i>specify units</i></td> </tr> </tbody> </table>	Outfall Number	Impervious Surface Area (within a mile radius of the facility)	Total Surface Area Drained (within a mile radius of the facility)	0025	25000	37000		<i>specify units</i>	<i>specify units</i>																	
	Outfall Number	Impervious Surface Area (within a mile radius of the facility)	Total Surface Area Drained (within a mile radius of the facility)																									
	0025	25000	37000																									
		<i>specify units</i>	<i>specify units</i>																									
		<i>specify units</i>	<i>specify units</i>																									
		<i>specify units</i>	<i>specify units</i>																									
		<i>specify units</i>	<i>specify units</i>																									
		<i>specify units</i>	<i>specify units</i>																									
		<i>specify units</i>	<i>specify units</i>																									
4.2	Provide a narrative description of the facility's significant material in the space below. (See instructions for content requirements.) 11 Buildings or structures; Treated sludge in drying beds; treated wastewater; all stored chemicals are in containment areas.																											
4.3	Provide the location and a description of existing structural and non-structural control measures to reduce pollutants in stormwater runoff. (See instructions for specific guidance.)																											
	<table border="1"> <thead> <tr> <th colspan="3">Stormwater Treatment</th> </tr> <tr> <th>Outfall Number</th> <th>Control Measures and Treatment</th> <th>Codes from Exhibit 2F-1 (list)</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	Stormwater Treatment			Outfall Number	Control Measures and Treatment	Codes from Exhibit 2F-1 (list)																					
Stormwater Treatment																												
Outfall Number	Control Measures and Treatment	Codes from Exhibit 2F-1 (list)																										

EPA Identification Number	NPDES Permit Number AL0076821	Facility Name Fort Rucker Main Treatment Plant
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SECTION 5. NON STORMWATER DISCHARGES (40 CFR 122.26(C)(1)(I)(C))

Non-Stormwater Discharges	5.1	Provide the following certification. (See instructions to determine the appropriate person to sign the application.) <i>I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of non-stormwater discharges. Moreover, I certify that the outfalls identified as having non-stormwater discharges are described in either an accompanying NPDES Form 2C, 2D, or 2E application.</i>			
		Name (print or type first and last name)	Official title		
		Jeffrey Miller	Vice President, Operations		
		Signature	Date signed		
			01/29/2026		
	5.2	Provide the testing information requested in the table below.			
		Outfall Number	Description of Testing Method Used	Date(s) of Testing	Onsite Drainage Points Directly Observed During Test

SECTION 6. SIGNIFICANT LEAKS OR SPILLS (40 CFR 122.26(C)(1)(I)(D))

Significant Leaks or Spills	6.1	Describe any significant leaks or spills of toxic or hazardous pollutants in the last three years.
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SECTION 7. DISCHARGE INFORMATION (40 CFR 122.26(C)(1)(I)(E))

Discharge Information	See the instructions to determine the pollutants and parameters you are required to monitor and, in turn, the tables you must complete. Not all applicants need to complete each table.	
	7.1	Is this a new source or new discharge? <input type="checkbox"/> Yes → See instructions regarding submission of <i>estimated data</i> . <input checked="" type="checkbox"/> No → See instructions regarding submission of <i>actual data</i> .
	Tables A, B, C, and D	
	7.2	Have you completed Table A for each outfall? <input checked="" type="checkbox"/> Yes

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Discharge Information Continued	<u>7.3</u>	Is the facility subject to an effluent limitation guideline (ELG) or effluent limitations in an NPDES permit for its process wastewater? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 7.5.
	<u>7.4</u>	Have you completed Table B by providing quantitative data for those pollutants that are (1) limited either directly or indirectly in an ELG and/or (2) subject to effluent limitations in an NPDES permit for the facility's process wastewater? <input type="checkbox"/> Yes
	<u>7.5</u>	Do you know or have reason to believe any pollutants in Exhibit 2F-2 are present in the discharge? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 7.7.
	<u>7.6</u>	Have you listed all pollutants in Exhibit 2F-2 that you know or have reason to believe are present in the discharge and provided quantitative data or an explanation for those pollutants in Table C? <input type="checkbox"/> Yes
	<u>7.7</u>	Do you qualify for a small business exemption under the criteria specified in the Instructions? <input type="checkbox"/> Yes → SKIP to Item 7.18. <input checked="" type="checkbox"/> No
	<u>7.8</u>	Do you know or have reason to believe any pollutants in Exhibit 2F-3 are present in the discharge? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 7.10.
	<u>7.9</u>	Have you listed all pollutants in Exhibit 2F-3 that you know or have reason to believe are present in the discharge in Table C? <input type="checkbox"/> Yes
	<u>7.10</u>	Do you expect any of the pollutants in Exhibit 2F-3 to be discharged in concentrations of 10 ppb or greater? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 7.12.
	<u>7.11</u>	Have you provided quantitative data in Table C for those pollutants in Exhibit 2F-3 that you expect to be discharged in concentrations of 10 ppb or greater? <input type="checkbox"/> Yes
	<u>7.12</u>	Do you expect acrolein, acrylonitrile, 2,4-dinitrophenol, or 2-methyl-4,6-dinitrophenol to be discharged in concentrations of 100 ppb or greater? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 7.14.
	<u>7.13</u>	Have you provided quantitative data in Table C for the pollutants identified in Item 7.12 that you expect to be discharged in concentrations of 100 ppb or greater? <input type="checkbox"/> Yes
	<u>7.14</u>	Have you provided quantitative data or an explanation in Table C for pollutants you expect to be present in the discharge at concentrations less than 10 ppb (or less than 100 ppb for the pollutants identified in Item 7.12)? <input type="checkbox"/> Yes
<u>7.15</u>	Do you know or have reason to believe any pollutants in Exhibit 2F-4 are present in the discharge? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 7.17.	

Discharge Information Continued	7.16	Have you listed pollutants in Exhibit 2F-4 that you know or believe to be present in the discharge and provided an explanation in Table C? <input type="checkbox"/> Yes		
	7.17	Have you provided information for the storm event(s) sampled in Table D? <input checked="" type="checkbox"/> Yes		
	Used or Manufactured Toxics			
	7.18	Is any pollutant listed on Exhibits 2F-2 through 2F-4 a substance or a component of a substance used or manufactured as an intermediate or final product or byproduct? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Section 8.		
	7.19	List the pollutants below, including TCDD if applicable. Attach additional sheets, if necessary.		

1.	4.	7.
2.	5.	8.
3.	6.	9.

SECTION 8. BIOLOGICAL TOXICITY TESTING DATA (40 CFR 122.21(G)(11))

Biological Toxicity Testing Data	8.1	Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last three years? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Section 9.		
	8.2	Identify the tests and their purposes below.		
		Test(s)	Purpose of Test(s)	Submitted to NPDES Permitting Authority?
				<input type="checkbox"/> Yes <input type="checkbox"/> No

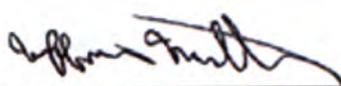
		<input type="checkbox"/> Yes <input type="checkbox"/> No
		<input type="checkbox"/> Yes <input type="checkbox"/> No

SECTION 9. CONTRACT ANALYSIS INFORMATION (40 CFR 122.21(G)(12))

Contract Analysis Information	9.1	Were any of the analyses reported in Section 7 (in Tables A through C) performed by a contract laboratory or consulting firm? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Section 10.		
	9.2	Provide information for each contract laboratory or consulting firm below.		
			Laboratory Number 1	Laboratory Number 2
		Laboratory Number 3		
		Name of laboratory/firm	Allied Environmental Lab	
		Laboratory address	P.O.Box 427 Ashford, AL 36312	
	Phone number	(334) 899-7642		
	Pollutant(s) analyzed	See Table A		

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SECTION 10. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(A) AND (D))

Checklist and Certification Statement	10.1	In Column 1 below, mark the sections of Form 2F that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to complete all sections or provide attachments.	
		Column 1	Column 2
		<input checked="" type="checkbox"/> Section 1	<input type="checkbox"/> w/ attachments (e.g., responses for additional outfalls)
		<input checked="" type="checkbox"/> Section 2	<input type="checkbox"/> w/ attachments
		<input checked="" type="checkbox"/> Section 3	<input checked="" type="checkbox"/> w/ site drainage map
		<input checked="" type="checkbox"/> Section 4	<input type="checkbox"/> w/ attachments
		<input checked="" type="checkbox"/> Section 5	<input type="checkbox"/> w/ attachments
		<input checked="" type="checkbox"/> Section 6	<input type="checkbox"/> w/ attachments
		<input checked="" type="checkbox"/> Section 7	<input checked="" type="checkbox"/> Table A <input type="checkbox"/> w/ small business exemption request <input type="checkbox"/> Table B <input type="checkbox"/> w/ analytical results as an attachment <input type="checkbox"/> Table C <input type="checkbox"/> Table D
		<input checked="" type="checkbox"/> Section 8	<input type="checkbox"/> w/ attachments
		<input checked="" type="checkbox"/> Section 9	<input type="checkbox"/> w/ attachments (e.g., responses for additional contact laboratories or firms)
		<input checked="" type="checkbox"/> Section 10	
	10.2	Provide the following certification. (See instructions to determine the appropriate person to sign the application.)	
		Certification Statement	
		<i>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.</i>	
		Name (print or type first and last name)	Official title
		Jeffrey Miller	Vice President, Operations
		Signature	Date signed
			01/29/2026

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TABLE A. CONVENTIONAL AND NON CONVENTIONAL PARAMETERS (40 CFR 122.26(C)(1)(I)(E)(3))¹

You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details and requirements.

Pollutant or Parameter	Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite		
1. Oil and grease	3.12 mg/L		1.81 mg/L		3	
2. Biochemical oxygen demand (BOD ₅)	4.43 mg/L	NA	1.90 mg/L	NA	3	
3. Chemical oxygen demand (COD)	151	NA	57.2	NA	3	
4. Total suspended solids (TSS)	127 mg/L	NA	62.1 mg/L	NA	3	
5. Total phosphorus	0.22 mg/L	NA	0.18 mg/L	NA	3	
6. Total Kjeldahl nitrogen (TKN)	0.57 mg/L	NA	0.33 mg/L	NA	3	
7. Total nitrogen (as N)	0.57 mg/L	NA	0.37 mg/L	NA	3	
8. pH (minimum)	6.04 s.u.		6.04 s.u.		3	
	6.61 s.u.		6.61 s.u.		3	

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

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TABLE D. STORM EVENT INFORMATION (40 CFR 122.26(C)(1)(I)(E)(6))

Provide data for the storm event(s) that resulted in the maximum daily discharges for the flow-weighted composite sample.

Date of Storm Event	Duration of Storm Event (in hours)	Total Rainfall During Storm Event (in inches)	Number of Hours Between Beginning of Storm Measured and End of Previous Measurable Rain Event	Maximum Flow Rate During Rain Event (in gpm or specify units)	Total Flow from Rain Event (in gallons or specify units)

Provide a description of the method of flow measurement or estimate.



SHEET No.
3

PROJECT No.
74-177

FORT RUCKER
MAIN PLANT NPDES

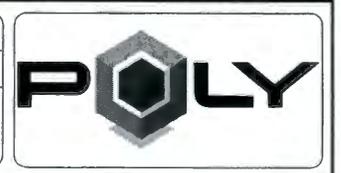
AERIAL SITE MAP

POLY, INC.
1935 Headland Avenue
Dolhan, AL 36303
334-793-4700

102 Sunset Lane 117 General Cir., Ste. 418
Shalimar, FL 32579 Birmingham, AL 35209
850-608-1100 205-813-0330

WWW.POLY-INC.COM

DESIGNED BY:	DRAWN BY:	DATE:
ENG / ARCH / SURVEYOR OF RECORD:	REGISTRATION No.	MARCH 2025
Cert. of Auth. No.		These drawings are copyrighted and the property of Poly-inc. Any use, partial or full reproduction is prohibited except by written Agreement with Poly-inc.
ARCHITECT:	CA-6490	
ENGINEER:	CA-74E	
	CA-1818	



EPA Identification Number	NPDES Permit Number AL0076821	Facility Name American Water Enterprises, LLC	OMB No. 2040-0004 Expires 07/31/2026	
Form 2S NPDES		U.S Environmental Protection Agency Application for NPDES Permit for Sewage Sludge Management NEW AND EXISTING TREATMENT WORKS TREATING DOMESTIC SEWAGE		
PRELIMINARY INFORMATION				
Does your facility currently have an effective NPDES permit or have you been directed by your NPDES permitting authority to submit a full Form 2S permit application?				
<input checked="" type="checkbox"/> Yes → Complete Part 2 of application package (begins p. 7). <input type="checkbox"/> No → Complete Part 1 of application package (below).				
Part 1		LIMITED BACKGROUND INFORMATION (40 CFR 122.21(c)(2)(ii))		
Complete this part only if you are a "sludge-only" facility (i.e., a facility that does not currently have, and is not applying for, an NPDES permit for a direct discharge to a surface body of water).				
PART 1, SECTION 1. FACILITY INFORMATION (40 CFR 122.21(C)(2)(II)(A))				
Facility Information	<u>1.1</u>	Facility name		
		Mailing address (street or P.O. box)		
		City or town	State	ZIP code
		Contact name (first and last)	Title	Phone number Email address
		Location address (street, route number, or other specific identifier)		<input type="checkbox"/> Same as mailing address
		City or town	State	ZIP code
		<u>1.2</u>	Ownership Status	
		<input type="checkbox"/> Public—federal <input type="checkbox"/> Public—state <input type="checkbox"/> Other public (specify) _____ <input type="checkbox"/> Private <input type="checkbox"/> Other (specify) _____		
PART 1, SECTION 2. APPLICANT INFORMATION (40 CFR 122.21(C)(2)(II)(B))				
Applicant Information	<u>2.1</u>	Is applicant different from entity listed under Item 1.1 above?		
		<input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 2.3 (Part 1, Section 2).		
	<u>2.2</u>	Applicant name		
		Applicant address (street or P.O. box)		
		City or town	State	ZIP code
	Contact name (first and last)	Title	Phone number Email address	
	<u>2.3</u>	Is the applicant the facility's owner, operator, or both? (Check only one response.)		
		<input type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Both		
	<u>2.4</u>	To which entity should the NPDES permitting authority send correspondence? (Check only one response.)		
		<input type="checkbox"/> Facility <input type="checkbox"/> Applicant <input type="checkbox"/> Facility and applicant (they are one and the same)		
PART 1, SECTION 3. SEWAGE SLUDGE AMOUNT (40 CFR 122.21(C)(2)(II)(D))				
Sewage Sludge Amount	<u>3.1</u>	Provide the total dry metric tons per the latest 365-day period of sewage sludge generated, treated, used, and disposed of:		
		Practice	Dry Metric Tons per 365-Day Period	
		Amount generated at the facility		
		Amount treated at the facility		
		Amount used (i.e., received from offsite) at the facility		
		Amount disposed of at the facility		

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

Use and Disposal Sites	Provide the following information for each site on which sewage sludge from this facility is used or disposed of.			
	<input type="checkbox"/> Check here if you have provided separate attachments with this information.			
	<u>7.1</u>	Site name or number		
	Mailing address (street or P.O. box)			
	City or town		State	ZIP code
	Contact name (first and last)	Title	Phone number	Email address
	Location address (street, route number, or other specific identifier)			<input type="checkbox"/> Same as mailing address
	City or town		State	ZIP code
	County		County code	<input type="checkbox"/> Not available
	<u>7.2</u>	Site type (check all that apply)		
<input type="checkbox"/> Agricultural <input type="checkbox"/> Lawn or home garden <input type="checkbox"/> Forest <input type="checkbox"/> Surface disposal <input type="checkbox"/> Public contact <input type="checkbox"/> Incineration <input type="checkbox"/> Reclamation <input type="checkbox"/> Municipal solid waste landfill <input type="checkbox"/> Other (describe)				

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

Checklist and Certification Statement	<u>8.1</u>	In Column 1 below, mark the sections of Form 2S, Part 1, that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to provide attachments.	
	Column 1		Column 2
	<input type="checkbox"/>	Section 1: Facility Information	<input type="checkbox"/> w/ attachments
	<input type="checkbox"/>	Section 2: Applicant Information	<input type="checkbox"/> w/ attachments
	<input type="checkbox"/>	Section 3: Sewage Sludge Amount	<input type="checkbox"/> w/ attachments
	<input type="checkbox"/>	Section 4: Pollutant Concentrations	<input type="checkbox"/> w/ attachments
	<input type="checkbox"/>	Section 5: Treatment Provided at Your Facility	<input type="checkbox"/> w/ attachments
	<input type="checkbox"/>	Section 6: Sewage Sludge Sent to Other Facilities	<input type="checkbox"/> w/ attachments
	<input type="checkbox"/>	Section 7: Use and Disposal Sites	<input type="checkbox"/> w/ attachments
	<input type="checkbox"/>	Section 8: Checklist and Certification Statement	

EPA Identification Number		NPDES Permit Number AL0076821	Facility Name American Water Enterprises, LLC	OMB No. 2040-0004 Expires 07/31/2026
Checklist and Certification Statement Continued	<u>8.2</u>	Provide the following certification. (See instructions to determine the appropriate person to submit the application.)		
	Certification Statement			
	<i>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.</i>			
		Name (print or type first and last name)	Official title	Phone number
		Signature		Date signed

PART 1 APPLICANTS STOP HERE.

Submit completed application package to your NPDES permitting authority.

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PART 2	PERMIT APPLICATION INFORMATION (40 CFR 122.21(q))
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Complete this part if you have an effective NPDES permit or have been directed by the NPDES permitting authority to submit a full permit application. In other words, complete this part if your facility has, or is applying for, an NPDES permit. Part 2 is divided into five sections. Section 1 pertains to all applicants. The applicability of Sections 2 to 5 depends on your facility's sewage sludge use or disposal practices. See the instructions to determine which sections you are required to complete.

