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MARCH 26, 2024

MR DAVID BOWLING
VICE PRESIDENT POWER OPERATIONS GAS, HYDRO, & INTEGRATION
TENNESSEE VALLEY AUTHORITY
400 WEST SUMMIT HILL DRIVE
WT 11A-K
KNOXVILLE TENNESSEE 37902

RE: DRAFT PERMIT
NPDES PERMIT NUMBER AL0003867
TVA COLBERT COMBUSTION TURBINES FACILITY

Dear Mr. Bowling:

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.

Our records indicate that you have utilized the Department's web-based electronic environmental (E2) reporting system for submittal of discharge monitoring reports (DMRs). The Department transitioned from the E2 Reporting System to the Alabama Environmental Permitting and Compliance System (AEPACS) for the submittal of DMRs on November 15, 2021. AEPACS is an electronic system that allows facilities to apply for and maintain permits as well as submit other required applications, registrations, and certifications. In addition, the system allows facilities to submit required compliance reports or other information to the Department. The Department has used the E2 User account information to set up a similar User Profile in AEPACS based on the following criteria:

1. The user has logged in to E2 since October 1, 2019; and
2. The E2 user account is set up using a unique email address.

E2 users that met the above criteria will only need to establish an ADEM Web Portal account (https://prd.adem.alabama.gov/awp) under the same email address as their E2 account to have the same permissions in AEPACS as they did in E2. They will also automatically be linked to the same facilities they were in E2.

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

If you have questions regarding this permit or monitoring requirements, please contact Theo Pinson by e-mail at **tpinson@adem.alabama.gov** or by phone at **(334) 274-4202.**

Sincerely,

Scott Ramsey, Chief
Industrial/Municipal Branch
Water Division

Enclosure: Draft Permit

pc via website:
Montgomery Field Office
EPA Region IV
U.S. Fish & Wildlife Service
AL Historical Commission
Advisory Council on Historic Preservation
Department of Conservation and Natural Resources

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

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

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

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

Alabama Department of Environmental Management

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

PERMITTEE: TENNESSEE VALLEY AUTHORITY

FACILITY LOCATION: TVA COLBERT COMBUSTION TURBINES FACILITY
307 GAS TURBINE ROAD
TUSCUMBIA, ALABAMA 35674
COLBERT COUNTY

PERMIT NUMBER: AL0003867

RECEIVING WATERS: 001 - CANE CREEK
004 - CANE CREEK
010 – TENNESSEE RIVER (PICKWICK LAKE)
013 - CANE CREEK
016 - CANE CREEK
017 - CANE CREEK

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

ISSUANCE DATE:

EFFECTIVE DATE:

EXPIRATION DATE:

DRAFT

Alabama Department of Environmental Management

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PART I: DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS

A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS

DSN 0011: Process wastewaters including simple cycle power block - EVAP Blowdown, CT fuel secondary containment, and stormwater runoff associated with electric power generation

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 the outfall(s) listed above and described more fully in the Permittee's application. Such discharges shall be limited and monitored by the Permittee as specified below: 1/ 2/ 3/

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Frequency 4/	Sample Type	Seasonal
pH (00400) Effluent Gross Value	*****	*****	*****	6.0 Minimum Daily	*****	8.5 Maximum Daily	S.U.	2X Monthly	Grab	All Months
Solids, Total Suspended (00530) Effluent Gross Value	*****	*****	*****	*****	(Report) Monthly Average	(Report) Maximum Daily	mg/l	2X Monthly	Grab	All Months
Oil & Grease (00556) Effluent Gross Value	*****	*****	*****	*****	*****	15.0 Maximum Daily	mg/l	2X Monthly	Grab	All Months
Nitrogen, Ammonia Total (As N) (00610) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Monthly	Grab	All Months
Arsenic, Total (As As) (01002) 5/ Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Monthly	Grab	All Months
Copper, Total (As Cu) (01042) 5/ Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Monthly	Grab	All Months
Iron, Total (As Fe) (01045) 5/ Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Monthly	Grab	All Months
Selenium, Total (As Se) (01147) 5/ Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Monthly	Grab	All Months
Flow, In Conduit or Thru Treatment Plant (50050) Effluent Gross Value	(Report) Monthly Average	(Report) Maximum Daily	MGD	*****	*****	*****	*****	2X Monthly	Calculated	All Months
Mercury, Total (As Hg) (71900) 5/ 6/ Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	ug/l	Monthly	Grab	All Months

THE DISCHARGE SHALL HAVE NO SHEEN, AND THERE SHALL BE NO DISCHARGE OF VISIBLE OIL, FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

1/ Samples collected to comply with the monitoring requirements specified above shall be collected at the following location: At the nearest accessible location just prior to discharge and after final treatment. Unless otherwise specified, composite samples shall be time composite samples collected using automatic sampling equipment or a minimum of eight (8) equal volume grab samples collected over equal time intervals. All composite samples shall be collected for the total period of discharge not to exceed 24 hours.

2/ If only one sampling event occurs during a month, the sample result shall be reported on the discharge monitoring report as both the monthly average and daily maximum value for all parameters with a monthly average limitation.

3/ See Part IV.A for Best Management Practices (BMP) Plan Requirements.

4/ Twice per month monitoring shall be conducted so that two samples are collected in the same month at least 10 days apart.

5/ For the purpose of demonstration of compliance with this parameter, "Total" and "Total Recoverable" shall be considered equivalent.

6/ EPA Method 245.7, 1631E, or alternative method specifically approved by the Department, shall be used for the analysis of this parameter.