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

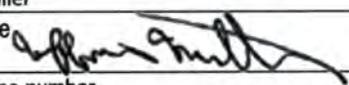
General Information	All Part 2 applicants must complete this section.				
	Facility Information				
	1.1	Facility name Fort Rucker Main Treatment Plant			
		Mailing address (street or P.O. box) Post Office Box 620397			
		City or town Fort Rucker	State AL	ZIP code 36362	Phone number (334) 503-1761
		Contact name (first and last) Stacy Bedsole	Title General Manager	Email address Stacy.bedsole@amwater.com	
		Location address (street, route number, or other specific identifier) 9801 Red Cloud Road			<input type="checkbox"/> Same as mailing address
		City or town Fort Rucker	State AL	ZIP code 36362	
	1.2	Is this facility a Class I sludge management facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
	1.3	Facility Design Flow Rate	2.5 million gallons per day (mgd)		
	1.4	Total Population Served	19500		
	1.5	Ownership Status			
		<input type="checkbox"/> Public—federal <input type="checkbox"/> Public—state <input type="checkbox"/> Other public (specify) _____ <input checked="" type="checkbox"/> Private <input type="checkbox"/> Other (specify) _____			
	Applicant Information				
	1.6	Is applicant different from entity listed under Item 1.1 above? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 1.8 (Part 2, Section 1).			
1.7	Applicant name American Water Enterprises, LLC				
	Applicant mailing address (street or P.O. box) 1 Water Street				
	City or town Camden	State NJ	ZIP code 08102		
	Contact name (first and last) Jeffrey Miller	Title Vice President	Phone number 8133526987	Email address Jeffrey.Miller@amwater.cc	
1.8	Is the applicant the facility's owner, operator, or both? (Check only one response.) <input type="checkbox"/> Operator <input type="checkbox"/> Owner <input checked="" type="checkbox"/> Both				
1.9	To which entity should the NPDES permitting authority send correspondence? (Check only one response.) <input checked="" type="checkbox"/> Facility <input type="checkbox"/> Applicant <input type="checkbox"/> Facility and applicant (they are one and the same)				

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IND/MUN BRANCH
WATER DIVISION

EPA Identification Number	NPDES Permit Number AL0076821	Facility Name American Water Enterprises, LLC	OMB No. 2040-0004 Expires 07/31/2026	
General Information Continued	Permit Information			
	<u>1.10</u>	Facility's NPDES permit number <input type="checkbox"/> Check here if you do not have an NPDES permit but are otherwise required to submit Part 2 of Form 2S.	NPDES Permit Number AL0076821	
	<u>1.11</u>	Indicate all other federal, state, and local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices below. <input type="checkbox"/> Check here if you have provided a separate attachment with this information.		
	Existing Environment Permits (check all that apply and print or type the corresponding permit number for each)			
	<input type="checkbox"/>	RCRA (hazardous wastes)	<input type="checkbox"/>	Nonattainment program (CAA)
	<input type="checkbox"/>	PSD (air emissions)	<input type="checkbox"/>	Dredge or fill (CWA Section 404)
	<input type="checkbox"/>	Ocean dumping (MPRSA)	<input type="checkbox"/>	UIC (underground injection of fluids)
	<input type="checkbox"/>		<input type="checkbox"/>	NESHAPs (CAA)
	<input type="checkbox"/>		<input type="checkbox"/>	Other (specify)
	Indian Country			
	<u>1.12</u>	Does any generation, treatment, storage, application to land, or disposal of sewage sludge from this facility occur in Indian Country? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 1.14 (Part 2, Section 1) below.		
	<u>1.13</u>	Provide a description of the generation, treatment, storage, land application, or disposal of sewage sludge that occurs.		
	Topographic Map			
	<u>1.14</u>	Have you attached a topographic map containing all required information to this application? (See instructions for specific requirements.) <input checked="" type="checkbox"/> Yes		
	Line Drawing			
<u>1.15</u>	Have you attached a line drawing and/or a narrative description that identifies all sewage sludge practices that will be employed during the term of the permit containing all the required information to this application? (See instructions for specific requirements.) <input checked="" type="checkbox"/> Yes			
Contractor Information				
<u>1.16</u>	Do contractors have any operational or maintenance responsibilities related to sewage sludge generation, treatment, use, or disposal at the facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 1.18 (Part 2, Section 1) below.			
<u>1.17</u>	Provide the following information for each contractor. <input type="checkbox"/> Check here if you have attached additional sheets to the application package.			
		Contractor 1	Contractor 2	
	Contractor company name			
	Mailing address (street or P.O. box)			
	City, state, and ZIP code			
	Contact name (first and last)			
	Telephone number			
	Email address			

EPA Identification Number		NPDES Permit Number AL0076821		Facility Name Fort Rucker Main Treatment Plant		OMB No. 2040-0004 Expires 07/31/2026		
General Information Continued	<u>1.17</u> cont.	Responsibilities of contractor		Contractor 1	Contractor 2	Contractor 3		
	Pollutant Concentrations							
	Using the table below or a separate attachment, provide sewage sludge monitoring data for the pollutants for which limits in sewage sludge have been established in 40 CFR 503 for this facility's expected use or disposal practices. All data must be based on three or more samples taken at least one month apart and must be no more than 4.5 years old.							
	<input type="checkbox"/> Check here if you have attached additional sheets to the application package.							
	<u>1.18</u>	Pollutant	Average Monthly Concentration (mg/kg dry weight)	Analytical Method	Detection Level			
		Arsenic	1.95	6010C	1.7			
		Cadmium	5.40	6010C	0.87			
		Chromium	25.1	6010C	1.7			
		Copper	394	6010C	3.5			
		Lead	29.4	6010C	8.7			
	Mercury	0.914	7471B	0.035				
	Molybdenum	9.95	6010C	4.3				
	Nickel	6.93	6010C	7.0				
	Selenium	4.05	6010C	1.7				
	Zinc	588	6010C	3.5				
Checklist and Certification Statement								
<u>1.19</u>	In Column 1 below, mark the sections of Form 2S, Part 2, that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing. Note that not all applicants are required to complete all sections or provide attachments. See Exhibit 2S-2 in the Instructions.							
	Column 1			Column 2				
	<input checked="" type="checkbox"/>	Section 1 (General Information)		<input type="checkbox"/> w/ attachments				
	<input checked="" type="checkbox"/>	Section 2 (Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge)		<input type="checkbox"/> w/ attachments				
	<input type="checkbox"/>	Section 3 (Land Application of Bulk Sewage Sludge)		<input type="checkbox"/> w/ attachments				
	<input type="checkbox"/>	Section 4 (Surface Disposal)		<input type="checkbox"/> w/ attachments				
	<input type="checkbox"/>	Section 5 (Incineration)		<input type="checkbox"/> w/ attachments				
<u>1.20</u>	Provide the following certification. (See instructions to determine the appropriate person to sign the application.)							
	Certification Statement							
	<i>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.</i>							
	Name (print or type first and last name) Jeffrey Miller			Official title Vice President, Operations				
	Signature 			Date signed 01/29/2026				
	Telephone number 8133526987							
Upon the request of the NPDES permitting authority, you must submit any other information the authority deems necessary to assess sewage sludge use or disposal practices at your facility and identify appropriate permitting requirements.								

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

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

<u>2.1</u>	Does your facility generate sewage sludge or derive a material from sewage sludge? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Part 2, Section 3.		
Amount Generated Onsite			
<u>2.2</u>	Total dry metric tons per 365-day period generated at your facility:		84.02
Amount Received from Offsite Facility			
<u>2.3</u>	Does your facility receive sewage sludge from another facility for treatment use or disposal? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 2.8 (Part 2, Section 2) below.		
<u>2.4</u>	Indicate the total number of facilities from which you receive sewage sludge for treatment, use, or disposal:		
Provide the following information for each of the facilities from which you receive sewage sludge. <input type="checkbox"/> Check here if you have attached additional sheets to the application package.			
<u>2.5</u>	Name of facility		
	Mailing address (street or P.O. box)		
	City or town	State	ZIP code
	Contact name (first and last)	Title	Phone number Email address
	Location address (street, route number, or other specific identifier)		<input type="checkbox"/> Same as mailing address
	City or town	State	ZIP code
	County	County code	<input type="checkbox"/> Not available
<u>2.6</u>	Indicate the amount of sewage sludge received, the applicable pathogen class and reduction alternative, and the applicable vector reduction option provided at the offsite facility.		
	Amount (dry metric tons)	Vector Attraction Reduction Option	
		<input type="checkbox"/> Not applicable <input type="checkbox"/> Class A, Alternative 1 <input type="checkbox"/> Class A, Alternative 2 <input type="checkbox"/> Class A, Alternative 3 <input type="checkbox"/> Class A, Alternative 4 <input type="checkbox"/> Class A, Alternative 5 <input type="checkbox"/> Class A, Alternative 6 <input type="checkbox"/> Class B, Alternative 1 <input type="checkbox"/> Class B, Alternative 2 <input type="checkbox"/> Class B, Alternative 3 <input type="checkbox"/> Class B, Alternative 4 <input type="checkbox"/> Domestic septage, pH adjustment	
		<input type="checkbox"/> Not applicable <input type="checkbox"/> Option 1 <input type="checkbox"/> Option 2 <input type="checkbox"/> Option 3 <input type="checkbox"/> Option 4 <input type="checkbox"/> Option 5 <input type="checkbox"/> Option 6 <input type="checkbox"/> Option 7 <input type="checkbox"/> Option 8 <input type="checkbox"/> Option 9 <input type="checkbox"/> Option 10 <input type="checkbox"/> Option 11	
<u>2.7</u>	Identify the treatment process(es) that are known to occur at the offsite facility, including blending activities and treatment to reduce pathogens or vector attraction properties. (Check all that apply.)		
	<input type="checkbox"/> Preliminary operations (e.g., sludge grinding and dewatering) <input type="checkbox"/> Stabilization <input type="checkbox"/> Composting <input type="checkbox"/> Disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization) <input type="checkbox"/> Heat drying <input type="checkbox"/> Methane or biogas capture and recovery		
	<input type="checkbox"/> Thickening (concentration) <input type="checkbox"/> Anaerobic digestion <input type="checkbox"/> Conditioning <input type="checkbox"/> Dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons) <input type="checkbox"/> Thermal reduction <input type="checkbox"/> Other (specify) _____		

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

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

2.14 Do you place sewage sludge in a bag or other container for sale or give-away for land application?
 Yes No → SKIP to Item 2.17 (Part 2, Section 2) below.

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

2.16 Attach a copy of all labels or notices that accompany the sewage sludge being sold or given away in a bag or other container for application to the land.
 Check here to indicate that you have attached all labels or notices to this application package.

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

Shipment Offsite for Treatment or Blending

2.17 Does another facility provide treatment or blending of your facility's sewage sludge? (This question does not pertain to dewatered sludge sent directly to a land application or surface disposal site.)
 Yes No → SKIP to Item 2.27 (Part 2, Section 2) below.

2.18 Indicate the total number of facilities that provide treatment or blending of your facility's sewage sludge. Provide the information in Items 2.19 to 2.26 (Part 2, Section 2) below for each facility.
 Check here if you have attached additional sheets to the application package.

2.19 Name of receiving facility

Mailing address (street or P.O. box)

City or town State ZIP code

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

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

City or town State ZIP code

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

2.21 Does the receiving facility provide additional treatment to reduce pathogens in sewage sludge from your facility or reduce the vector attraction properties of sewage sludge from your facility?
 Yes No → SKIP to Item 2.24 (Part 2, Section 2) below.

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

Pathogen Class and Reduction Alternative	Vector Attraction Reduction Option
<input type="checkbox"/> Not applicable	<input type="checkbox"/> Not applicable
<input type="checkbox"/> Class A, Alternative 1	<input type="checkbox"/> Option 1
<input type="checkbox"/> Class A, Alternative 2	<input type="checkbox"/> Option 2
<input type="checkbox"/> Class A, Alternative 3	<input type="checkbox"/> Option 3
<input type="checkbox"/> Class A, Alternative 4	<input type="checkbox"/> Option 4
<input type="checkbox"/> Class A, Alternative 5	<input type="checkbox"/> Option 5
<input type="checkbox"/> Class A, Alternative 6	<input type="checkbox"/> Option 6
<input type="checkbox"/> Class B, Alternative 1	<input type="checkbox"/> Option 7
<input type="checkbox"/> Class B, Alternative 2	<input type="checkbox"/> Option 8
<input type="checkbox"/> Class B, Alternative 3	<input type="checkbox"/> Option 9
<input type="checkbox"/> Class B, Alternative 4	<input type="checkbox"/> Option 10
<input type="checkbox"/> Domestic septage, pH adjustment	<input type="checkbox"/> Option 11

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Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge Continued	<u>2.23</u>	Which treatment process(es) are used at the receiving facility to reduce pathogens in sewage sludge or reduce the vector attraction properties of sewage sludge from your facility? (Check all that apply.)	
	<input type="checkbox"/>	Preliminary operations (e.g., sludge grinding and dewatering)	<input type="checkbox"/> Thickening (concentration)
	<input type="checkbox"/>	Stabilization	<input type="checkbox"/> Anaerobic digestion
	<input type="checkbox"/>	Composting	<input type="checkbox"/> Conditioning
	<input type="checkbox"/>	Disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization)	<input type="checkbox"/> Dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons)
	<input type="checkbox"/>	Heat drying	<input type="checkbox"/> Thermal reduction
	<input type="checkbox"/>	Methane or biogas capture and recovery	<input type="checkbox"/> Other (specify) _____
	<u>2.24</u>	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).	
	<input type="checkbox"/>	Check here to indicate that you have attached material.	
	<u>2.25</u>	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?	
	<input type="checkbox"/>	Yes	<input type="checkbox"/> No → SKIP to Item 2.32 (Part 2, Section 2) below.
	<u>2.26</u>	Attach a copy of all labels or notices that accompany the product being sold or given away.	
	<input type="checkbox"/>	Check here to indicate that you have attached material.	
	<input type="checkbox"/>	Check here once you have completed Items 2.17 to 2.26 (Part 2, Section 2), then → SKIP to Item 2.32 (Part 2, Section 2) below.	
	Land Application of Bulk Sewage Sludge		
<u>2.27</u>	Is sewage sludge from your facility applied to the land?		
<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/> No → SKIP to Item 2.32 (Part 2, Section 2) below.	
<u>2.28</u>	Total dry metric tons per 365-day period of sewage sludge applied to all land application sites:		
<u>2.29</u>	Did you identify all land application sites in Part 2, Section 3 of this application?		
<input type="checkbox"/>	Yes	<input type="checkbox"/> No → Submit a copy of the land application plan with your application.	
<u>2.30</u>	Are any land application sites located in states other than the state where you generate sewage sludge or derive a material from sewage sludge?		
<input type="checkbox"/>	Yes	<input type="checkbox"/> No → SKIP to Item 2.32 (Part 2, Section 2) below.	
<u>2.31</u>	Describe how you notify the NPDES permitting authority for the states where the land application sites are located. Attach a copy of the notification.		
<input type="checkbox"/>	Check here if you have attached the explanation to the application package.		
<input type="checkbox"/>	Check here if you have attached the notification to the application package.		
Surface Disposal			
<u>2.32</u>	Is sewage sludge from your facility placed on a surface disposal site?		
<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/> No → SKIP to Item 2.39 (Part 2, Section 2) below.	
<u>2.33</u>	Total dry metric tons of sewage sludge from your facility placed on all surface disposal sites per 365-day period:		
<u>2.34</u>	Do you own or operate all surface disposal sites to which you send sewage sludge for disposal?		
<input type="checkbox"/>	Yes → SKIP to Item 2.39 (Part 2, Section 2) below.	<input type="checkbox"/> No	
<u>2.35</u>	Indicate the total number of surface disposal sites to which you send your sewage sludge. (Provide the information in Items 2.36 to 2.38 of Part 2, Section 2, for each facility.)		
<input type="checkbox"/>	Check here if you have attached additional sheets to the application package.		

EPA Identification Number		NPDES Permit Number AL0076821		Facility Name American Water Enterprises, LLC		OMB No. 2040-0004 Expires 07/31/2026		
Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge Continued	2.36	Site name or number of surface disposal site you do not own or operate						
		Mailing address (street or P.O. box)						
		City or town			State		ZIP code	
		Contact name (first and last)		Title		Phone number		Email address
	2.37	Site contact (check all that apply)						
		<input type="checkbox"/> Owner			<input type="checkbox"/> Operator			
	2.38	Total dry metric tons of sewage sludge from your facility placed on this surface disposal site per 365-day period:						
	Incineration							
	2.39	Is sewage sludge from your facility fired in a sewage sludge incinerator?						
		<input type="checkbox"/> Yes			<input checked="" type="checkbox"/> No → SKIP to Item 2.46 (Part 2, Section 2) below.			
	2.40	Total dry metric tons of sewage sludge from your facility fired in all sewage sludge incinerators per 365-day period:						
	2.41	Do you own or operate all sewage sludge incinerators in which sewage sludge from your facility is fired?						
		<input type="checkbox"/> Yes → SKIP to Item 2.46 (Part 2, Section 2) below.			<input type="checkbox"/> No			
	2.42	Indicate the total number of sewage sludge incinerators that you use but do not own or operate. (Provide the information in Items 2.43 to 2.45 directly below for each facility.)						
	<input type="checkbox"/> Check here if you have attached additional sheets to the application package.							
2.43	Incinerator name or number							
	Mailing address (street or P.O. box)							
	City or town			State		ZIP code		
	Contact name (first and last)		Title		Phone number		Email address	
	Location address (street, route number, or other specific identifier)						<input type="checkbox"/> Same as mailing address	
	City or town			State		ZIP code		
2.44	Contact (check all that apply)							
	<input type="checkbox"/> Incinerator owner			<input type="checkbox"/> Incinerator operator				
2.45	Total dry metric tons of sewage sludge from your facility fired in this sewage sludge incinerator per 365-day period:							
Disposal in a Municipal Solid Waste Landfill								
2.46	Is sewage sludge from your facility placed on a municipal solid waste landfill?							
	<input checked="" type="checkbox"/> Yes			<input type="checkbox"/> No → SKIP to Part 2, Section 3.				
2.47	Indicate the total number of municipal solid waste landfills used. (Provide the information in Items 2.48 to 2.52 directly below for each facility.)						1	
	<input type="checkbox"/> Check here if you have attached additional sheets to the application package.							
Generation of Sewage Sludge or Preparation of a Material Derived	2.48	Name of landfill Coffee County Landfill						
		Mailing address (street or P.O. box) 7733 Highway 125						
		City or town Elba			State AL		ZIP code 36323	
		Contact name (first and last) Mike Thornton		Title Environmental Service Mgr		Phone number (334) 897-6773		Email address

EPA Identification Number

NPDES Permit Number

Facility Name

OMB No. 2040-0004

AL0076821

American Water Enterprises, LLC

Expires 07/31/2026

Location address (street, route number, or other specific identifier)		<input checked="" type="checkbox"/> Same as mailing address	
County Coffee		County code <input checked="" type="checkbox"/> Not available	
City or town Elba		State AL	ZIP code 36323
<u>2.49</u>	Total dry metric tons of sewage sludge from your facility placed in this municipal solid waste landfill per 365-day period:	84.02	
<u>2.50</u>	List the numbers of all other federal, state, and local permits that regulate the operation of this municipal solid waste landfill.		
	Permit Number	Type of Permit	
	16-10	Subtitle D Landfill	
<u>2.51</u>	Attach information to determine whether the sewage sludge meets applicable requirements for disposal of sewage sludge in a municipal solid waste landfill (e.g., results of paint filter liquids test and TCLP test).		
	<input checked="" type="checkbox"/> Check here to indicate you have attached the requested information.		
<u>2.52</u>	Does the municipal solid waste landfill comply with applicable criteria set forth in 40 CFR 258?		
	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

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

Land Application of Bulk Sewage Sludge

3.1	Does your facility apply sewage sludge to land? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Part 2, Section 4.
3.2	Do any of the following conditions apply? <ul style="list-style-type: none"> • The sewage sludge meets the ceiling concentrations in Table 1 of 40 CFR 503.12, the pollutant concentrations in Table 3 of 40 CFR 503.13, Class A pathogen reduction requirements at 40 CFR 503.32(a), and one of the vector attraction reduction requirements at 40 CFR 503.33(b)(1)–(8); • The sewage sludge is sold or given away in a bag or other container for application to the land; or • You provide the sewage sludge to another facility for treatment or blending. <input type="checkbox"/> Yes → SKIP to Part 2, Section 4. <input type="checkbox"/> No
3.3	Complete Section 3 for every site on which the sewage sludge is applied. <input type="checkbox"/> Check here if you have attached sheets to the application package for one or more land application sites.
Identification of Land Application Site	
3.4	Site name or number
	Location address (street, route number, or other specific identifier) <input type="checkbox"/> Same as mailing address
	County <input type="checkbox"/> County code <input type="checkbox"/> Not available
	City or town State ZIP code
Latitude/Longitude of Land Application Site (see instructions)	
	Latitude Longitude
Method of Determination	
	<input type="checkbox"/> USGS map <input type="checkbox"/> Field survey <input type="checkbox"/> Other (specify) _____
3.5	Provide a topographic map (or other appropriate map if a topographic map is unavailable) that shows the site location. <input type="checkbox"/> Check here to indicate you have attached a topographic map for this site.
Owner Information	
3.6	Are you the owner of this land application site? <input type="checkbox"/> Yes → SKIP to Item 3.8 (Part 2, Section 3) below. <input type="checkbox"/> No
3.7	Owner name
	Mailing address (street or P.O. box)
	City or town State ZIP code
	Contact name (first and last) Title Phone number Email address
Applier Information	
3.8	Are you the person who applies, or who is responsible for application of, sewage sludge to this land application site? <input type="checkbox"/> Yes → SKIP to Item 3.10 (Part 2, Section 3) below. <input type="checkbox"/> No
3.9	Applier's name
	Mailing address (street or P.O. box)
	City or town State ZIP code
	Contact name (first and last) Title Phone number Email address

Site Type

3.10

Type of land application:

- Agricultural land Forest
- Reclamation site Public contact site
- Other (describe)

Crop or Other Vegetation Grown Onsite

3.11

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

3.12

What is the nitrogen requirement for this crop or vegetation?

Vector Attraction Reduction

3.13

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

- Yes No → SKIP to Item 3.16 (Part 2, Section 3) below.

3.14

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

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

3.15

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

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

Cumulative Loadings and Remaining Allotments

3.16

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

- Yes No → SKIP to Part 2, Section 4.

3.17

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

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

3.18

Provide the following information about your NPDES permitting authority:

NPDES permitting authority name

Contact person

Telephone number

Email address

3.19

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

- Yes No → SKIP to Part 2, Section 4.

3.20

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

- Check here to indicate that additional pages are attached.

Facility name

Mailing address (street or P.O. box)

City or town

State

ZIP code

Contact name (first and last)

Title

Phone number

Email address

Land Application of Bulk Sewage Sludge Continued

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

Surface Disposal

<u>4.1</u>	Do you own or operate a surface disposal site? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Part 2, Section 5.
<u>4.2</u>	Complete all items in Section 4 for each active sewage sludge unit that you own or operate. <input type="checkbox"/> Check here to indicate that you have attached material to the application package for one or more active sewage sludge units.
Information on Active Sewage Sludge Units	
<u>4.3</u>	Unit name or number
	Mailing address (street or P.O. box)
	City or town State ZIP code
	Contact name (first and last) Title Phone number Email address
	Location address (street, route number, or other specific identifier) <input type="checkbox"/> Same as mailing address
	County County code <input type="checkbox"/> Not available
	City or town State ZIP code
Latitude/Longitude of Active Sewage Sludge Unit (see instructions)	
	Latitude Longitude
Method of Determination	
	<input type="checkbox"/> USGS map <input type="checkbox"/> Field survey <input type="checkbox"/> Other (specify) _____
<u>4.4</u>	Provide a topographic map (or other appropriate map if a topographic map is unavailable) that shows the site location. <input type="checkbox"/> Check here to indicate that you have completed and attached a topographic map.
<u>4.5</u>	Total dry metric tons of sewage sludge placed on the active sewage sludge unit per 365-day period:
<u>4.6</u>	Total dry metric tons of sewage sludge placed on the active sewage sludge unit over the life of the unit:
<u>4.7</u>	Does the active sewage sludge unit have a liner with a maximum permeability of 1×10^{-7} centimeters per second (cm/sec)? <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 4.9 (Part 2, Section 4) below.
<u>4.8</u>	Describe the liner. <input type="checkbox"/> Check here to indicate that you have attached a description to the application package.
<u>4.9</u>	Does the active sewage sludge unit have a leachate collection system? <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 4.11 (Part 2, Section 4) below.
<u>4.10</u>	Describe the leachate collection system and the method used for leachate disposal and provide the numbers of any federal, state, or local permit(s) for leachate disposal. <input type="checkbox"/> Check here to indicate that you have attached the description to the application package.

EPA Identification Number		NPDES Permit Number AL0076821	Facility Name American Water Enterprises, LLC		OMB No. 2040-0004 Expires 07/31/2026		
Surface Disposal Continued	4.11	Is the boundary of the active sewage sludge unit less than 150 meters from the property line of the surface disposal site?					
		<input type="checkbox"/> Yes		<input type="checkbox"/> No → SKIP to Item 4.13 (Part 2, Section 4) below.			
	4.12	Provide the actual distance in meters:				_____ meters	
	4.13	Remaining capacity of active sewage sludge unit in dry metric tons:				_____ dry metric tons	
	4.14	Anticipated closure date for active sewage sludge unit, if known (MM/DD/YYYY): _____					
	4.15	Attach a copy of any closure plan that has been developed for this active sewage sludge unit. <input type="checkbox"/> Check here to indicate that you have attached a copy of the closure plan to the application package.					
	Sewage Sludge from Other Facilities						
	4.16	Is sewage sludge sent to this active sewage sludge unit from any facilities other than your facility?					
		<input type="checkbox"/> Yes		<input type="checkbox"/> No → SKIP to Item 4.21 (Part 2, Section 4) below.			
	4.17	Indicate the total number of facilities (other than your facility) that send sewage sludge to this active sewage sludge unit. (Complete Items 4.18 to 4.20 directly below for each such facility.) <input type="checkbox"/> Check here to indicate that you have attached responses for each facility to the application package.					
	4.18	Facility name _____					
		Mailing address (street or P.O. box) _____					
City or town _____			State _____	ZIP code _____			
Contact name (first and last) _____		Title _____	Phone number _____	Email address _____			
4.19	Indicate the pathogen class and reduction alternative and the vector attraction reduction option met for the sewage sludge before it leaves the other facility.						
	Pathogen Class and Reduction Alternative			Vector Attraction Reduction Option			
	<input type="checkbox"/> Not applicable <input type="checkbox"/> Class A, Alternative 1 <input type="checkbox"/> Class A, Alternative 2 <input type="checkbox"/> Class A, Alternative 3 <input type="checkbox"/> Class A, Alternative 4 <input type="checkbox"/> Class A, Alternative 5 <input type="checkbox"/> Class A, Alternative 6 <input type="checkbox"/> Class B, Alternative 1 <input type="checkbox"/> Class B, Alternative 2 <input type="checkbox"/> Class B, Alternative 3 <input type="checkbox"/> Class B, Alternative 4 <input type="checkbox"/> Domestic septage, pH adjustment			<input type="checkbox"/> Not applicable <input type="checkbox"/> Option 1 <input type="checkbox"/> Option 2 <input type="checkbox"/> Option 3 <input type="checkbox"/> Option 4 <input type="checkbox"/> Option 5 <input type="checkbox"/> Option 6 <input type="checkbox"/> Option 7 <input type="checkbox"/> Option 8 <input type="checkbox"/> Option 9 <input type="checkbox"/> Option 10 <input type="checkbox"/> Option 11			
4.20	Which treatment process(es) are used at the other facility to reduce pathogens in sewage sludge or reduce the vector attraction properties of sewage sludge before it leaves that facility? (Check all that apply.)						
	<input type="checkbox"/> Preliminary operations (e.g., sludge grinding and degritting) <input type="checkbox"/> Stabilization <input type="checkbox"/> Composting <input type="checkbox"/> Disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization) <input type="checkbox"/> Heat drying <input type="checkbox"/> Methane or biogas capture and recovery		<input type="checkbox"/> Thickening (concentration) <input type="checkbox"/> Anaerobic digestion <input type="checkbox"/> Conditioning <input type="checkbox"/> Dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons) <input type="checkbox"/> Thermal reduction <input type="checkbox"/> Other (specify) _____				

EPA Identification Number	NPDES Permit Number AL0076821	Facility Name American Water Enterprises, LLC	OMB No. 2040-0004 Expires 07/31/2026	
Surface Disposal Continued	Vector Attraction Reduction			
	<u>4.21</u>	Which vector attraction reduction option, if any, is met when sewage sludge is placed on this active sewage sludge unit?		
		<input type="checkbox"/> Option 9 (injection below and surface)	<input type="checkbox"/> Option 11 (covering active sewage sludge unit daily)	
		<input type="checkbox"/> Option 10 (incorporation into soil within 6 hours)	<input type="checkbox"/> None	
	<u>4.22</u>	Describe any treatment processes used at the active sewage sludge unit to reduce vector attraction properties of sewage sludge.		
		<input type="checkbox"/> Check here if you have attached your description to the application package.		
	Groundwater Monitoring			
	<u>4.23</u>	Is groundwater monitoring currently conducted at this active sewage sludge unit, or are groundwater monitoring data otherwise available for this active sewage sludge unit?		
		<input type="checkbox"/> Yes	<input type="checkbox"/> No → SKIP to Item 4.26 (Part 2, Section 4) below.	
	<u>4.24</u>	Provide a copy of available groundwater monitoring data.		
		<input type="checkbox"/> Check here to indicate you have attached the monitoring data.		
	<u>4.25</u>	Describe the well locations, the approximate depth to groundwater, and the groundwater monitoring procedures used to obtain these data.		
		<input type="checkbox"/> Check here if you have attached your description to the application package.		
	<u>4.26</u>	Has a groundwater monitoring program been prepared for this active sewage sludge unit?		
	<input type="checkbox"/> Yes	<input type="checkbox"/> No → SKIP to Item 4.28 (Part 2, Section 4) below.		
<u>4.27</u>	Submit a copy of the groundwater monitoring program with this permit application.			
	<input type="checkbox"/> Check here to indicate you have attached the monitoring program.			
<u>4.28</u>	Have you obtained a certification from a qualified groundwater scientist that the aquifer below the active sewage sludge unit has not been contaminated?			
	<input type="checkbox"/> Yes	<input type="checkbox"/> No → SKIP to Item 4.30 (Part 2, Section 4) below.		
<u>4.29</u>	Submit a copy of the certification with this permit application.			
	<input type="checkbox"/> Check here to indicate you have attached the certification to the application package.			
Site-Specific Limits				
<u>4.30</u>	Are you seeking site-specific pollutant limits for the sewage sludge placed on the active sewage sludge unit?			
	<input type="checkbox"/> Yes	<input type="checkbox"/> No → SKIP to Part 2, Section 5.		
<u>4.31</u>	Submit information to support the request for site-specific pollutant limits with this application.			
	<input type="checkbox"/> Check here to indicate you have attached the requested information.			

PART 2, SECTION 5 INCINERATION (40 CFR 122.21(Q)(11))

Incinerator Information	
5.1	Do you fire sewage sludge in a sewage sludge incinerator? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to END.
5.2	Indicate the total number of incinerators used at your facility. (Complete the remainder of Section 5 for each such incinerator.) <input type="checkbox"/> Check here to indicate that you have attached information for one or more incinerators.
5.3	Incinerator name or number
	Location address (street, route number, or other specific identifier)
	County <input type="checkbox"/> Not available
	County code
	City or town
	State
	ZIP code
Latitude/Longitude of Incinerator (see instructions)	
	Latitude
	Longitude
Method of Determination	
	<input type="checkbox"/> USGS map <input type="checkbox"/> Field survey <input type="checkbox"/> Other (specify) _____
Amount Fired	
5.4	Dry metric tons per 365-day period of sewage sludge fired in the sewage sludge incinerator:
Beryllium NESHAP	
5.5	Submit information, test data, and a description of measures taken that demonstrate whether the sewage sludge incinerated is beryllium-containing waste and will continue to remain as such. <input type="checkbox"/> Check here to indicate that you have attached this material to the application package.
5.6	Is the sewage sludge fired in this incinerator "beryllium-containing waste" as defined at 40 CFR 61.31? <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 5.8 (Part 2, Section 5) below.
5.7	Submit with this application a complete report of the latest beryllium emission rate testing <i>and</i> documentation of ongoing incinerator operating parameters indicating that the NESHAP emission rate limit for beryllium has been and will continue to be met. <input type="checkbox"/> Check here to indicate that you have attached this information.
Mercury NESHAP	
5.8	Is compliance with the mercury NESHAP being demonstrated via stack testing? <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 5.11 (Part 2, Section 5) below.
5.9	Submit a complete report of stack testing and documentation of ongoing incinerator operating parameters indicating that the incinerator has met and will continue to meet the mercury NESHAP emission rate limit. <input type="checkbox"/> Check here to indicate that you have attached this information.
5.10	Provide copies of mercury emission rate tests for the two most recent years in which testing was conducted. <input type="checkbox"/> Check here to indicate that you have attached this information.
5.11	Do you demonstrate compliance with the mercury NESHAP by sewage sludge sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 5.13 (Part 2, Section 5) below.
5.12	Submit a complete report of sewage sludge sampling and documentation of ongoing incinerator operating parameters indicating that the incinerator has met and will continue to meet the mercury NESHAP emission rate limit. <input type="checkbox"/> Check here to indicate that you have attached this information.

Incineration

EPA Identification Number		NPDES Permit Number AL0076821	Facility Name American Water Enterprises, LLC	OMB No. 2040-0004 Expires 07/31/2026
Incineration Continued	Dispersion Factor			
	5.13	Dispersion factor in micrograms/cubic meter per gram/second:		
	5.14	Name and type of dispersion model:		
	5.15	Submit a copy of the modeling results and supporting documentation. <input type="checkbox"/> Check here to indicate that you have attached this information.		
	Control Efficiency			
	5.16	Provide the control efficiency, in hundredths, for each of the pollutants listed below.		
		Pollutant	Control Efficiency, in Hundredths	
		Arsenic		
		Cadmium		
		Chromium		
		Lead		
		Nickel		
	5.17	Attach a copy of the results or performance testing and supporting documentation (including testing dates). <input type="checkbox"/> Check here to indicate that you have attached this information.		
	Risk-Specific Concentration for Chromium			
	5.18	Provide the risk-specific concentration (RSC) used for chromium in micrograms per cubic meter:		
	5.19	Was the RSC determined via Table 2 in 40 CFR 503.43? <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 5.21 (Part 2, Section 5) below.		
	5.20	Identify the type of incinerator used as the basis. <input type="checkbox"/> Fluidized bed with wet scrubber <input type="checkbox"/> Other types with wet scrubber <input type="checkbox"/> Fluidized bed with wet scrubber and wet electrostatic precipitator <input type="checkbox"/> Other types with wet scrubber and wet electrostatic precipitator		
	5.21	Was the RSC determined via Table 6 in 40 CFR 503.43 (site-specific determination)? <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 5.23 (Part 2, Section 5) below.		
	5.22	Provide the decimal fraction of hexavalent chromium concentration to total chromium concentration in stack exit gas:		
	5.23	Attach the results of incinerator stack tests for hexavalent and total chromium concentrations, including the date(s) of any test(s), with this application. <input type="checkbox"/> Check here to indicate that you have attached this information. <input type="checkbox"/> Not applicable		
Incinerator Parameters				
5.24	Do you monitor total hydrocarbons (THC) in the exit gas of the sewage sludge incinerator? <input type="checkbox"/> Yes <input type="checkbox"/> No			
5.25	Do you monitor carbon monoxide (CO) in the exit gas of the sewage sludge incinerator? <input type="checkbox"/> Yes <input type="checkbox"/> No			
5.26	Indicate the type of sewage sludge incinerator.			
5.27	Incinerator stack height in meters:			
5.28	Indicate whether the value submitted in Item 5.27 is (check only one response): <input type="checkbox"/> Actual stack height <input type="checkbox"/> Creditable stack height			

EPA Identification Number		NPDES Permit Number AL0076821	Facility Name American Water Enterprises, LLC	OMB No. 2040-0004 Expires 07/31/2026
Incineration Continued	Performance Test Operating Parameters			
	5.29	Maximum performance test combustion temperature:		
	5.30	Performance test sewage sludge feed rate, in dry metric tons/day		
	5.31	Indicate whether value submitted in Item 5.30 is (check only one response):		
		<input type="checkbox"/> Average use	<input type="checkbox"/> Maximum design	
	5.32	Attach supporting documents describing how the feed rate was calculated.		
		<input type="checkbox"/> Check here to indicate that you have attached this information.		
	5.33	Submit information documenting the performance test operating parameters for the air pollution control device(s) used for this sewage sludge incinerator.		
		<input type="checkbox"/> Check here to indicate that you have attached this information.		
	Monitoring Equipment			
5.34	List the equipment in place to monitor the listed parameters.			
	Parameter	Equipment in Place for Monitoring		
	Total hydrocarbons or carbon monoxide			
	Percent oxygen			
	Percent moisture			
	Combustion temperature			
	Other (describe)			
Air Pollution Control Equipment				
5.35	List all air pollution control equipment used with this sewage sludge incinerator.			
	<input type="checkbox"/> Check here if you have attached the list to the application package for the noted incinerator.			

END of PART 2

Submit completed application package to your NPDES permitting authority.



August 01, 2024

Service Request No:R2406579

Randy McDonald
Allied Environmental, Inc
306 Church Street
Ashford, AL 36312

Laboratory Results for: American Water - Main Plant

Dear Randy,

Enclosed are the results of the sample(s) submitted to our laboratory July 18, 2024
For your reference, these analyses have been assigned our service request number **R2406579**.

All testing was performed according to our laboratory's quality assurance program and met the requirements of the TNI standards except as noted in the case narrative report. Any testing not included in the lab's accreditation is identified on a Non-Certified Analytes report. All results are intended to be considered in their entirety. ALS Environmental is not responsible for use of less than the complete report. Results apply only to the individual samples submitted to the lab for analysis, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s), and represented by Laboratory Control Sample control limits. Any events, such as QC failures or Holding Time exceedances, which may add to the uncertainty are explained in the report narrative or are flagged with qualifiers. The flags are explained in the Report Qualifiers and Definitions page of this report.

Please contact me if you have any questions. My extension is 7476. You may also contact me via email at Chris.Leavy@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Christopher Leavy
Project Manager

ADDRESS 1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
PHONE +1 585 288 5380 | FAX +1 585 288 8475
ALS Group USA, Corp.
dba ALS Environmental



Narrative Documents

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER



Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil

Service Request: R2406579
Date Received: 07/18/2024

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

One soil sample was received for analysis at ALS Environmental on 07/18/2024. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Semivolatiles by GC/MS:

No significant anomalies were noted with this analysis.

Semivolatile GC:

Method 8081B: The lower control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV) on one detector. All recoveries were acceptable on the secondary detector. Since there were no detections of the analyte(s) above the MRL in the associated field samples, the quantitation is not affected. The data quality was not significantly affected and no further corrective action was taken.

The RPD between the LCS and the LCSD was greater than the RPD limit. The percent recovery limit was met for both the LCS and the LCSD.

Metals:

When analyzed without dilution, the concentration of one or more elements in one or more samples exceeded the associated single element interference check concentration. As per section 9.9.1 of EPA 6010D, affected samples were diluted to reduce the solution concentration of the high concentration element below the interference check concentration, whether or not the high concentration element was an analyte of interest. The dilution has increased the reporting limits accordingly.

Volatiles by GC/MS:

Method 8260D, R2406579-001: Analysis was performed on a sample (TCLP extract) with headspace. Headspace-free sample was not available.

Approved by 

Date 08/01/2024



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: D. BED 1-5		Lab ID: R2406579-001				
Analyte	Results	Flag	MDL	MRL	Units	Method
Chloroform	4.4	J	3.5	50	ug/L	8260D
Endrin	0.26	J	0.020	0.50	ug/L	8081B
Heptachlor	0.61		0.020	0.50	ug/L	8081B
Mercury	0.00012	J	0.00008	0.00030	mg/L	7470A
Methoxychlor	0.40	J	0.020	0.50	ug/L	8081B
Zinc	2.69		0.15	0.30	mg/L	6010D



Sample Receipt Information

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: Allied Environmental, Inc
Project: American Water - Main Plant

Service Request:R2406579

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R2406579-001	D. BED 1-5	7/17/2024	0700



R2406579 5
 Allied Environmental, Inc
 American Water - Main Plant

Cooler Receipt and Preservation Check Form

Project/Client American Water Folder Number _____

Cooler received on 7/18/24 by: SES COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were Custody seals on outside of cooler?	Y N <u>NA</u>
2	Custody papers properly completed (ink, signed)?	Y N <u>NA</u>
3	Did all bottles arrive in good condition (unbroken)?	Y N <u>NA</u>
4	Circle: <u>Wet Ice</u> Dry Ice Gel packs present?	Y N <u>NA</u>

5a	Did VOA vials have sig* bubbles?	Y N <u>NA</u>
5b	Sig* bubbles: Alk? Y N <u>NA</u> Sulfide? Y N <u>NA</u>	
6	Where did the bottles originate?	<u>ALS/ROC</u> CLIENT
7	Soil VOA received as:	<u>Bulk</u> Encore 5035set NA

8. Temperature Readings Date: 7/18/24 Time: 1025 ID: IR#12 R#13 From: Temp Blank Sample Bottle

Temp (°C)	<u>2.3</u>						
Within 0-6°C?	<u>(Y)</u> N	Y N	Y N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed (described below) Same Day Rule
 & Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: SMD by SES on 7/18/24 at 1026
 5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 7/18/24 Time: 1445 by: SES

- 9. Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES NO
- 10. Did all bottle labels and tags agree with custody papers? YES NO
- 11. Were correct containers used for the tests indicated? YES NO
- 12. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO N/A
- 13. Were dissolved metals filtered in the field? YES NO N/A

14. Air Samples: Cassettes / Tubes Intact Y / N with MS Y / N Canisters Pressurized Tedlar® Bags Inflated N/A

pH	Lot of test paper	Reagent	Preserved?		Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
			Yes	No						
≥12		NaOH								
≤2		HNO ₃								
≤2		H ₂ SO ₄								
<4		NaHSO ₄								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add Na ₂ S ₂ O ₃ (625, 608, CN), ascorbic (phenol).					
		Na ₂ S ₂ O ₃								
		ZnAcetate	-	-						
		HCl	**	**						

**VOAs and 1664 Not to be tested before analysis. Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).

Bottle lot numbers: 11323-35G, 052724-17U
 Explain all Discrepancies/ Other Comments:

HPRD	BULK
HTR	FLDT
SUB	HGFB
ALS	LL3541

Labels secondary reviewed by: SES *significant air bubbles: VOA > 5-6 mm : WC > 1 in. diameter



Miscellaneous Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



REPORT QUALIFIERS AND DEFINITIONS

- U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
- J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Aroclors).
- B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
- E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
- E Organics- Concentration has exceeded the calibration range for that specific analysis.
- D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
- * Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
- H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.
- # Spike was diluted out.
- + Correlation coefficient for MSA is <0.995.
- N Inorganics- Matrix spike recovery was outside laboratory limits.
- N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
- S Concentration has been determined using Method of Standard Additions (MSA).
- W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
- P Concentration >40% difference between the two GC columns.
- C Confirmed by GC/MS
- Q DoD reports: indicates a pesticide/Aroclor is not confirmed ($\geq 100\%$ Difference between two GC columns).
- X See Case Narrative for discussion.
- MRL Method Reporting Limit. Also known as:
- LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
- MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
- LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.
- ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for State Accreditations¹



NELAP States
Florida ID # E87674
New Hampshire ID # 2941
New York ID # 10145
Pennsylvania ID# 68-786
Virginia #460167

Non-NELAP States
Connecticut ID #PH0556
Delaware Approved
Maine ID #NY01587
North Carolina #36701
North Carolina #676
Rhode Island LAO00333

¹ Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory. To verify NH accredited analytes, go to <https://www4.des.state.nh.us/CertifiedLabs/Certified-Method.aspx>.

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/

Service Request: R2406579

Sample Name: D. BED 1-5
Lab Code: R2406579-001
Sample Matrix: Soil

Date Collected: 07/17/24
Date Received: 07/18/24

Analysis Method	Extracted/Digested By	Analyzed By
6010D	CDISTEFANO	NMANSEN
7470A	ECASTROVINCI	ECASTROVINCI
8081B	JVANHEYNINGEN	AFELSER
8151A	JVANHEYNINGEN	AFELSER
8260D		KRUEST
8270E	EDEGRAY	EDEGRAY



PREPARATION METHODS

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

INORGANIC

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C or 6010D	3005A/3010A
6020A or 6020B	ILM05.3
9034 Sulfide Acid Soluble	9030B
SM 4500-CN-N-2016 Amenable and Residual Cyanide	SM 4500-CN-G and SM 4500-CN-B,C-2016
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C or 6010D	3050B
6020A or 6020B	3050B
6010C or 6010D TCLP (1311) extract	3005A/3010A
6010C or 6010D SPLP (1312) extract	3005A/3010A
7199	3060A
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction
For analytical methods not listed, the preparation method is the same as the analytical method reference.	

ORGANIC

Preparation Methods for Organic methods are listed in the header of the Results pages.

Regarding "Bulk/5035A":

For soil/solid samples submitted in soil jars for Volatiles analysis, the prep method is listed as "Bulk/5035A". The lab follows the closed-system EPA 5035A protocols once the sample is transferred to a sealed vial, but collection in bulk in soil jars does not follow the collection protocols listed in EPA 5035A. In accordance with the NYSDOH technical notice of October 2012, all results or reporting limits <200 ug/kg are to be considered estimated due to potential low bias.



Sample Results

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Volatile Organic Compounds by GC/MS

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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil

Sample Name: D. BED 1-5
Lab Code: R2406579-001

Service Request: R2406579
Date Collected: 07/17/24 07:00
Date Received: 07/18/24 09:55

Units: ug/L
Basis: As Received

TCLP Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Pre-Prep Method: EPA 1311
Pre-Prep Date: 7/23/24

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1-Dichloroethene (1,1-DCE)	ND U	50	2.0	10	07/26/24 07:16	
1,2-Dichloroethane	ND U	50	2.0	10	07/26/24 07:16	
2-Butanone (MEK)	ND U	100	20	10	07/26/24 07:16	
Benzene	ND U	50	2.0	10	07/26/24 07:16	
Carbon Tetrachloride	ND U	50	2.6	10	07/26/24 07:16	
Chlorobenzene	ND U	50	2.0	10	07/26/24 07:16	
Chloroform	4.4 J	50	3.5	10	07/26/24 07:16	
Tetrachloroethene (PCE)	ND U	50	2.3	10	07/26/24 07:16	
Trichloroethene (TCE)	ND U	50	2.2	10	07/26/24 07:16	
Vinyl Chloride	ND U	50	4.6	10	07/26/24 07:16	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	87	85 - 122	07/26/24 07:16	
Dibromofluoromethane	96	80 - 116	07/26/24 07:16	
Toluene-d8	99	87 - 121	07/26/24 07:16	



Semivolatile Organic Compounds by GC/MS

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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil
Sample Name: D. BED 1-5
Lab Code: R2406579-001

Service Request: R2406579
Date Collected: 07/17/24 07:00
Date Received: 07/18/24 09:55

Units: ug/L
Basis: As Received

TCLP Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Pre-Prep Method: EPA 1311
Pre-Prep Date: 7/23/24

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dichlorobenzene	ND U	100	1.2	1	07/29/24 23:47	7/26/24	
2,4,5-Trichlorophenol	ND U	100	1.1	1	07/29/24 23:47	7/26/24	
2,4,6-Trichlorophenol	ND U	100	1.4	1	07/29/24 23:47	7/26/24	
2,4-Dinitrotoluene	ND U	100	2.4	1	07/29/24 23:47	7/26/24	
2-Methylphenol	ND U	100	1.0	1	07/29/24 23:47	7/26/24	
3- and 4-Methylphenol Coelution	ND U	100	1.2	1	07/29/24 23:47	7/26/24	
Hexachlorobenzene	ND U	100	1.6	1	07/29/24 23:47	7/26/24	
Hexachlorobutadiene	ND U	100	1.0	1	07/29/24 23:47	7/26/24	
Hexachloroethane	ND U	100	1.1	1	07/29/24 23:47	7/26/24	
Nitrobenzene	ND U	100	1.5	1	07/29/24 23:47	7/26/24	
Pentachlorophenol (PCP)	ND U	500	9.7	1	07/29/24 23:47	7/26/24	
Pyridine	ND U	500	1.0	1	07/29/24 23:47	7/26/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	105	35 - 141	07/29/24 23:47	
2-Fluorobiphenyl	66	31 - 118	07/29/24 23:47	
2-Fluorophenol	47	10 - 105	07/29/24 23:47	
Nitrobenzene-d5	64	31 - 110	07/29/24 23:47	
Phenol-d6	32	10 - 107	07/29/24 23:47	
p-Terphenyl-d14	112	10 - 165	07/29/24 23:47	



Semivolatile Organic Compounds by GC

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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil

Service Request: R2406579
Date Collected: 07/17/24 07:00
Date Received: 07/18/24 09:55

Sample Name: D. BED 1-5
Lab Code: R2406579-001

Units: ug/L
Basis: As Received

TCLP Organochlorine Pesticides by Gas Chromatography

Analysis Method: 8081B
Prep Method: EPA 3510C

Pre-Prep Method: EPA 1311
Pre-Prep Date: 7/23/24

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Chlordane	ND U	2.5	0.13	1	07/29/24 19:46	7/26/24	
Endrin	0.26 J	0.50	0.020	1	07/29/24 19:46	7/26/24	
gamma-BHC (Lindane)	ND U	0.50	0.020	1	07/29/24 19:46	7/26/24	
Heptachlor	0.61	0.50	0.020	1	07/29/24 19:46	7/26/24	
Heptachlor Epoxide	ND U	0.50	0.020	1	07/29/24 19:46	7/26/24	
Methoxychlor	0.40 J	0.50	0.020	1	07/29/24 19:46	7/26/24	
Toxaphene	ND U	5.0	0.50	1	07/29/24 19:46	7/26/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	38	10 - 111	07/29/24 19:46	
Tetrachloro-m-xylene	73	10 - 101	07/29/24 19:46	

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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil
Sample Name: D. BED 1-5
Lab Code: R2406579-001

Service Request: R2406579
Date Collected: 07/17/24 07:00
Date Received: 07/18/24 09:55
Units: ug/L
Basis: As Received

TCLP Chlorinated Herbicides by GC

Analysis Method: 8151A
Prep Method: Method

Pre-Prep Method: EPA 1311
Pre-Prep Date: 7/23/24

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
2,4-D	ND U	5.0	0.35	1	07/30/24 12:31	7/26/24	
2,4,5-TP (Silvex)	ND U	5.0	0.33	1	07/30/24 12:31	7/26/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
DCAA	60	12 - 131	07/30/24 12:31	



Metals

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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil
Sample Name: D. BED 1-5
Lab Code: R2406579-001

Service Request: R2406579
Date Collected: 07/17/24 07:00
Date Received: 07/18/24 09:55

Basis: As Received

Toxicity Characteristics Leachate Procedure (TCLP)
Inorganic Parameters

Pre-Prep Method: EPA 1311

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010D	ND U	mg/L	1.5	0.06	3	07/29/24 16:51	07/24/24	
Barium	6010D	ND U	mg/L	3.0	0.2	3	07/29/24 16:51	07/24/24	
Cadmium	6010D	ND U	mg/L	0.30	0.03	3	07/29/24 16:51	07/24/24	
Chromium	6010D	ND U	mg/L	0.30	0.15	3	07/29/24 16:51	07/24/24	
Lead	6010D	ND U	mg/L	0.30	0.15	3	07/29/24 16:51	07/24/24	
Mercury	7470A	0.00012 J	mg/L	0.00030	0.00008	1	07/26/24 11:44	07/25/24	
Nickel	6010D	ND U	mg/L	0.30	0.15	3	07/29/24 16:51	07/24/24	
Selenium	6010D	ND U	mg/L	0.60	0.06	3	07/29/24 16:51	07/24/24	
Silver	6010D	ND U	mg/L	0.30	0.03	3	07/29/24 16:51	07/24/24	
Zinc	6010D	2.69	mg/L	0.30	0.15	3	07/29/24 16:51	07/24/24	



QC Summary Forms

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Volatile Organic Compounds by GC/MS

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QA/QC Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil

Service Request: R2406579

SURROGATE RECOVERY SUMMARY
TCLP Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Extraction Method: EPA 5030C

Sample Name	Lab Code	4-Bromofluorobenzene	Dibromofluoromethane	Toluene-d8
		85 - 122	80 - 116	87 - 121
D. BED 1-5	R2406579-001	87	96	99
Method Blank	RQ2408761-01	88	94	98
Lab Control Sample	RQ2408965-07	95	98	98
Method Blank	RQ2408965-08	86	93	95

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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: RQ2408761-01

Service Request: R2406579
Date Collected: NA
Date Received: NA

Units: ug/L
Basis: As Received

TCLP Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Pre-Prep Method: EPA 1311
Pre-Prep Date: 7/23/24

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1-Dichloroethene (1,1-DCE)	ND U	5.0	0.20	1	07/26/24 02:39	
1,2-Dichloroethane	ND U	5.0	0.20	1	07/26/24 02:39	
2-Butanone (MEK)	ND U	10	2.0	1	07/26/24 02:39	
Benzene	ND U	5.0	0.20	1	07/26/24 02:39	
Carbon Tetrachloride	ND U	5.0	0.26	1	07/26/24 02:39	
Chlorobenzene	ND U	5.0	0.20	1	07/26/24 02:39	
Chloroform	5.0 J	5.0	0.35	1	07/26/24 02:39	
Tetrachloroethene (PCE)	ND U	5.0	0.23	1	07/26/24 02:39	
Trichloroethene (TCE)	ND U	5.0	0.22	1	07/26/24 02:39	
Vinyl Chloride	ND U	5.0	0.46	1	07/26/24 02:39	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	88	85 - 122	07/26/24 02:39	
Dibromofluoromethane	94	80 - 116	07/26/24 02:39	
Toluene-d8	98	87 - 121	07/26/24 02:39	

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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: RQ2408965-08

Service Request: R2406579
Date Collected: NA
Date Received: NA
Units: ug/L
Basis: As Received

TCLP Volatile Organic Compounds by GC/MS

Analysis Method: 8260D

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1-Dichloroethene (1,1-DCE)	ND U	5.0	0.20	1	07/25/24 23:35	
1,2-Dichloroethane	ND U	5.0	0.20	1	07/25/24 23:35	
2-Butanone (MEK)	ND U	10	2.0	1	07/25/24 23:35	
Benzene	ND U	5.0	0.20	1	07/25/24 23:35	
Carbon Tetrachloride	ND U	5.0	0.26	1	07/25/24 23:35	
Chlorobenzene	ND U	5.0	0.20	1	07/25/24 23:35	
Chloroform	ND U	5.0	0.35	1	07/25/24 23:35	
Tetrachloroethene (PCE)	ND U	5.0	0.23	1	07/25/24 23:35	
Trichloroethene (TCE)	ND U	5.0	0.22	1	07/25/24 23:35	
Vinyl Chloride	ND U	5.0	0.46	1	07/25/24 23:35	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	86	85 - 122	07/25/24 23:35	
Dibromofluoromethane	93	80 - 116	07/25/24 23:35	
Toluene-d8	95	87 - 121	07/25/24 23:35	

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QA/QC Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil

Service Request: R2406579
Date Analyzed: 07/25/24

Lab Control Sample Summary
TCLP Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:As Received

Lab Control Sample
RQ2408965-07

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1-Dichloroethene (1,1-DCE)	8260D	21.4	20.0	107	69-142
1,2-Dichloroethane	8260D	20.2	20.0	101	71-127
2-Butanone (MEK)	8260D	19.1	20.0	96	61-137
Benzene	8260D	21.0	20.0	105	79-119
Carbon Tetrachloride	8260D	20.9	20.0	104	70-127
Chlorobenzene	8260D	20.4	20.0	102	80-121
Chloroform	8260D	20.3	20.0	102	79-120
Tetrachloroethene (PCE)	8260D	20.0	20.0	100	72-125
Trichloroethene (TCE)	8260D	20.6	20.0	103	74-122
Vinyl Chloride	8260D	17.4	20.0	87	74-159



Semivolatile Organic Compounds by GC/MS

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Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil

Service Request: R2406579

SURROGATE RECOVERY SUMMARY
TCLP Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Extraction Method: EPA 3510C

Sample Name	Lab Code	2,4,6-Tribromophenol	2-Fluorobiphenyl	2-Fluorophenol
		35 - 141	31 - 118	10 - 105
D. BED 1-5	R2406579-001	105	66	47
Method Blank	RQ2408850-01	117	77	54
Method Blank	RQ2408910-01	101	74	53
Lab Control Sample	RQ2408910-02	116	85	58
Duplicate Lab Control Sample	RQ2408910-03	108	85	56

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil

Service Request: R2406579

SURROGATE RECOVERY SUMMARY
TCLP Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Extraction Method: EPA 3510C

Sample Name	Lab Code	Nitrobenzene-d5	Phenol-d6	p-Terphenyl-d14
		31 - 110	10 - 107	10 - 165
D. BED 1-5	R2406579-001	64	32	112
Method Blank	RQ2408850-01	76	35	120
Method Blank	RQ2408910-01	76	33	114
Lab Control Sample	RQ2408910-02	84	42	119
Duplicate Lab Control Sample	RQ2408910-03	81	40	118

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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: RQ2408850-01

Service Request: R2406579
Date Collected: NA
Date Received: NA

Units: ug/L
Basis: As Received

TCLP Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Pre-Prep Method: EPA 1311
Pre-Prep Date: 7/23/24

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dichlorobenzene	ND U	100	1.2	1	07/30/24 00:36	7/26/24	
2,4,5-Trichlorophenol	ND U	100	1.1	1	07/30/24 00:36	7/26/24	
2,4,6-Trichlorophenol	ND U	100	1.4	1	07/30/24 00:36	7/26/24	
2,4-Dinitrotoluene	ND U	100	2.4	1	07/30/24 00:36	7/26/24	
2-Methylphenol	ND U	100	1.0	1	07/30/24 00:36	7/26/24	
3- and 4-Methylphenol Coelution	ND U	100	1.2	1	07/30/24 00:36	7/26/24	
Hexachlorobenzene	ND U	100	1.6	1	07/30/24 00:36	7/26/24	
Hexachlorobutadiene	ND U	100	1.0	1	07/30/24 00:36	7/26/24	
Hexachloroethane	ND U	100	1.1	1	07/30/24 00:36	7/26/24	
Nitrobenzene	ND U	100	1.5	1	07/30/24 00:36	7/26/24	
Pentachlorophenol (PCP)	ND U	500	9.7	1	07/30/24 00:36	7/26/24	
Pyridine	ND U	500	1.0	1	07/30/24 00:36	7/26/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	117	35 - 141	07/30/24 00:36	
2-Fluorobiphenyl	77	31 - 118	07/30/24 00:36	
2-Fluorophenol	54	10 - 105	07/30/24 00:36	
Nitrobenzene-d5	76	31 - 110	07/30/24 00:36	
Phenol-d6	35	10 - 107	07/30/24 00:36	
p-Terphenyl-d14	120	10 - 165	07/30/24 00:36	

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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil

Sample Name: Method Blank
Lab Code: RQ2408910-01

Service Request: R2406579
Date Collected: NA
Date Received: NA

Units: ug/L
Basis: As Received

TCLP Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dichlorobenzene	ND U	10	1.2	1	07/29/24 17:07	7/26/24	
2,4,5-Trichlorophenol	ND U	10	1.1	1	07/29/24 17:07	7/26/24	
2,4,6-Trichlorophenol	ND U	10	1.4	1	07/29/24 17:07	7/26/24	
2,4-Dinitrotoluene	ND U	10	2.4	1	07/29/24 17:07	7/26/24	
2-Methylphenol	ND U	10	1.0	1	07/29/24 17:07	7/26/24	
3- and 4-Methylphenol Coelution	ND U	10	1.2	1	07/29/24 17:07	7/26/24	
Hexachlorobenzene	ND U	10	1.6	1	07/29/24 17:07	7/26/24	
Hexachlorobutadiene	ND U	10	1.0	1	07/29/24 17:07	7/26/24	
Hexachloroethane	ND U	10	1.1	1	07/29/24 17:07	7/26/24	
Nitrobenzene	ND U	10	1.5	1	07/29/24 17:07	7/26/24	
Pentachlorophenol (PCP)	ND U	50	9.7	1	07/29/24 17:07	7/26/24	
Pyridine	ND U	50	1.0	1	07/29/24 17:07	7/26/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	101	35 - 141	07/29/24 17:07	
2-Fluorobiphenyl	74	31 - 118	07/29/24 17:07	
2-Fluorophenol	53	10 - 105	07/29/24 17:07	
Nitrobenzene-d5	76	31 - 110	07/29/24 17:07	
Phenol-d6	33	10 - 107	07/29/24 17:07	
p-Terphenyl-d14	114	10 - 165	07/29/24 17:07	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil

Service Request: R2406579
Date Analyzed: 07/29/24

Duplicate Lab Control Sample Summary
TCLP Semivolatile Organic Compounds by GC/MS

Units:ug/L
Basis:As Received

Lab Control Sample **Duplicate Lab Control Sample**
RQ2408910-02 RQ2408910-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
1,4-Dichlorobenzene	8270E	50.3	80.0	63	43.8	80.0	55	10-124	14	30
2,4,5-Trichlorophenol	8270E	72.3	80.0	90	66.6	80.0	83	48-134	8	30
2,4,6-Trichlorophenol	8270E	67.4	80.0	84	63.4	80.0	79	44-135	6	30
2,4-Dinitrotoluene	8270E	79.1	80.0	99	75.7	80.0	95	54-130	4	30
2-Methylphenol	8270E	57.5	80.0	72	52.9	80.0	66	47-100	8	30
3- and 4-Methylphenol Coelution	8270E	56.5	80.0	71	53.2	80.0	67	40-92	6	30
Hexachlorobenzene	8270E	72.2	80.0	90	67.5	80.0	84	53-123	7	30
Hexachlorobutadiene	8270E	53.0	80.0	66	44.9	80.0	56	16-95	17	30
Hexachloroethane	8270E	46.7	80.0	58	40.0	80.0	50	15-92	15	30
Nitrobenzene	8270E	62.5	80.0	78	57.6	80.0	72	46-108	8	30
Pentachlorophenol (PCP)	8270E	49.2 J	80.0	61	48.1 J	80.0	60	29-164	2	30
Pyridine	8270E	22.3 J	80.0	28	21.1 J	80.0	26	10-123	6	30



Semivolatile Organic Compounds by GC

ALS Environmental—Rochester Laboratory
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Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil

Service Request: R2406579

SURROGATE RECOVERY SUMMARY
TCLP Organochlorine Pesticides by Gas Chromatography

Analysis Method: 8081B
Extraction Method: EPA 3510C

Sample Name	Lab Code	Decachlorobiphenyl	Tetrachloro-m-xylene
		10 - 111	10 - 101
D. BED 1-5	R2406579-001	38	73
Method Blank	RQ2408850-01	74	75
Method Blank	RQ2408982-01	59	63
Lab Control Sample	RQ2408982-02	42	71
Duplicate Lab Control Sample	RQ2408982-03	45	69
D. BED 1-5 MS	RQ2408982-04	25	53
D. BED 1-5 DMS	RQ2408982-05	36	67

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil

Service Request: R2406579
Date Collected: 07/17/24
Date Received: 07/18/24
Date Analyzed: 07/29/24
Date Extracted: 07/26/24

Duplicate Matrix Spike Summary
TCLP Organochlorine Pesticides by Gas Chromatography

Sample Name: D. BED 1-5
Lab Code: R2406579-001
Analysis Method: 8081B
Prep Method: EPA 3510C

Units: ug/L
Basis: As Received

Analyte Name	Sample Result	Result	Matrix Spike RQ2408982-04		Duplicate Matrix Spike RQ2408982-05		% Rec Limits	RPD	RPD Limit	
			Spike Amount	% Rec	Result	Spike Amount				% Rec
Endrin	0.26 J	2.84	4.00	64	3.12	4.00	71	48-165	9	30
gamma-BHC (Lindane)	ND U	2.77	4.00	69	2.87	4.00	72	43-164	4	30
Heptachlor	0.61	2.14	4.00	38	2.58	4.00	49	29-168	19	30
Heptachlor Epoxide	ND U	2.71	4.00	68	3.00	4.00	75	29-180	10	30
Methoxychlor	0.40 J	2.66	4.00	57	2.69	4.00	57	38-162	<1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: RQ2408850-01

Service Request: R2406579
Date Collected: NA
Date Received: NA

Units: ug/L
Basis: As Received

TCLP Organochlorine Pesticides by Gas Chromatography

Analysis Method: 8081B
Prep Method: EPA 3510C

Pre-Prep Method: EPA 1311
Pre-Prep Date: 7/23/24

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Chlordane	ND U	2.5	0.13	1	07/29/24 20:56	7/26/24	
Endrin	ND U	0.50	0.020	1	07/29/24 20:56	7/26/24	
gamma-BHC (Lindane)	ND U	0.50	0.020	1	07/29/24 20:56	7/26/24	
Heptachlor	ND U	0.50	0.020	1	07/29/24 20:56	7/26/24	
Heptachlor Epoxide	ND U	0.50	0.020	1	07/29/24 20:56	7/26/24	
Methoxychlor	ND U	0.50	0.020	1	07/29/24 20:56	7/26/24	
Toxaphene	ND U	5.0	0.50	1	07/29/24 20:56	7/26/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	74	10 - 111	07/29/24 20:56	
Tetrachloro-m-xylene	75	10 - 101	07/29/24 20:56	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil

Sample Name: Method Blank
Lab Code: RQ2408982-01

Service Request: R2406579
Date Collected: NA
Date Received: NA

Units: ug/L
Basis: As Received

TCLP Organochlorine Pesticides by Gas Chromatography

Analysis Method: 8081B
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Chlordane	ND U	2.5	0.13	1	07/29/24 18:54	7/26/24	
Endrin	ND U	0.50	0.020	1	07/29/24 18:54	7/26/24	
gamma-BHC (Lindane)	ND U	0.50	0.020	1	07/29/24 18:54	7/26/24	
Heptachlor	ND U	0.50	0.020	1	07/29/24 18:54	7/26/24	
Heptachlor Epoxide	ND U	0.50	0.020	1	07/29/24 18:54	7/26/24	
Methoxychlor	ND U	0.50	0.020	1	07/29/24 18:54	7/26/24	
Toxaphene	ND U	5.0	0.50	1	07/29/24 18:54	7/26/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	59	10 - 111	07/29/24 18:54	
Tetrachloro-m-xylene	63	10 - 101	07/29/24 18:54	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil

Service Request: R2406579
Date Analyzed: 07/29/24

Duplicate Lab Control Sample Summary
TCLP Organochlorine Pesticides by Gas Chromatography

Units:ug/L
Basis:As Received

Lab Control Sample **Duplicate Lab Control Sample**
RQ2408982-02 RQ2408982-03

Analyte Name	Analytical		Spike		Spike		% Rec	% Rec	RPD	RPD
	Method	Result	Amount	% Rec	Amount	% Rec				
Endrin	8081B	3.44	4.00	86	3.40	4.00	85	47-116	1	30
gamma-BHC (Lindane)	8081B	2.86	4.00	72	2.81	4.00	70	41-105	2	30
Heptachlor	8081B	3.14	4.00	78	3.05	4.00	76	33-99	3	30
Heptachlor Epoxide	8081B	3.50	4.00	88	3.05	4.00	76	46-111	14	30
Methoxychlor	8081B	3.32	4.00	83	3.32	4.00	83	29-138	<1	30

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil

Service Request: R2406579

SURROGATE RECOVERY SUMMARY
TCLP Chlorinated Herbicides by GC

Analysis Method: 8151A
Extraction Method: Method

Sample Name	Lab Code	DCAA 12 - 131
D. BED 1-5	R2406579-001	60
Method Blank	RQ2408850-01	58
Method Blank	RQ2408976-01	67
Lab Control Sample	RQ2408976-02	79
Duplicate Lab Control Sample	RQ2408976-03	59
D. BED 1-5 MS	RQ2408976-04	68
D. BED 1-5 DMS	RQ2408976-05	79

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil

Service Request: R2406579
Date Collected: 07/17/24
Date Received: 07/18/24
Date Analyzed: 07/30/24
Date Extracted: 07/26/24

Duplicate Matrix Spike Summary
TCLP Chlorinated Herbicides by GC

Sample Name: D. BED 1-5
Lab Code: R2406579-001
Analysis Method: 8151A
Prep Method: Method

Units: ug/L
Basis: As Received

Analyte Name	Sample Result	Result	Matrix Spike RQ2408976-04		Duplicate Matrix Spike RQ2408976-05		% Rec Limits	RPD	RPD Limit	
			Spike Amount	% Rec	Result	Spike Amount				% Rec
2,4-D	ND U	24.7	40.0	62	28.8	40.0	72	26-154	15	30
2,4,5-TP (Silvex)	ND U	24.6	40.0	61	27.8	40.0	69	21-120	12	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCS D control limits.

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: RQ2408850-01

Service Request: R2406579
Date Collected: NA
Date Received: NA

Units: ug/L
Basis: As Received

TCLP Chlorinated Herbicides by GC

Analysis Method: 8151A
Prep Method: Method

Pre-Prep Method: EPA 1311
Pre-Prep Date: 7/23/24

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
2,4-D	ND U	5.0	0.35	1	07/30/24 14:49	7/26/24	
2,4,5-TP (Silvex)	ND U	5.0	0.33	1	07/30/24 14:49	7/26/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
DCAA	58	12 - 131	07/30/24 14:49	

ALS Group USA, Corp.
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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: RQ2408976-01

Service Request: R2406579
Date Collected: NA
Date Received: NA

Units: ug/L
Basis: As Received

TCLP Chlorinated Herbicides by GC

Analysis Method: 8151A
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
2,4-D	ND U	5.0	0.35	1	07/30/24 11:00	7/26/24	
2,4,5-TP (Silvex)	ND U	5.0	0.33	1	07/30/24 11:00	7/26/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
DCAA	67	12 - 131	07/30/24 11:00	

ALS Group USA, Corp.
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QA/QC Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil

Service Request: R2406579
Date Analyzed: 07/30/24

Duplicate Lab Control Sample Summary
TCLP Chlorinated Herbicides by GC

Units:ug/L
Basis:As Received

Lab Control Sample
RQ2408976-02

Duplicate Lab Control Sample
RQ2408976-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
2,4-D	8151A	25.8	40.0	65	21.3	40.0	53	10-103	19	30
2,4,5-TP (Silvex)	8151A	27.2	40.0	68	22.3	40.0	56	13-124	20	30



Metals

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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: R2406579-MB1

Service Request: R2406579
Date Collected: NA
Date Received: NA

Basis: As Received

**Toxicity Characteristics Leachate Procedure (TCLP)
Inorganic Parameters**

Pre-Prep Method: EPA 1311

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010D	ND U	mg/L	1.5	0.06	3	07/29/24 15:43	07/24/24	
Barium	6010D	ND U	mg/L	3.0	0.2	3	07/29/24 15:43	07/24/24	
Cadmium	6010D	ND U	mg/L	0.30	0.03	3	07/29/24 15:43	07/24/24	
Chromium	6010D	ND U	mg/L	0.30	0.15	3	07/29/24 15:43	07/24/24	
Lead	6010D	ND U	mg/L	0.30	0.15	3	07/29/24 15:43	07/24/24	
Mercury	7470A	ND U	mg/L	0.00030	0.00008	1	07/26/24 11:04	07/25/24	
Nickel	6010D	ND U	mg/L	0.30	0.15	3	07/29/24 15:43	07/24/24	
Selenium	6010D	ND U	mg/L	0.60	0.06	3	07/29/24 15:43	07/24/24	
Silver	6010D	ND U	mg/L	0.30	0.03	3	07/29/24 15:43	07/24/24	
Zinc	6010D	ND U	mg/L	0.30	0.15	3	07/29/24 15:43	07/24/24	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: R2406579-MB2

Service Request: R2406579
Date Collected: NA
Date Received: NA

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010D	ND U	mg/L	0.50	0.02	1	07/29/24 15:37	07/24/24	
Barium	6010D	ND U	mg/L	1.0	0.04	1	07/29/24 15:37	07/24/24	
Cadmium	6010D	ND U	mg/L	0.10	0.01	1	07/29/24 15:37	07/24/24	
Chromium	6010D	ND U	mg/L	0.10	0.05	1	07/29/24 15:37	07/24/24	
Lead	6010D	ND U	mg/L	0.10	0.05	1	07/29/24 15:37	07/24/24	
Mercury	7470A	ND U	mg/L	0.00030	0.00008	1	07/26/24 10:59	07/25/24	
Nickel	6010D	ND U	mg/L	0.10	0.05	1	07/29/24 15:37	07/24/24	
Selenium	6010D	ND U	mg/L	0.20	0.02	1	07/29/24 15:37	07/24/24	
Silver	6010D	ND U	mg/L	0.10	0.01	1	07/29/24 15:37	07/24/24	
Zinc	6010D	ND U	mg/L	0.10	0.05	1	07/29/24 15:37	07/24/24	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil

Service Request: R2406579
Date Analyzed: 07/26/24 - 07/29/24

Lab Control Sample Summary
Inorganic Parameters

Units:mg/L
Basis:As Received

Lab Control Sample
R2406579-LCS

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	6010D	0.972	1.00	97	80-120
Barium	6010D	2.02	2.0	101	80-120
Cadmium	6010D	0.502	0.50	100	80-120
Chromium	6010D	0.518	0.50	104	80-120
Lead	6010D	0.529	0.50	106	80-120
Mercury	7470A	0.00106	0.00100	106	80-120
Nickel	6010D	1.02	1.00	102	80-120
Selenium	6010D	0.940	1.00	94	80-120
Silver	6010D	0.261	0.25	104	80-120
Zinc	6010D	0.953	1.00	95	80-120



July 31, 2024

Service Request No:R2406580

Randy McDonald
Allied Environmental, Inc
306 Church Street
Ashford, AL 36312

Laboratory Results for: American Water - Main Plant

Dear Randy,

Enclosed are the results of the sample(s) submitted to our laboratory July 18, 2024
For your reference, these analyses have been assigned our service request number **R2406580**.

All testing was performed according to our laboratory's quality assurance program and met the requirements of the TNI standards except as noted in the case narrative report. Any testing not included in the lab's accreditation is identified on a Non-Certified Analytes report. All results are intended to be considered in their entirety. ALS Environmental is not responsible for use of less than the complete report. Results apply only to the individual samples submitted to the lab for analysis, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s), and represented by Laboratory Control Sample control limits. Any events, such as QC failures or Holding Time exceedances, which may add to the uncertainty are explained in the report narrative or are flagged with qualifiers. The flags are explained in the Report Qualifiers and Definitions page of this report.

Please contact me if you have any questions. My extension is 7476. You may also contact me via email at Chris.Leavy@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Christopher Leavy
Project Manager

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ALS Group USA, Corp.
dba ALS Environmental



Narrative Documents

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Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil

Service Request: R2406580
Date Received: 07/18/2024

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

One soil sample was received for analysis at ALS Environmental on 07/18/2024. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Semivolatile GC:

No significant anomalies were noted with this analysis.

General Chemistry:

No significant anomalies were noted with this analysis.

Subcontracted Analytical Parameters:

No significant anomalies were noted with this analysis.

Approved by 

Date 07/30/2024



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: D. BED 1-5		Lab ID: R2406580-001				
Analyte	Results	Flag	MDL	MRL	Units	Method
Aroclor 1248	12000			1200	ug/Kg	8082A
Cyanide, Total	1.34		0.49	0.86	mg/Kg	9012B
Ignitability	Not Ignitable				NONE	1030
pH	5.52				pH Units	9045D
Sulfate	4930		100	230	mg/Kg	9056A
Total Solids	26.6				Percent	ALS SOP



Sample Receipt Information

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www.alsglobal.com

Client: Allied Environmental, Inc
Project: American Water - Main Plant

Service Request:R2406580

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R2406580-001	D. BED 1-5	7/17/2024	0700



R2406580 **5**
 Allied Environmental, Inc
 American Water - Main Plant

Cooler Receipt and Preservation Check Form

Project/Client American Water Folder Number _____

Cooler received on 7/18/24 by: SES COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were Custody seals on outside of cooler?	<u>Y</u>	<u>N</u>	5a	Did VOA vials have sig* bubbles?	<u>Y</u>	<u>N</u>	<u>NA</u>
2	Custody papers properly completed (ink, signed)?	<u>Y</u>	<u>N</u>	5b	Sig* bubbles: Alk?	<u>Y</u>	<u>N</u>	<u>NA</u>
3	Did all bottles arrive in good condition (unbroken)?	<u>Y</u>	<u>N</u>		Sulfide?	<u>Y</u>	<u>N</u>	<u>NA</u>
4	Circle: <u>Wet Ice</u> Dry Ice Gel packs present?	<u>Y</u>	<u>N</u>	6	Where did the bottles originate?	<u>ALS/ROC CLIENT</u>		
				7	Soil VOA received as:	<u>Bulk</u>	<u>Encore</u>	<u>5035set</u> <u>NA</u>

8. Temperature Readings Date: 7/18/24 Time: 1025 ID: IR#12 IR#13 From: Temp Blank Sample Bottle

Temp (°C)	<u>2.3</u>						
Within 0-6°C?	<u>Y</u>	<u>N</u>	<u>Y</u>	<u>N</u>	<u>Y</u>	<u>N</u>	<u>Y</u>
If <0°C, were samples frozen?	<u>Y</u>	<u>N</u>	<u>Y</u>	<u>N</u>	<u>Y</u>	<u>N</u>	<u>Y</u>

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed (described below) Same Day Rule
 & Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: SMD by SES on 7/18/24 at 1026
 5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 7/18/24 Time: 1440 by: SES

- 9. Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES NO
- 10. Did all bottle labels and tags agree with custody papers? YES NO
- 11. Were correct containers used for the tests indicated? YES NO
- 12. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO N/A
- 13. Were dissolved metals filtered in the field? YES NO N/A
- 14. Air Samples: Cassettes / Tubes Intact Y / N with MS Y / N Canisters Pressurized _____ Feular® Bags Inflated N/A

pH	Lot of test paper	Reagent	Preserved?		Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
			Yes	No						
≥12		NaOH								
≤2		HNO ₃								
≤2		H ₂ SO ₄								
<4		NaHSO ₄								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add Na ₂ S ₂ O ₃ (625, 608, CN), ascorbic (phenol).					
		Na ₂ S ₂ O ₃								
		ZnAcetate	-	-						
		HCl	**	**						

**VOAs and 1664 Not to be tested before analysis. Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).

Bottle lot numbers: 11323-359, 052724-1TW
 Explain all Discrepancies/ Other Comments:

HPROD	BULK
HTR	FLDT
<u>SUB</u>	HGFB
ALS	LL3541

Labels secondary reviewed by: SES *significant air bubbles: VOA > 5-6 mm : WC > 1 in. diameter



Miscellaneous Forms

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REPORT QUALIFIERS AND DEFINITIONS

- U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
- J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Aroclors).
- B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
- E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
- E Organics- Concentration has exceeded the calibration range for that specific analysis.
- D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
- * Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
- H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.
- # Spike was diluted out.
- + Correlation coefficient for MSA is <0.995.
- N Inorganics- Matrix spike recovery was outside laboratory limits.
- N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
- S Concentration has been determined using Method of Standard Additions (MSA).
- W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
- P Concentration >40% difference between the two GC columns.
- C Confirmed by GC/MS
- Q DoD reports: indicates a pesticide/Aroclor is not confirmed ($\geq 100\%$ Difference between two GC columns).
- X See Case Narrative for discussion.
- MRL Method Reporting Limit. Also known as:
LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
- MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
- LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.
- ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for State Accreditations¹



NELAP States
Florida ID # E87674
New Hampshire ID # 2941
New York ID # 10145
Pennsylvania ID# 68-786
Virginia #460167

Non-NELAP States
Connecticut ID #PH0556
Delaware Approved
Maine ID #NY01587
North Carolina #36701
North Carolina #676
Rhode Island LAO00333

¹ Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory. To verify NH accredited analytes, go to <https://www4.des.state.nh.us/CertifiedLabs/Certified-Method.aspx>.

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: Allied Environmental, Inc
Project: American Water - Main Plant

Service Request: R2406580

Non-Certified Analytes

Certifying Agency: New York Department of Health

Method	Matrix	Analyte
ALS SOP	Soil	Total Solids

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/

Service Request: R2406580

Sample Name: D. BED 1-5
Lab Code: R2406580-001
Sample Matrix: Soil

Date Collected: 07/17/24
Date Received: 07/18/24

Analysis Method	Extracted/Digested By	Analyzed By
1030		CWOODS
8082A	JVANHEYNINGEN	AFELSER
9012B	GNITAJOUPPI	MROGERSON
9034	CCAMPBELL	CCAMPBELL
9045D		SBIRNBERG
9056A	KAWONG	KAWONG
9095B		SBIRNBERG
ALS SOP		HCASTROVINCI
ASTM D3173-03		KSATTERLEE
ASTM D4239-11		AALAZHARI



PREPARATION METHODS

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

INORGANIC

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C or 6010D	3005A/3010A
6020A or 6020B	ILM05.3
9034 Sulfide Acid Soluble	9030B
SM 4500-CN-N-2016 Amenable and Residual Cyanide	SM 4500-CN-G and SM 4500-CN-B,C-2016
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C or 6010D	3050B
6020A or 6020B	3050B
6010C or 6010D TCLP (1311) extract	3005A/3010A
6010C or 6010D SPLP (1312) extract	3005A/3010A
7199	3060A
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction
For analytical methods not listed, the preparation method is the same as the analytical method reference.	

ORGANIC

Preparation Methods for Organic methods are listed in the header of the Results pages.

Regarding "Bulk/5035A":

For soil/solid samples submitted in soil jars for Volatiles analysis, the prep method is listed as "Bulk/5035A". The lab follows the closed-system EPA 5035A protocols once the sample is transferred to a sealed vial, but collection in bulk in soil jars does not follow the collection protocols listed in EPA 5035A. In accordance with the NYSDOH technical notice of October 2012, all results or reporting limits <200 ug/kg are to be considered estimated due to potential low bias.



Sample Results

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Semivolatile Organic Compounds by GC

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil

Service Request: R2406580
Date Collected: 07/17/24 07:00
Date Received: 07/18/24 09:55

Sample Name: D. BED 1-5
Lab Code: R2406580-001

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC using Microwave Extraction

Analysis Method: 8082A
Prep Method: EPA 3546

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	ND U	1200	10	07/25/24 21:32	7/22/24	
Aroclor 1221	ND U	2500	10	07/25/24 21:32	7/22/24	
Aroclor 1232	ND U	1200	10	07/25/24 21:32	7/22/24	
Aroclor 1242	ND U	1200	10	07/25/24 21:32	7/22/24	
Aroclor 1248	12000	1200	10	07/25/24 21:32	7/22/24	
Aroclor 1254	ND U	1200	10	07/25/24 21:32	7/22/24	
Aroclor 1260	ND U	1200	10	07/25/24 21:32	7/22/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	49	10 - 138	07/25/24 21:32	
Tetrachloro-m-xylene	61	11 - 122	07/25/24 21:32	



General Chemistry

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ALS Group USA, Corp.
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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil
Sample Name: D. BED 1-5
Lab Code: R2406580-001

Service Request: R2406580
Date Collected: 07/17/24 07:00
Date Received: 07/18/24 09:55

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cyanide, Total	9012B	1.34	mg/Kg	0.86	0.49	1	07/25/24 20:22	07/25/24	
Sulfate	9056A	4930	mg/Kg	230	100	2	07/30/24 06:09	07/30/24	
Sulfide, Acid-Soluble	9034	ND U	mg/Kg	75	53	1	07/22/24 15:40	07/22/24	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil
Sample Name: D. BED 1-5
Lab Code: R2406580-001

Service Request: R2406580
Date Collected: 07/17/24 07:00
Date Received: 07/18/24 09:55
Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Free Liquid	9095B	Absent Not	NONE	-	-	1	07/23/24 13:37	NA	
Ignitability	1030	Ignitable	NONE	-	-	1	07/18/24 14:45	NA	
pH	9045D	5.52	pH Units	-	-	1	07/26/24 16:37	NA	H
Total Solids	ALS SOP	26.6	Percent	-	-	1	07/23/24 11:54	NA	



QC Summary Forms

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ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil

Service Request: R2406580

SURROGATE RECOVERY SUMMARY
Polychlorinated Biphenyls (PCBs) by GC using Microwave Extraction

Analysis Method: 8082A
Extraction Method: EPA 3546

Sample Name	Lab Code	Decachlorobiphenyl	Tetrachloro-m-xylene
		10 - 138	11 - 122
D. BED 1-5	R2406580-001	49	61
Method Blank	RQ2408681-01	36	60
Lab Control Sample	RQ2408681-04	58	60
Duplicate Lab Control Sample	RQ2408681-05	57	59

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: RQ2408681-01

Service Request: R2406580
Date Collected: NA
Date Received: NA

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC using Microwave Extraction

Analysis Method: 8082A
Prep Method: EPA 3546

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	ND U	32	1	07/24/24 11:21	7/22/24	
Aroclor 1221	ND U	66	1	07/24/24 11:21	7/22/24	
Aroclor 1232	ND U	32	1	07/24/24 11:21	7/22/24	
Aroclor 1242	ND U	32	1	07/24/24 11:21	7/22/24	
Aroclor 1248	ND U	32	1	07/24/24 11:21	7/22/24	
Aroclor 1254	ND U	32	1	07/24/24 11:21	7/22/24	
Aroclor 1260	ND U	32	1	07/24/24 11:21	7/22/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	36	10 - 138	07/24/24 11:21	
Tetrachloro-m-xylene	60	11 - 122	07/24/24 11:21	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil

Service Request: R2406580
Date Analyzed: 07/24/24

Duplicate Lab Control Sample Summary
Polychlorinated Biphenyls (PCBs) by GC using Microwave Extraction

Units:ug/Kg
Basis:Dry

Lab Control Sample
RQ2408681-04

Duplicate Lab Control Sample
RQ2408681-05

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Aroclor 1016	8082A	131	163	80	135	165	82	34-141	3	30
Aroclor 1260	8082A	134	163	82	139	165	85	30-158	4	30



General Chemistry

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: R2406580-MB

Service Request: R2406580
Date Collected: NA
Date Received: NA
Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cyanide, Total	9012B	ND U	mg/Kg	0.30	0.17	1	07/25/24 20:02	07/25/24	
Sulfate	9056A	ND U	mg/Kg	30	13	1	07/30/24 04:35	07/30/24	
Sulfide, Acid-Soluble	9034	ND U	mg/Kg	20	14	1	07/22/24 15:40	07/22/24	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: R2406580-MB

Service Request: R2406580
Date Collected: NA
Date Received: NA

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Free Liquid	9095B	Absent	NONE	-	-	1	07/23/24 13:37	NA	

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil

Service Request: R2406580
Date Collected: 07/17/24
Date Received: 07/18/24
Date Analyzed: 07/23/24

Replicate Sample Summary
General Chemistry Parameters

Sample Name: D. BED 1-5
Lab Code: R2406580-001

Units: NONE
Basis: As Received

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>MRL</u>	<u>MDL</u>	<u>Sample Result</u>	<u>Duplicate Sample R2406580-001DUP Result</u>	<u>Average</u>	<u>RPD</u>	<u>RPD Limit</u>
Free Liquid	9095B	-		Absent	Absent	NC	NC	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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dba ALS Environmental

QA/QC Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil

Service Request: R2406580
Date Collected: 07/17/24
Date Received: 07/18/24
Date Analyzed: 07/26/24

Replicate Sample Summary
General Chemistry Parameters

Sample Name: D. BED 1-5
Lab Code: R2406580-001

Units: pH Units
Basis: As Received

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample R2406580-001DUP Result	Average	RPD	RPD Limit
pH	9045D	-	-	5.52	5.52	5.52	<1	0.10

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil

Service Request: R2406580
Date Analyzed: 07/22/24 - 07/30/24

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/Kg
Basis:Dry

Lab Control Sample
R2406580-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Cyanide, Total	9012B	3.00	3.00	100	85-115
Sulfate	9056A	192	200	96	80-120
Sulfide, Acid-Soluble	9034	142	145	98	10-135

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil

Service Request: R2406580
Date Analyzed: 07/25/24

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/Kg
Basis:Dry

Lab Control Sample
R2406580-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Cyanide, Total	9012B	17.9	18.0	100	85-115



Subcontracted Analytical Parameters

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July 25, 2024

Client: Allied Environmental, Inc
306 Church Street
Ashford, AL 36312

Attn: Randy McDonald

Project: American Water - Main Plant

Date Received: July 18, 2024

Certificate of Analysis

Sample ID	Sample Date and Time	Lab #	Moisture D3173 wt%	Sulfur, Total D4239 Moist. Free wt%
D. BED 1-5	7/17/24 0700	R2406580-001	69.39	0.88

Dawn Brown, Project Manager



Client: Allied Environmental, Inc
 306 Church Street
 Ashford, AL 36312
Attn: Randy McDonald

Project: American Water - Main Plant

Date Received: July 18, 2024

Quality Control

	Moisture		Sulfur, Total
	D3173		D4239
	wt%		Moist. Free wt%

Analysis Date	7/25/24	7/25/24
Prep Blank	n/a	0.01
LCS	NANO Pure	AEB2049
CN	Water	(7344)
Observed Value	100.00	7.49 7
True Value	100.00	7.42
%R	100.0	100.9
Duplicate	T2401239-001	R2406427-002
Observed Value	0.87	0.03
Duplicate Value	0.91	0.02
%RPD	4.5	40.0
		<10xRL



October 29, 2024

Service Request No:R2409490

Randy McDonald
Allied Environmental, Inc
306 Church Street
Ashford, AL 36312

Laboratory Results for: American Water - Main Plant

Dear Randy,

Enclosed are the results of the sample(s) submitted to our laboratory September 26, 2024
For your reference, these analyses have been assigned our service request number **R2409490**.

All testing was performed according to our laboratory's quality assurance program and met the requirements of the TNI standards except as noted in the case narrative report. Any testing not included in the lab's accreditation is identified on a Non-Certified Analytes report. All results are intended to be considered in their entirety. ALS Environmental is not responsible for use of less than the complete report. Results apply only to the individual samples submitted to the lab for analysis, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s), and represented by Laboratory Control Sample control limits. Any events, such as QC failures or Holding Time exceedances, which may add to the uncertainty are explained in the report narrative or are flagged with qualifiers. The flags are explained in the Report Qualifiers and Definitions page of this report.

Please contact me if you have any questions. My extension is 7476. You may also contact me via email at Chris.Leavy@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Christopher Leavy
Project Manager

ADDRESS 1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
PHONE +1 585 288 5380 | FAX +1 585 288 8475
ALS Group USA, Corp.
dba ALS Environmental



Narrative Documents

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Client: Allied Environmental, Inc
Project: American Water - Main Plant
Sample Matrix: Soil

Service Request: R2409490
Date Received: 09/26/2024

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

One soil sample was received for analysis at ALS Environmental on 09/26/2024. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Semivolatiles by GC/MS:

Method 8270E, 10/04/2024: The upper control criterion was exceeded for one or more analytes in the Laboratory Control Sample (LCS) and Duplicate Laboratory Control Sample (DLCS). There were no detections of the analyte(s) above the MRL in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.

Semivolatile GC:

Method 8082A: The lower control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV) on one detector. All recoveries were acceptable on the secondary detector. Since there were no detections of the analyte(s) above the MRL in the associated field samples, the quantitation is not affected. The data quality was not significantly affected and no further corrective action was taken.

Metals:

When analyzed without dilution, the concentration of one or more elements in one or more samples exceeded the associated single element interference check concentration. As per section 9.9.1 of EPA 6010D, affected samples were diluted to reduce the solution concentration of the high concentration element below the interference check concentration, whether or not the high concentration element was an analyte of interest. The dilution has increased the reporting limits accordingly.

General Chemistry:

No significant anomalies were noted with this analysis.

Subcontracted Analytical Parameters:

No significant anomalies were noted with this analysis.

Volatiles by GC/MS:

No significant anomalies were noted with this analysis.

Approved by _____

A handwritten signature in black ink, appearing to be "CWS" followed by a stylized flourish.

Date 10/29/2024



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: Drying Bed		Lab ID: R2409490-001				
Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	0.02	J	0.02	0.50	mg/L	6010D
Barium	0.2	J	0.04	1.0	mg/L	6010D
Cadmium	0.06	J	0.01	0.10	mg/L	6010D
Chloroform	6.5	J	3.5	50	ug/L	8260D
Cyanide, Total	3.0		0.7	1.2	mg/Kg	9012B
Lead	0.27		0.05	0.10	mg/L	6010D
Nickel	0.08	J	0.05	0.10	mg/L	6010D
pH	6.04				pH Units	9045D
Sulfate	1580		70	140	mg/Kg	9056A
Total Solids	21.2				Percent	ALS SOP
Zinc	16.1		0.5	1.0	mg/L	6010D



Sample Receipt Information

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Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds

Service Request:R2409490

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R2409490-001	Drying Bed	9/24/2024	1520



R2409490

5

Allied Environmental, Inc
American Water - Main Plant



Cooler Receipt and Preservation Check Form

Project/Client Allied Folder Number _____

Cooler received on 9/26/24 by: SES COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were Custody seals on outside of cooler?	<u>(Y)</u>	N
2	Custody papers properly completed (ink, signed)?	<u>(Y)</u>	N
3	Did all bottles arrive in good condition (unbroken)?	<u>(Y)</u>	N
4	Circle: <u>Wet Ice</u> Dry Ice Gel packs present?	<u>(Y)</u>	N

5a	Did VOA vials have sig* bubbles?	Y	N	<u>(NA)</u>
5b	Sig* bubbles: Alk?	Y	N	<u>(NA)</u>
	Sulfide?	Y	N	<u>(NA)</u>
6	Where did the bottles originate?	<u>ALS/ROC</u>	CLIENT	
7	Soil VOA received as:	<u>Bulk</u>	Encore	5035sct NA

8. Temperature Readings Date: 9/26/24 Time: 9:29 ID: IR#12 (IR#1) From: Temp Blank Sample Bottle

Temp (°C)	<u>2.5</u>							
Within 0-6°C?	<u>(Y)</u>	N	Y	N	Y	N	Y	N
If <0°C, were samples frozen?	Y	N	Y	N	Y	N	Y	N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed (described below) Same Day Rule
& Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: SMO by SES on 9/26/24 at 9:30
5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 9/26/24 Time: 1:00 by: SES

- 9. Were all bottle labels complete (i.e. analysis, preservation, etc.)? (YES) NO
- 10. Did all bottle labels and tags agree with custody papers? (YES) NO
- 11. Were correct containers used for the tests indicated? (YES) NO
- 12. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO (N/A)
- 13. Were dissolved metals filtered in the field? YES NO (N/A)
- 14. Air Samples: Cassettes / Tubes Intact Y / N with MS Y / N Canisters Pressurized Tedlar® Bags Inflated (N/A)

pH	Lot of test paper	Reagent	Preserved?		Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
			Yes	No						
≥12		NaOH								
≤2		HNO ₃								
≤2		H ₂ SO ₄								
<4		NaHSO ₄								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add Na ₂ S ₂ O ₃ (625, 608, CN), ascorbic (phenol).					
		Na ₂ S ₂ O ₃								
		ZnAcctate	-	-						
		HCl	**	**						

**VOAs and 1664 Not to be tested before analysis. Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).

Bottle lot numbers: 111323-356, 052724-1TW
Explain all Discrepancies/ Other Comments:

HPROD	BULK
HTR	FLDT
<u>(SUB)</u>	HGFB
ALS	LL3541

Labels secondary reviewed by: SES *significant air bubbles: VOA > 5-6 mm : WC > 1 in. diameter



Miscellaneous Forms

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REPORT QUALIFIERS AND DEFINITIONS

- U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
- J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Aroclors).
- B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
- E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
- E Organics- Concentration has exceeded the calibration range for that specific analysis.
- D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
- * Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
- H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.
- # Spike was diluted out.
- + Correlation coefficient for MSA is <0.995.
- N Inorganics- Matrix spike recovery was outside laboratory limits.
- N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
- S Concentration has been determined using Method of Standard Additions (MSA).
- W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
- P Concentration >40% difference between the two GC columns.
- C Confirmed by GC/MS
- Q DoD reports: indicates a pesticide/Aroclor is not confirmed ($\geq 100\%$ Difference between two GC columns).
- X See Case Narrative for discussion.
- MRL Method Reporting Limit. Also known as:
- LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
- MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
- LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.
- ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for State Accreditations¹



NELAP States
Florida ID # E87674
New Hampshire ID # 2941
New York ID # 10145
Pennsylvania ID# 68-786
Texas ID#T104704581
Virginia #460167

Non-NELAP States
Connecticut ID #PH0556
Delaware Approved
Maine ID #NY01587
North Carolina #36701
North Carolina #676
Rhode Island LAO00333

¹ Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory. To verify NH accredited analytes, go to <https://www4.des.state.nh.us/CertifiedLabs/Certified-Method.aspx>.

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds

Service Request: R2409490

Non-Certified Analytes

Certifying Agency: New York Department of Health

Method	Matrix	Analyte
ALS SOP	Soil	Total Solids

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds

Service Request: R2409490

Sample Name: Drying Bed
Lab Code: R2409490-001
Sample Matrix: Soil

Date Collected: 09/24/24
Date Received: 09/26/24

Analysis Method	Extracted/Digested By	Analyzed By
6010D	CDISTEFANO	ECASTROVINCI
6010D	CDISTEFANO	NMANSEN
7470A	ECASTROVINCI	ECASTROVINCI
8081B	JVANHEYNINGEN	AFELSER
8082A	JVANHEYNINGEN	AFELSER
8151A	JVANHEYNINGEN	AFELSER
8260D		KRUEST
8270E	JVANHEYNINGEN	EDEGRAY
9012B	GNITAJOUPPI	MROGERSON
9034	AFELSER	AFELSER
9045D		KAWONG
9056A	KWONG	KAWONG
9095B		KAWONG
ALS SOP		HCASTROVINCI
ASTM D3173-03		KSATTERLEE
ASTM D4239-11		BCABRERA



PREPARATION METHODS

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

INORGANIC

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C or 6010D	3005A/3010A
6020A or 6020B	ILM05.3
9034 Sulfide Acid Soluble	9030B
SM 4500-CN-N-2016 Amenable and Residual Cyanide	SM 4500-CN-G and SM 4500-CN-B,C-2016
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C or 6010D	3050B
6020A or 6020B	3050B
6010C or 6010D TCLP (1311) extract	3005A/3010A
6010C or 6010D SPLP (1312) extract	3005A/3010A
7199	3060A
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction
For analytical methods not listed, the preparation method is the same as the analytical method reference.	

ORGANIC

Preparation Methods for Organic methods are listed in the header of the Results pages.

Regarding "Bulk/5035A":

For soil/solid samples submitted in soil jars for Volatiles analysis, the prep method is listed as "Bulk/5035A". The lab follows the closed-system EPA 5035A protocols once the sample is transferred to a sealed vial, but collection in bulk in soil jars does not follow the collection protocols listed in EPA 5035A. In accordance with the NYSDOH technical notice of October 2012, all results or reporting limits <200 ug/kg are to be considered estimated due to potential low bias.



Sample Results

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Volatile Organic Compounds by GC/MS

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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil
Sample Name: Drying Bed
Lab Code: R2409490-001

Service Request: R2409490
Date Collected: 09/24/24 15:20
Date Received: 09/26/24 09:25

Units: ug/L
Basis: As Received

TCLP Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Pre-Prep Method: EPA 1311
Pre-Prep Date: 10/8/24

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1-Dichloroethene (1,1-DCE)	ND U	50	2.0	10	10/14/24 13:41	
1,2-Dichloroethane	ND U	50	2.0	10	10/14/24 13:41	
2-Butanone (MEK)	ND U	100	20	10	10/14/24 13:41	
Benzene	ND U	50	2.0	10	10/14/24 13:41	
Carbon Tetrachloride	ND U	50	2.6	10	10/14/24 13:41	
Chlorobenzene	ND U	50	2.0	10	10/14/24 13:41	
Chloroform	6.5 J	50	3.5	10	10/14/24 13:41	
Tetrachloroethene (PCE)	ND U	50	2.3	10	10/14/24 13:41	
Trichloroethene (TCE)	ND U	50	2.2	10	10/14/24 13:41	
Vinyl Chloride	ND U	50	4.6	10	10/14/24 13:41	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	10/14/24 13:41	
Dibromofluoromethane	99	80 - 116	10/14/24 13:41	
Toluene-d8	100	87 - 121	10/14/24 13:41	



Semivolatile Organic Compounds by GC/MS

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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil
Sample Name: Drying Bed
Lab Code: R2409490-001

Service Request: R2409490
Date Collected: 09/24/24 15:20
Date Received: 09/26/24 09:25

Units: ug/L
Basis: As Received

TCLP Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Pre-Prep Method: EPA 1311
Pre-Prep Date: 10/1/24

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dichlorobenzene	ND U	100	1.2	1	10/04/24 15:21	10/2/24	
2,4,5-Trichlorophenol	ND U	100	1.1	1	10/04/24 15:21	10/2/24	
2,4,6-Trichlorophenol	ND U	100	1.4	1	10/04/24 15:21	10/2/24	
2,4-Dinitrotoluene	ND U	100	2.4	1	10/04/24 15:21	10/2/24	
2-Methylphenol	ND U	100	1.0	1	10/04/24 15:21	10/2/24	
3- and 4-Methylphenol Coelution	ND U	100	1.2	1	10/04/24 15:21	10/2/24	
Hexachlorobenzene	ND U	100	1.6	1	10/04/24 15:21	10/2/24	
Hexachlorobutadiene	ND U	100	1.0	1	10/04/24 15:21	10/2/24	
Hexachloroethane	ND U	100	1.1	1	10/04/24 15:21	10/2/24	
Nitrobenzene	ND U	100	1.5	1	10/04/24 15:21	10/2/24	
Pentachlorophenol (PCP)	ND U	500	9.7	1	10/04/24 15:21	10/2/24	
Pyridine	ND U	500	1.0	1	10/04/24 15:21	10/2/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	82	35 - 141	10/04/24 15:21	
2-Fluorobiphenyl	68	31 - 118	10/04/24 15:21	
2-Fluorophenol	52	10 - 105	10/04/24 15:21	
Nitrobenzene-d5	72	31 - 110	10/04/24 15:21	
Phenol-d6	38	10 - 107	10/04/24 15:21	
p-Terphenyl-d14	86	10 - 165	10/04/24 15:21	



Semivolatile Organic Compounds by GC

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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil
Sample Name: Drying Bed
Lab Code: R2409490-001

Service Request: R2409490
Date Collected: 09/24/24 15:20
Date Received: 09/26/24 09:25

Units: ug/L
Basis: As Received

TCLP Organochlorine Pesticides by Gas Chromatography

Analysis Method: 8081B
Prep Method: EPA 3510C

Pre-Prep Method: EPA 1311
Pre-Prep Date: 10/1/24

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Chlordane	ND U	2.5	0.13	1	10/07/24 18:39	10/1/24	
Endrin	ND U	0.50	0.020	1	10/07/24 18:39	10/1/24	
gamma-BHC (Lindane)	ND U	0.50	0.020	1	10/07/24 18:39	10/1/24	
Heptachlor	ND U	0.50	0.020	1	10/07/24 18:39	10/1/24	
Heptachlor Epoxide	ND U	0.50	0.020	1	10/07/24 18:39	10/1/24	
Methoxychlor	ND U	0.50	0.020	1	10/07/24 18:39	10/1/24	
Toxaphene	ND U	5.0	0.50	1	10/07/24 18:39	10/1/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	74	10 - 111	10/07/24 18:39	
Tetrachloro-m-xylene	57	10 - 101	10/07/24 18:39	

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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil
Sample Name: Drying Bed
Lab Code: R2409490-001

Service Request: R2409490
Date Collected: 09/24/24 15:20
Date Received: 09/26/24 09:25

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	ND U	150	80	1	10/08/24 21:48	10/8/24	
Aroclor 1221	ND U	310	130	1	10/08/24 21:48	10/8/24	
Aroclor 1232	ND U	150	90	1	10/08/24 21:48	10/8/24	
Aroclor 1242	ND U	150	80	1	10/08/24 21:48	10/8/24	
Aroclor 1248	ND U	150	85	1	10/08/24 21:48	10/8/24	
Aroclor 1254	ND U	150	80	1	10/08/24 21:48	10/8/24	
Aroclor 1260	ND U	150	80	1	10/08/24 21:48	10/8/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	30	10 - 120	10/08/24 21:48	
Tetrachloro-m-xylene	14	10 - 109	10/08/24 21:48	

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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil
Sample Name: Drying Bed
Lab Code: R2409490-001

Service Request: R2409490
Date Collected: 09/24/24 15:20
Date Received: 09/26/24 09:25
Units: ug/L
Basis: As Received

TCLP Chlorinated Herbicides by GC

Analysis Method: 8151A
Prep Method: Method

Pre-Prep Method: EPA 1311
Pre-Prep Date: 10/1/24

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
2,4-D	ND U	5.0	0.35	1	10/02/24 20:33	10/1/24	
2,4,5-TP (Silvex)	ND U	5.0	0.33	1	10/02/24 20:33	10/1/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
DCAA	66	12 - 131	10/02/24 20:33	



Metals

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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil
Sample Name: Drying Bed
Lab Code: R2409490-001

Service Request: R2409490
Date Collected: 09/24/24 15:20
Date Received: 09/26/24 09:25

Basis: As Received

Toxicity Characteristics Leachate Procedure (TCLP)
Inorganic Parameters

Pre-Prep Method: EPA 1311

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010D	0.02 J	mg/L	0.50	0.02	1	10/03/24 02:57	10/01/24	
Barium	6010D	0.2 J	mg/L	1.0	0.04	1	10/03/24 02:57	10/01/24	
Cadmium	6010D	0.06 J	mg/L	0.10	0.01	1	10/03/24 02:57	10/01/24	
Chromium	6010D	ND U	mg/L	0.10	0.05	1	10/03/24 02:57	10/01/24	
Lead	6010D	0.27	mg/L	0.10	0.05	1	10/03/24 02:57	10/01/24	
Mercury	7470A	ND U	mg/L	0.00030	0.00008	1	10/03/24 10:31	10/02/24	
Nickel	6010D	0.08 J	mg/L	0.10	0.05	1	10/03/24 02:57	10/01/24	
Selenium	6010D	ND U	mg/L	0.20	0.02	1	10/03/24 02:57	10/01/24	
Silver	6010D	ND U	mg/L	0.10	0.01	1	10/03/24 02:57	10/01/24	
Zinc	6010D	16.1	mg/L	1.0	0.5	10	10/04/24 17:20	10/01/24	



General Chemistry

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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil
Sample Name: Drying Bed
Lab Code: R2409490-001

Service Request: R2409490
Date Collected: 09/24/24 15:20
Date Received: 09/26/24 09:25

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cyanide, Total	9012B	3.0	mg/Kg	1.2	0.7	1	10/03/24 22:18	10/02/24	
Sulfate	9056A	1580	mg/Kg	140	70	1	10/16/24 12:29	10/16/24	
Sulfide, Acid-Soluble	9034	ND U	mg/Kg	92	65	1	09/27/24 17:45	09/27/24	

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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil
Sample Name: Drying Bed
Lab Code: R2409490-001

Service Request: R2409490
Date Collected: 09/24/24 15:20
Date Received: 09/26/24 09:25
Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Free Liquid	9095B	Absent	NONE	-	-	1	10/03/24 11:35	NA	
pH	9045D	6.04	pH Units	-	-	1	10/03/24 12:35	NA	H
Total Solids	ALS SOP	21.2	Percent	-	-	1	10/01/24 09:00	NA	



QC Summary Forms

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Volatile Organic Compounds by GC/MS

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QA/QC Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil

Service Request: R2409490

SURROGATE RECOVERY SUMMARY
TCLP Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Extraction Method: EPA 5030C

Sample Name	Lab Code	4-Bromofluorobenzene	Dibromofluoromethane	Toluene-d8
		85 - 122	80 - 116	87 - 121
Drying Bed	R2409490-001	96	99	100
Method Blank	RQ2412686-01	98	98	99
Lab Control Sample	RQ2412970-05	99	103	101
Method Blank	RQ2412970-06	99	98	101

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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: RQ2412686-01

Service Request: R2409490
Date Collected: NA
Date Received: NA

Units: ug/L
Basis: As Received

TCLP Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Pre-Prep Method: EPA 1311
Pre-Prep Date: 10/8/24

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1-Dichloroethene (1,1-DCE)	ND U	5.0	0.20	1	10/14/24 13:18	
1,2-Dichloroethane	ND U	5.0	0.20	1	10/14/24 13:18	
2-Butanone (MEK)	ND U	10	2.0	1	10/14/24 13:18	
Benzene	ND U	5.0	0.20	1	10/14/24 13:18	
Carbon Tetrachloride	ND U	5.0	0.26	1	10/14/24 13:18	
Chlorobenzene	ND U	5.0	0.20	1	10/14/24 13:18	
Chloroform	4.1 J	5.0	0.35	1	10/14/24 13:18	
Tetrachloroethene (PCE)	ND U	5.0	0.23	1	10/14/24 13:18	
Trichloroethene (TCE)	ND U	5.0	0.22	1	10/14/24 13:18	
Vinyl Chloride	ND U	5.0	0.46	1	10/14/24 13:18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	10/14/24 13:18	
Dibromofluoromethane	98	80 - 116	10/14/24 13:18	
Toluene-d8	99	87 - 121	10/14/24 13:18	

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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil

Sample Name: Method Blank
Lab Code: RQ2412970-06

Service Request: R2409490
Date Collected: NA
Date Received: NA

Units: ug/L
Basis: As Received

TCLP Volatile Organic Compounds by GC/MS

Analysis Method: 8260D
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1-Dichloroethene (1,1-DCE)	ND U	5.0	0.20	1	10/14/24 11:45	
1,2-Dichloroethane	ND U	5.0	0.20	1	10/14/24 11:45	
2-Butanone (MEK)	ND U	10	2.0	1	10/14/24 11:45	
Benzene	ND U	5.0	0.20	1	10/14/24 11:45	
Carbon Tetrachloride	ND U	5.0	0.26	1	10/14/24 11:45	
Chlorobenzene	ND U	5.0	0.20	1	10/14/24 11:45	
Chloroform	ND U	5.0	0.35	1	10/14/24 11:45	
Tetrachloroethene (PCE)	ND U	5.0	0.23	1	10/14/24 11:45	
Trichloroethene (TCE)	ND U	5.0	0.22	1	10/14/24 11:45	
Vinyl Chloride	ND U	5.0	0.46	1	10/14/24 11:45	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	10/14/24 11:45	
Dibromofluoromethane	98	80 - 116	10/14/24 11:45	
Toluene-d8	101	87 - 121	10/14/24 11:45	

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QA/QC Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil

Service Request: R2409490
Date Analyzed: 10/14/24

Lab Control Sample Summary
TCLP Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:As Received

Lab Control Sample
RQ2412970-05

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1-Dichloroethene (1,1-DCE)	8260D	20.8	20.0	104	69-142
1,2-Dichloroethane	8260D	18.7	20.0	94	71-127
2-Butanone (MEK)	8260D	14.1	20.0	70	61-137
Benzene	8260D	18.1	20.0	91	79-119
Carbon Tetrachloride	8260D	19.0	20.0	95	70-127
Chlorobenzene	8260D	17.9	20.0	90	80-121
Chloroform	8260D	18.9	20.0	94	79-120
Tetrachloroethene (PCE)	8260D	18.6	20.0	93	72-125
Trichloroethene (TCE)	8260D	18.9	20.0	94	74-122
Vinyl Chloride	8260D	22.4	20.0	112	74-159



Semivolatile Organic Compounds by GC/MS

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Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil

Service Request: R2409490

SURROGATE RECOVERY SUMMARY
TCLP Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Extraction Method: EPA 3510C

Sample Name	Lab Code	2,4,6-Tribromophenol	2-Fluorobiphenyl	2-Fluorophenol
		35 - 141	31 - 118	10 - 105
Drying Bed	R2409490-001	82	68	52
Method Blank	RQ2412372-01	68	63	47
Method Blank	RQ2412461-01	83	72	56
Lab Control Sample	RQ2412461-02	91	76	55
Duplicate Lab Control Sample	RQ2412461-03	79	67	45

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil

Service Request: R2409490

SURROGATE RECOVERY SUMMARY
TCLP Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Extraction Method: EPA 3510C

Sample Name	Lab Code	Nitrobenzene-d5	Phenol-d6	p-Terphenyl-d14
		31 - 110	10 - 107	10 - 165
Drying Bed	R2409490-001	72	38	86
Method Blank	RQ2412372-01	64	33	73
Method Blank	RQ2412461-01	76	40	96
Lab Control Sample	RQ2412461-02	75	43	91
Duplicate Lab Control Sample	RQ2412461-03	63	37	83

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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: RQ2412372-01

Service Request: R2409490
Date Collected: NA
Date Received: NA

Units: ug/L
Basis: As Received

TCLP Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Pre-Prep Method: EPA 1311
Pre-Prep Date: 10/1/24

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dichlorobenzene	ND U	100	1.2	1	10/07/24 11:54	10/2/24	
2,4,5-Trichlorophenol	ND U	100	1.1	1	10/07/24 11:54	10/2/24	
2,4,6-Trichlorophenol	ND U	100	1.4	1	10/07/24 11:54	10/2/24	
2,4-Dinitrotoluene	ND U	100	2.4	1	10/07/24 11:54	10/2/24	
2-Methylphenol	ND U	100	1.0	1	10/07/24 11:54	10/2/24	
3- and 4-Methylphenol Coelution	ND U	100	1.2	1	10/07/24 11:54	10/2/24	
Hexachlorobenzene	ND U	100	1.6	1	10/07/24 11:54	10/2/24	
Hexachlorobutadiene	ND U	100	1.0	1	10/07/24 11:54	10/2/24	
Hexachloroethane	ND U	100	1.1	1	10/07/24 11:54	10/2/24	
Nitrobenzene	ND U	100	1.5	1	10/07/24 11:54	10/2/24	
Pentachlorophenol (PCP)	ND U	500	9.7	1	10/07/24 11:54	10/2/24	
Pyridine	ND U	500	1.0	1	10/07/24 11:54	10/2/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	68	35 - 141	10/07/24 11:54	
2-Fluorobiphenyl	63	31 - 118	10/07/24 11:54	
2-Fluorophenol	47	10 - 105	10/07/24 11:54	
Nitrobenzene-d5	64	31 - 110	10/07/24 11:54	
Phenol-d6	33	10 - 107	10/07/24 11:54	
p-Terphenyl-d14	73	10 - 165	10/07/24 11:54	

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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: RQ2412461-01

Service Request: R2409490
Date Collected: NA
Date Received: NA
Units: ug/L
Basis: As Received

TCLP Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270E
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dichlorobenzene	ND U	100	1.2	1	10/04/24 14:10	10/2/24	
2,4,5-Trichlorophenol	ND U	100	1.1	1	10/04/24 14:10	10/2/24	
2,4,6-Trichlorophenol	ND U	100	1.4	1	10/04/24 14:10	10/2/24	
2,4-Dinitrotoluene	ND U	100	2.4	1	10/04/24 14:10	10/2/24	
2-Methylphenol	ND U	100	1.0	1	10/04/24 14:10	10/2/24	
3- and 4-Methylphenol Coelution	ND U	100	1.2	1	10/04/24 14:10	10/2/24	
Hexachlorobenzene	ND U	100	1.6	1	10/04/24 14:10	10/2/24	
Hexachlorobutadiene	ND U	100	1.0	1	10/04/24 14:10	10/2/24	
Hexachloroethane	ND U	100	1.1	1	10/04/24 14:10	10/2/24	
Nitrobenzene	ND U	100	1.5	1	10/04/24 14:10	10/2/24	
Pentachlorophenol (PCP)	ND U	500	9.7	1	10/04/24 14:10	10/2/24	
Pyridine	ND U	500	1.0	1	10/04/24 14:10	10/2/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	83	35 - 141	10/04/24 14:10	
2-Fluorobiphenyl	72	31 - 118	10/04/24 14:10	
2-Fluorophenol	56	10 - 105	10/04/24 14:10	
Nitrobenzene-d5	76	31 - 110	10/04/24 14:10	
Phenol-d6	40	10 - 107	10/04/24 14:10	
p-Terphenyl-d14	96	10 - 165	10/04/24 14:10	

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QA/QC Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil

Service Request: R2409490
Date Analyzed: 10/04/24

Duplicate Lab Control Sample Summary
TCLP Semivolatile Organic Compounds by GC/MS

Units:ug/L
Basis:As Received

Lab Control Sample **Duplicate Lab Control Sample**
RQ2412461-02 RQ2412461-03

Analyte Name	Analytical Method	Lab Control Sample			Duplicate Lab Control Sample			% Rec Limits	RPD	RPD Limit
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
1,4-Dichlorobenzene	8270E	518	800	65	477	800	60	10-124	8	30
2,4,5-Trichlorophenol	8270E	919	800	115	902	800	113	48-134	2	30
2,4,6-Trichlorophenol	8270E	869	800	109	837	800	105	44-135	4	30
2,4-Dinitrotoluene	8270E	1090	800	136 *	1070	800	134 *	54-130	2	30
2-Methylphenol	8270E	794	800	99	738	800	92	47-100	7	30
3- and 4-Methylphenol Coelution	8270E	830	800	104 *	769	800	96 *	40-92	8	30
Hexachlorobenzene	8270E	880	800	110	851	800	106	53-123	3	30
Hexachlorobutadiene	8270E	464	800	58	439	800	55	16-95	5	30
Hexachloroethane	8270E	492	800	62	458	800	57	15-92	7	30
Nitrobenzene	8270E	795	800	99	724	800	90	46-108	9	30
Pentachlorophenol (PCP)	8270E	763	800	95	767	800	96	29-164	<1	30
Pyridine	8270E	128 J	800	16	150 J	800	19	10-123	16	30



Semivolatile Organic Compounds by GC

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Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil

Service Request: R2409490

SURROGATE RECOVERY SUMMARY
TCLP Organochlorine Pesticides by Gas Chromatography

Analysis Method: 8081B
Extraction Method: EPA 3510C

Sample Name	Lab Code	Decachlorobiphenyl	Tetrachloro-m-xylene
		10 - 111	10 - 101
Drying Bed	R2409490-001	74	57
Method Blank	RQ2412372-01	102	67
Method Blank	RQ2412412-01	68	68
Lab Control Sample	RQ2412412-02	106	70
Duplicate Lab Control Sample	RQ2412412-03	106	67

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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: RQ2412372-01

Service Request: R2409490
Date Collected: NA
Date Received: NA

Units: ug/L
Basis: As Received

TCLP Organochlorine Pesticides by Gas Chromatography

Analysis Method: 8081B
Prep Method: EPA 3510C

Pre-Prep Method: EPA 1311
Pre-Prep Date: 10/1/24

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Chlordane	ND U	2.5	0.13	1	10/07/24 20:06	10/1/24	
Endrin	ND U	0.50	0.020	1	10/07/24 20:06	10/1/24	
gamma-BHC (Lindane)	ND U	0.50	0.020	1	10/07/24 20:06	10/1/24	
Heptachlor	ND U	0.50	0.020	1	10/07/24 20:06	10/1/24	
Heptachlor Epoxide	ND U	0.50	0.020	1	10/07/24 20:06	10/1/24	
Methoxychlor	ND U	0.50	0.020	1	10/07/24 20:06	10/1/24	
Toxaphene	ND U	5.0	0.50	1	10/07/24 20:06	10/1/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	102	10 - 111	10/07/24 20:06	
Tetrachloro-m-xylene	67	10 - 101	10/07/24 20:06	

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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: RQ2412412-01

Service Request: R2409490
Date Collected: NA
Date Received: NA

Units: ug/L
Basis: As Received

TCLP Organochlorine Pesticides by Gas Chromatography

Analysis Method: 8081B
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Chlordane	ND U	2.5	0.13	1	10/07/24 17:46	10/1/24	
Endrin	ND U	0.50	0.020	1	10/07/24 17:46	10/1/24	
gamma-BHC (Lindane)	ND U	0.50	0.020	1	10/07/24 17:46	10/1/24	
Heptachlor	ND U	0.50	0.020	1	10/07/24 17:46	10/1/24	
Heptachlor Epoxide	ND U	0.50	0.020	1	10/07/24 17:46	10/1/24	
Methoxychlor	ND U	0.50	0.020	1	10/07/24 17:46	10/1/24	
Toxaphene	ND U	5.0	0.50	1	10/07/24 17:46	10/1/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	68	10 - 111	10/07/24 17:46	
Tetrachloro-m-xylene	68	10 - 101	10/07/24 17:46	

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QA/QC Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil

Service Request: R2409490
Date Analyzed: 10/07/24

Duplicate Lab Control Sample Summary
TCLP Organochlorine Pesticides by Gas Chromatography

Units:ug/L
Basis:As Received

Analyte Name	Analytical Method	Lab Control Sample RQ2412412-02			Duplicate Lab Control Sample RQ2412412-03			% Rec Limits	RPD	RPD Limit
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Endrin	8081B	3.17	4.00	79	3.14	4.00	78	47-116	1	30
gamma-BHC (Lindane)	8081B	3.21	4.00	80	3.12	4.00	78	41-105	3	30
Heptachlor	8081B	3.08	4.00	77	2.84	4.00	71	33-99	8	30
Heptachlor Epoxide	8081B	3.24	4.00	81	3.14	4.00	79	46-111	3	30
Methoxychlor	8081B	3.22	4.00	81	3.22	4.00	81	29-138	<1	30

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QA/QC Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil

Service Request: R2409490

SURROGATE RECOVERY SUMMARY
Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Extraction Method: EPA 3541

Sample Name	Lab Code	Decachlorobiphenyl	Tetrachloro-m-xylene
		10 - 120	10 - 109
Drying Bed	R2409490-001	30 P	14 P
Method Blank	RQ2412687-01	77	83
Method Blank	RQ2412687-01	80	80
Lab Control Sample	RQ2412687-02	83	91
Lab Control Sample	RQ2412687-02	84	87
Duplicate Lab Control Sample	RQ2412687-03	81	88
Duplicate Lab Control Sample	RQ2412687-03	87	85

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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: RQ2412687-01

Service Request: R2409490
Date Collected: NA
Date Received: NA
Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	ND U	33	17	1	10/08/24 21:07	10/8/24	
Aroclor 1221	ND U	67	26	1	10/08/24 21:07	10/8/24	
Aroclor 1232	ND U	33	19	1	10/08/24 21:07	10/8/24	
Aroclor 1242	ND U	33	17	1	10/08/24 21:07	10/8/24	
Aroclor 1248	ND U	33	18	1	10/08/24 21:07	10/8/24	
Aroclor 1254	ND U	33	17	1	10/08/24 21:07	10/8/24	
Aroclor 1260	ND U	33	17	1	10/08/24 21:07	10/8/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	64	10 - 120	10/08/24 21:07	
Tetrachloro-m-xylene	83	10 - 109	10/08/24 21:07	

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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: RQ2412687-01

Service Request: R2409490
Date Collected: NA
Date Received: NA
Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3541

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	ND U	33	17	1	10/09/24 23:35	10/8/24	
Aroclor 1221	ND U	67	26	1	10/09/24 23:35	10/8/24	
Aroclor 1232	ND U	33	19	1	10/09/24 23:35	10/8/24	
Aroclor 1242	ND U	33	17	1	10/09/24 23:35	10/8/24	
Aroclor 1248	ND U	33	18	1	10/09/24 23:35	10/8/24	
Aroclor 1254	ND U	33	17	1	10/09/24 23:35	10/8/24	
Aroclor 1260	ND U	33	17	1	10/09/24 23:35	10/8/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	80	10 - 120	10/09/24 23:35	
Tetrachloro-m-xylene	80	10 - 109	10/09/24 23:35	

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QA/QC Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil

Service Request: R2409490
Date Analyzed: 10/09/24

Duplicate Lab Control Sample Summary
Polychlorinated Biphenyls (PCBs) by GC

Units:ug/Kg
Basis:Dry

Lab Control Sample **Duplicate Lab Control Sample**
RQ2412687-02 RQ2412687-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Aroclor 1016	8082A	138	166	83	138	167	83	23-111	<1	30
Aroclor 1260	8082A	134	166	81	138	167	83	21-121	3	30

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QA/QC Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil

Service Request: R2409490

SURROGATE RECOVERY SUMMARY
TCLP Chlorinated Herbicides by GC

Analysis Method: 8151A
Extraction Method: Method

Sample Name	Lab Code	DCAA 12 - 131
Drying Bed	R2409490-001	66
Method Blank	RQ2412372-01	80
Method Blank	RQ2412402-01	71
Lab Control Sample	RQ2412402-02	59
Duplicate Lab Control Sample	RQ2412402-03	66
Drying Bed MS	RQ2412402-04	61
Drying Bed DMS	RQ2412402-05	79

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QA/QC Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil

Service Request: R2409490
Date Collected: 09/24/24
Date Received: 09/26/24
Date Analyzed: 10/2/24
Date Extracted: 10/1/24

Duplicate Matrix Spike Summary
TCLP Chlorinated Herbicides by GC

Sample Name: Drying Bed
Lab Code: R2409490-001
Analysis Method: 8151A
Prep Method: Method

Units: ug/L
Basis: As Received

Analyte Name	Sample Result	Result	Matrix Spike RQ2412402-04		Duplicate Matrix Spike RQ2412402-05		% Rec Limits	RPD	RPD Limit	
			Spike Amount	% Rec	Result	Spike Amount				% Rec
2,4-D	ND U	22.8	40.0	57	29.7	40.0	74	26-154	26	30
2,4,5-TP (Silvex)	ND U	25.2	40.0	63	33.2	40.0	83	21-120	28	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: RQ2412372-01

Service Request: R2409490
Date Collected: NA
Date Received: NA
Units: ug/L
Basis: As Received

TCLP Chlorinated Herbicides by GC

Analysis Method: 8151A
Prep Method: Method

Pre-Prep Method: EPA 1311
Pre-Prep Date: 10/1/24

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
2,4-D	ND U	5.0	0.35	1	10/02/24 22:34	10/1/24	
2,4,5-TP (Silvex)	ND U	5.0	0.33	1	10/02/24 22:34	10/1/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
DCAA	80	12 - 131	10/02/24 22:34	

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Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: RQ2412402-01

Service Request: R2409490
Date Collected: NA
Date Received: NA
Units: ug/L
Basis: As Received

TCLP Chlorinated Herbicides by GC

Analysis Method: 8151A
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
2,4-D	ND U	5.0	0.35	1	10/02/24 19:21	10/1/24	
2,4,5-TP (Silvex)	ND U	5.0	0.33	1	10/02/24 19:21	10/1/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
DCAA	71	12 - 131	10/02/24 19:21	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil

Service Request: R2409490
Date Analyzed: 10/02/24

Duplicate Lab Control Sample Summary
TCLP Chlorinated Herbicides by GC

Units:ug/L
Basis:As Received

Lab Control Sample **Duplicate Lab Control Sample**
RQ2412402-02 RQ2412402-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
2,4-D	8151A	22.2	40.0	55	23.7	40.0	59	10-103	7	30
2,4,5-TP (Silvex)	8151A	23.8	40.0	60	26.9	40.0	67	13-124	12	30



Metals

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: R2409490-MB1

Service Request: R2409490
Date Collected: NA
Date Received: NA

Basis: As Received

Toxicity Characteristics Leachate Procedure (TCLP)
Inorganic Parameters

Pre-Prep Method: EPA 1311

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date	
								Extracted	Q
Arsenic	6010D	ND U	mg/L	0.50	0.02	1	10/03/24 02:47	10/01/24	
Barium	6010D	ND U	mg/L	1.0	0.04	1	10/03/24 02:47	10/01/24	
Cadmium	6010D	ND U	mg/L	0.10	0.01	1	10/03/24 02:47	10/01/24	
Chromium	6010D	ND U	mg/L	0.10	0.05	1	10/03/24 02:47	10/01/24	
Lead	6010D	ND U	mg/L	0.10	0.05	1	10/03/24 02:47	10/01/24	
Mercury	7470A	ND U	mg/L	0.00030	0.00008	1	10/03/24 10:26	10/02/24	
Nickel	6010D	ND U	mg/L	0.10	0.05	1	10/03/24 02:47	10/01/24	
Selenium	6010D	ND U	mg/L	0.20	0.02	1	10/03/24 02:47	10/01/24	
Silver	6010D	ND U	mg/L	0.10	0.01	1	10/03/24 02:47	10/01/24	
Zinc	6010D	ND U	mg/L	0.10	0.05	1	10/03/24 02:47	10/01/24	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: R2409490-MB2

Service Request: R2409490
Date Collected: NA
Date Received: NA

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Arsenic	6010D	ND U	mg/L	0.50	0.02	1	10/03/24 02:34	10/01/24		
Barium	6010D	ND U	mg/L	1.0	0.04	1	10/03/24 02:34	10/01/24		
Cadmium	6010D	ND U	mg/L	0.10	0.01	1	10/03/24 02:34	10/01/24		
Chromium	6010D	ND U	mg/L	0.10	0.05	1	10/03/24 02:34	10/01/24		
Lead	6010D	ND U	mg/L	0.10	0.05	1	10/03/24 02:34	10/01/24		
Mercury	7470A	ND U	mg/L	0.00030	0.00008	1	10/03/24 09:25	10/02/24		
Nickel	6010D	ND U	mg/L	0.10	0.05	1	10/03/24 02:34	10/01/24		
Selenium	6010D	ND U	mg/L	0.20	0.02	1	10/03/24 02:34	10/01/24		
Silver	6010D	ND U	mg/L	0.10	0.01	1	10/03/24 02:34	10/01/24		
Zinc	6010D	ND U	mg/L	0.10	0.05	1	10/03/24 02:34	10/01/24		

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil

Service Request: R2409490
Date Analyzed: 10/03/24

Lab Control Sample Summary
Inorganic Parameters

Units:mg/L
Basis:As Received

Lab Control Sample
R2409490-LCS

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	6010D	1.00	1.00	100	80-120
Barium	6010D	2.07	2.0	104	80-120
Cadmium	6010D	0.538	0.50	108	80-120
Chromium	6010D	0.537	0.50	107	80-120
Lead	6010D	0.548	0.50	110	80-120
Mercury	7470A	0.000996	0.00100	100	80-120
Nickel	6010D	1.08	1.00	108	80-120
Selenium	6010D	1.01	1.00	101	80-120
Silver	6010D	0.265	0.25	106	80-120
Zinc	6010D	1.04	1.00	104	80-120

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: R2409490-MB

Service Request: R2409490
Date Collected: NA
Date Received: NA
Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cyanide, Total	9012B	ND U	mg/Kg	0.30	0.17	1	10/03/24 22:15	10/02/24	
Sulfate	9056A	ND U	mg/Kg	30	13	1	10/16/24 12:17	10/16/24	
Sulfide, Acid-Soluble	9034	ND U	mg/Kg	20	14	1	09/27/24 17:45	09/27/24	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: R2409490-MB

Service Request: R2409490
Date Collected: NA
Date Received: NA

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Free Liquid	9095B	Absent	NONE	-	-	1	10/03/24 11:35	NA	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil

Service Request: R2409490
Date Collected: 09/24/24
Date Received: 09/26/24
Date Analyzed: 10/3/24
Date Extracted: 10/2/24

Duplicate Matrix Spike Summary
Cyanide, Total

Sample Name: Drying Bed
Lab Code: R2409490-001
Analysis Method: 9012B
Prep Method: Method

Units: mg/Kg
Basis: Dry

Analyte Name	Sample Result	Result	Matrix Spike R2409490-001MS		Duplicate Matrix Spike R2409490-001DMS		% Rec Limits	RPD	RPD Limit	
			Spike Amount	% Rec	Result	Spike Amount				% Rec
Cyanide, Total	3.0	15.8	14.0	91	13.1	11.4	88	10-159	18	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil

Service Request: R2409490
Date Analyzed: 09/27/24 - 10/16/24

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/Kg
Basis:Dry

Lab Control Sample
R2409490-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Cyanide, Total	9012B	3.32	3.00	111	85-115
Sulfate	9056A	188	200	94	80-120
Sulfide, Acid-Soluble	9034	67.6	229	30	10-135

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Allied Environmental, Inc
Project: American Water - Main Plant/TCLP - Drying Beds
Sample Matrix: Soil

Service Request: R2409490
Date Analyzed: 10/03/24

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/Kg
Basis:Dry

Lab Control Sample
R2409490-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Cyanide, Total	9012B	18.4	18.0	102	85-115



Subcontracted Analytical Parameters

ALS Environmental—Rochester Laboratory
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 Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 | Fax: 717-944-1430 |

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
 State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For **ALS Environmental-Rochester**
 Project R2409490
 Workorder 3380602
 Report ID 357428 on 10/2/2024

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Sep 27, 2024.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Kaleb Brown (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

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 ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
 Reports Invoices - ALS Environmental
 Chris Leavy - ALS Environmental-Rochester
 Remy Rubin -

Kaleb Brown

Kaleb Brown
 Project Coordinator

(ALS Digital Signature)

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Project R2409490
Workorder 3380602



Sample Summary

<u>Lab ID</u>	<u>Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>	<u>Collector</u>	<u>Collection Company</u>
3380602001	Drying Bed	Solid	09/24/2024 15:20	09/27/2024 08:54	CBC	Collected By Client



Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, including but not limited to the following EPA Method reference revisions:
EPA 300.1 Rev. 1.0-1997
EPA 300.0 Rev. 2.1-1993
EPA 353.2 Rev. 2.0-1993
EPA 410.4 Rev. 1.0-1993
EPA 420.4 Rev. 1.0-1993
EPA 365.1 Rev. 2.0-1993
EPA 200.7 Rev. 4.4-1994
EPA 200.8 Rev. 5.4-1994
EPA 245.1 Rev. 3.0-1994
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are performed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits
#	Please reference the result in the Results Section for analyte-level flags.

Project R2409490
Workorder 3380602



Project Notations

Sample Notations

Lab ID **Sample ID**

Result Notations

Notation Ref.

1 According to Pa/USEPA regulations, this sample is not considered to be ignitable. (Ref 40 CFR 261.21)

Project R2409490

Workorder 3380602



Detected Results Summary

Client Sample ID	Drying Bed	Collected	09/24/2024 15:20
Lab Sample ID	3380602001	Lab Receipt	09/27/2024 08:54

Compound	Result	Units	RDL	MDL	Method	Flag
WET CHEMISTRY						
Moisture	79.8	%	0.1	0.01	S2540G-15	#
Total Solids	20.2	%	0.1	0.01	S2540G-15	#

Project R2409490
Workorder 3380602



Results

Client Sample ID	Drying Bed	Collected	09/24/2024 15:20
Lab Sample ID	3380602001	Lab Receipt	09/27/2024 08:54

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	MDL	Method	Dilution	Analysis Date/Time	By	Cntr
Ignitability	Not Ignitable.	1				SW846 1030	1	10/02/2024 07:20	CAB	A
Moisture	79.8		%	0.1	0.01	S2540G-15	1	09/27/2024 20:53	LMD	A
Total Solids	20.2		%	0.1	0.01	S2540G-15	1	09/27/2024 20:53	LMD	A

Project R2409490
Workorder 3380602



Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3380602001	Drying Bed	S2540G-15	N/A	
		SW846 1030	N/A	



QUALITY CONTROL SAMPLES

WET CHEMISTRY

QC Batch			
QC Batch	1304925	Prep Method	N/A
Date	N/A	Analysis Method	S25406-15
Tech.			

Associated Samples
 3380602001

Duplicate 3884520 (DUP) 3380535001 (non-Project Sample) For QC Batch 1304925

****NOTE - The Original Result and Duplicate Result shown below are raw results and are only used for the purpose of calculating Sample Duplicate percent recoveries. This result is not a final value and cannot be used as such.

RESULTS

Compound	CAS No		Result (%)	Orig. Result (%)		Qualifiers
Moisture	MOISTURE	DUP	96.6304	96.2284	RPD	0.42 (Max-10)
Total Solids	TSP	DUP	3.3695	3.7715	RPD	11.30* (Max-5)

Duplicate 3884521 (DUP) 3380525001 (non-Project Sample) For QC Batch 1304925

****NOTE - The Original Result and Duplicate Result shown below are raw results and are only used for the purpose of calculating Sample Duplicate percent recoveries. This result is not a final value and cannot be used as such.

RESULTS

Compound	CAS No		Result (%)	Orig. Result (%)		Qualifiers
Moisture	MOISTURE	DUP	84.5989	83.2453	RPD	1.61 (Max-10)
Total Solids	TSP	DUP	15.4010	16.7546	RPD	8.42* (Max-5)

Duplicate 3884522 (DUP) 3380617009 (non-Project Sample) For QC Batch 1304925

****NOTE - The Original Result and Duplicate Result shown below are raw results and are only used for the purpose of calculating Sample Duplicate percent recoveries. This result is not a final value and cannot be used as such.

RESULTS

Compound	CAS No		Result (%)	Orig. Result (%)		Qualifiers
Moisture	MOISTURE	DUP	8.8566	9.3698	RPD	5.63 (Max-10)
Total Solids	TSP	DUP	91.1433	90.6301	RPD	0.56 (Max-5)

Duplicate 3884523 (DUP) 3380617011 (non-Project Sample) For QC Batch 1304925

****NOTE - The Original Result and Duplicate Result shown below are raw results and are only used for the purpose of calculating Sample Duplicate percent recoveries. This result is not a final value and cannot be used as such.



QUALITY CONTROL SAMPLES

WET CHEMISTRY (cont.)

RESULTS

Compound	CAS No		Result (%)	Orig. Result (%)		Qualifiers
Moisture	MOISTURE	DUP	7.0331	8.2028	RPD	15.40* (Max-10)
Total Solids	TSP	DUP	92.9668	91.7971	RPD	1.27 (Max-5)

Duplicate 3884524 (DUP) 3380617001 (non-Project Sample) For QC Batch 1304925

****NOTE - The Original Result and Duplicate Result shown below are raw results and are only used for the purpose of calculating Sample Duplicate percent recoveries. This result is not a final value and cannot be used as such.

RESULTS

Compound	CAS No		Result (%)	Orig. Result (%)		Qualifiers
Moisture	MOISTURE	DUP	9.7345	7.5516	RPD	25.30* (Max-10)
Total Solids	TSP	DUP	90.2654	92.4483	RPD	2.39 (Max-5)

Duplicate 3884525 (DUP) 3380415004 (non-Project Sample) For QC Batch 1304925

****NOTE - The Original Result and Duplicate Result shown below are raw results and are only used for the purpose of calculating Sample Duplicate percent recoveries. This result is not a final value and cannot be used as such.

RESULTS

Compound	CAS No		Result (%)	Orig. Result (%)		Qualifiers
Moisture	MOISTURE	DUP	77.0606	77.7777	RPD	0.93 (Max-10)
Total Solids	TSP	DUP	22.9393	22.2222	RPD	3.18 (Max-5)

Duplicate 3884526 (DUP) 3380415006 (non-Project Sample) For QC Batch 1304925

****NOTE - The Original Result and Duplicate Result shown below are raw results and are only used for the purpose of calculating Sample Duplicate percent recoveries. This result is not a final value and cannot be used as such.

RESULTS

Compound	CAS No		Result (%)	Orig. Result (%)		Qualifiers
Moisture	MOISTURE	DUP	75	74.5341	RPD	0.62 (Max-10)
Total Solids	TSP	DUP	25	25.4658	RPD	1.85 (Max-5)

Duplicate 3884527 (DUP) 3380643002 (non-Project Sample) For QC Batch 1304925

****NOTE - The Original Result and Duplicate Result shown below are raw results and are only used for the purpose of calculating Sample Duplicate percent recoveries. This result is not a final value and cannot be used as such.



QUALITY CONTROL SAMPLES

WET CHEMISTRY (cont.)

RESULTS

Compound	CAS No		Result (%)	Orig. Result (%)		Qualifiers
Moisture	MOISTURE	DUP	74.0416	74.1965	RPD 0.21	(Max-10)
Total Solids	TSP	DUP	25.9583	25.8034	RPD 0.60	(Max-5)

QC Batch			
QC Batch	1307910	Prep Method	N/A
Date	N/A	Analysis Method	SW846 1030
Tech.			

Associated Samples
 3380602001

Duplicate 3886313 (DUP) 3380617001 (non-Project Sample) For QC Batch 1307910

****NOTE - The Original Result and Duplicate Result shown below are raw results and are only used for the purpose of calculating Sample Duplicate percent recoveries. This result is not a final value and cannot be used as such.

RESULTS

Compound	CAS No				Qualifiers
Ignitability	IGN	DUP			

Duplicate 3886314 (DUP) 3380617002 (non-Project Sample) For QC Batch 1307910

****NOTE - The Original Result and Duplicate Result shown below are raw results and are only used for the purpose of calculating Sample Duplicate percent recoveries. This result is not a final value and cannot be used as such.

RESULTS

Compound	CAS No				Qualifiers
Ignitability	IGN	DUP			

Project R2409490
Workorder 3380602



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Any Batch
3380602001	Drying Bed	N/A	N/A	N/A		S2540G-15	1304925
		N/A	N/A	N/A		SW846 1030	1307910

ALS Environmental Chain of Custody

1565 Jefferson Rd, Building 300 • Rochester, NY 14623 • 585-288-5380 • FAX 585-288-8475

ALS Contact: Christopher Leavy

Project Number: R2409490
 Project Manager: Christopher Leavy
 QAP: LAB QAP



3380602

Logged By: CKW
 PM: KSB



Lab Code	Sample ID	# of Cont.	Matrix	Sample		Lab ID	Ignitability 1030
				Date	Time		
R2409490-001	Drying Bed	1	Soil	9/24/24	1520	Middletown ALS	X

Test Comments
 Ignitability - 1030

R2409490-001

If more solid choose this test code

6-571

*imp. no cts. no sampler.
 10/27/24*

Temp By:	WO Temp (°C)	Therm ID			
<i>W</i>	<i>6</i>	<i>571</i>			
Receipt Info Completed By:			CW		
Cooler Custody Seal Intact			Y	N	NA
Sample Custody Seal Intact			Y	N	NA
Received on Ice			Y	N	NA
Cooler & Samples Intact			Y	N	NA
Correct Containers Provided			Y	N	NA
Sample Label/COC Agree			Y	N	NA
Adequate Sample Volumes			Y	N	NA
CR6 Samples Filtered			Y	N	NA
OP Samples Filtered			Y	N	NA
VOA Trip Blank			Y	N	NA
Nis 4 Days?			Y	N	NA
Rad Screen (uCi)			Y	N	NA
Courier/Tracking #:					
SDWA Compliance			Y	N	NA
PWSID			Y	N	NA
WV Containers 0-6°C			Y	N	NA

Special Instructions/Comments H - Test is On Hold P - Test is Authorized for Prep Only	Turnaround Requirements _____ RUSH (Surcharges Apply) PLEASE CIRCLE WORK DAYS 1 2 3 4 5 <input checked="" type="checkbox"/> STANDARD Requested FAX Date: _____ Requested Report Date: <u>10/07/24</u>	Report Requirements _____ I. Results Only <input checked="" type="checkbox"/> II. Results + QC Summaries _____ III. Results + QC and Calibration Summaries _____ IV. Data Validation Report with Raw Data PQL/MDL/J <u>Y</u> EDD <u>N</u>	Invoice Information PO# 58R2409490 Bill to
---	---	--	--

Relinquished By: *Smith SA* *9/26/24*
1530
 10/2/2024 12:56 PM

Received By: *Felix - CW* *ALS 92724 0854*
 Page 77 of 80

Airbill Number: *7127068980 CS*
 12 of 13 Page 1

R2409490

X Ship To: Middletown ALS
ALS Environmental - Middletown
301 Fulling Mill Rd.
Middletown, PA 17057

PC u Date 9/26
SMO SES Date 9/26

Instructions:

Ice ✓
Dry Ice _____
No Ice _____

Shipping:

Overnight ✓
2nd Day _____
Ground _____

Bill to Client Account _____

Comments:



October 16, 2024

Client: Allied Environmental, Inc
306 Church Street
Ashford, AL 36312

Attn: Randy McDonald

Project: American Water - Main Plant

Date Received: September 26, 2024

Certificate of Analysis

Sample ID	Sample Date and Time	Lab #	Moisture D3173 wt%	Sulfur, Total D4239 Moist. Free wt%
Drying Bed	9/24/24 1520	R2409490-001	68.71	1.04

Wendy Hyatt, Laboratory Director



October 16, 2024

Client: Allied Environmental, Inc
 306 Church Street
 Ashford, AL 36312

Attn: Randy McDonald

Project: American Water - Main Plant

Date Received: September 26, 2024

Quality Control

	Moisture		Sulfur, Total
	D3173		D4239
	wt%		Moist. Free wt%

Analysis Date	10/3/24	10/15/24
Prep Blank	N/A	<0.01

LCS	NANO Pure	AEB2049
CN	Water	(7492)
Observed Value	100.02	6.78
True Value	100.00	7.32
%R	100.0	92.6

Duplicate	T2401680-001	T2401753-003
Observed Value	0.74	9.37
Duplicate Value	0.74	9.31
%RPD	0.0	0.6