DSN 004S: Stormwater runoff from the switchyard and south yard area including groundwater

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 the outfall(s) listed above and described more fully in the Permittee's application. Such discharges shall be limited and monitored by the Permittee as specified below:

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Frequency[2]	Sample Type[1]	Seasonal
pH (00400) Effluent Gross Value	*****	*****	*****	(Report) Minimum Daily	*****	(Report) Maximum Daily	S.U.	Semi-Annually	Grab	All Months
Solids, Total Suspended (00530) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months
Oil & Grease (00556) Effluent Gross Value	*****	*****	*****	*****	*****	15.0 Maximum Daily	mg/l	Semi-Annually	Grab	All Months
Arsenic, Total (As As) (01002) 5/ Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months
Copper, Total (As Cu) (01042) 5/ Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months
Iron, Total (As Fe) (01045) 5/ Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months
Nickel, Total (As Ni) (01067) 5/ Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months
Zinc, Total (As Zn) (01092) 5/ Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months
Flow, In Conduit or Thru Treatment Plant (50050) Effluent Gross Value	*****	(Report) Maximum Daily	MGD	*****	*****	*****	*****	Semi-Annually	Estimate	All Months

THE DISCHARGE SHALL HAVE NO SHEEN, AND THERE SHALL BE NO DISCHARGE OF VISIBLE OIL, FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

1/ Samples collected to comply with the monitoring requirements specified above shall be collected at the following location: At the nearest accessible location just prior to discharge and after final treatment. Unless otherwise specified, composite samples shall be time composite samples collected using automatic sampling equipment or a minimum of eight (8) equal volume grab samples collected over equal time intervals. All composite samples shall be collected for the total period of discharge not to exceed 24 hours.

2/ If only one sampling event occurs during a month, the sample result shall be reported on the discharge monitoring report as both the monthly average and daily maximum value for all parameters with a monthly average limitation.

3/ See Part IV.A for Best Management Practices (BMP) Plan Requirements.

4/ See Part IV.B for Stormwater Measurement and Sampling Requirements.

5/ For the purpose of demonstration of compliance with this parameter, "Total" and "Total Recoverable" shall be considered equivalent.

DSN 010S: Stormwater runoff from the closed Ash Stack 5 Area

DSN 013S: Stormwater runoff from the closed Ash Pond 4 Area

DSN 016S: Stormwater runoff from the closed Ash Pond 4 Area

DSN 017S: Stormwater runoff from the closed Ash Pond 4 Area

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 the outfall(s) listed above and described more fully in the Permittee's application. Such discharges shall be limited and monitored by the Permittee as specified below: 3/ 4/

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Frequency[2]	Sample Type[1]	Seasonal
Turbidity (00070) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	NTU	Semi-Annually	Measured	All Months
BOD, 5-Day (20 Deg. C) (00310) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months
pH (00400) Effluent Gross Value	*****	*****	*****	(Report) Minimum Daily	*****	(Report) Maximum Daily	S.U.	Semi-Annually	Grab	All Months
Solids, Total Suspended (00530) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months
Oil & Grease (00556) Effluent Gross Value	*****	*****	*****	*****	*****	15.0 Maximum Daily	mg/l	Semi-Annually	Grab	All Months
Nitrogen, Organic Total (As N) (00605) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months
Nitrogen, Ammonia Total (As N) (00610) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months
Nitrogen, Kjeldahl Total (As N) (00625) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months
Nitrite Plus Nitrate Total 1 Det. (As N) (00630) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months

THE DISCHARGE SHALL HAVE NO SHEEN, AND THERE SHALL BE NO DISCHARGE OF VISIBLE OIL, FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

1/ Samples collected to comply with the monitoring requirements specified above shall be collected at the following location: At the nearest accessible location just prior to discharge and after final treatment. Unless otherwise specified, composite samples shall be time composite samples collected using automatic sampling equipment or a minimum of eight (8) equal volume grab samples collected over equal time intervals. All composite samples shall be collected for the total period of discharge not to exceed 24 hours.

2/ If only one sampling event occurs during a month, the sample result shall be reported on the discharge monitoring report as both the monthly average and daily maximum value for all parameters with a monthly average limitation.

3/ See Part IV.A for Best Management Practices (BMP) Plan Requirements.

4/ See Part IV.B for Stormwater Measurement and Sampling Requirements.

DSN 010S (Continued): Stormwater runoff from the closed Ash Stack 5 Area

DSN 013S (Continued): Stormwater runoff from the closed Ash Pond 4 Area

DSN 016S (Continued): Stormwater runoff from the closed Ash Pond 4 Area

DSN 017S (Continued): Stormwater runoff from the closed Ash Pond 4 Area

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 the outfall(s) listed above and described more fully in the Permittee's application. Such discharges shall be limited and monitored by the Permittee as specified below: 3/ 4/

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Frequency[2]	Sample Type[1]	Seasonal
Phosphorus, Total (As P) (00665) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months
Arsenic, Total Recoverable (00978) 5/ Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months
Cadmium, Total (As Cd) (01027) 5/ Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months
Chromium, Total (As Cr) (01034) 5/ Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months
Copper, Total (As Cu) (01042) 5/ Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months
Lead, Total (As Pb) (01051) 5/ Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months
Nickel, Total (As Ni) (01067) 5/ Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months
Zinc, Total (As Zn) (01092) 5/ Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months
Selenium, Total (As Se) (01147) 5/ Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months

THE DISCHARGE SHALL HAVE NO SHEEN, AND THERE SHALL BE NO DISCHARGE OF VISIBLE OIL, FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

1/ Samples collected to comply with the monitoring requirements specified above shall be collected at the following location: At the nearest accessible location just prior to discharge and after final treatment. Unless otherwise specified, composite samples shall be time composite samples collected using automatic sampling equipment or a minimum of eight (8) equal volume grab samples collected over equal time intervals. All composite samples shall be collected for the total period of discharge not to exceed 24 hours.

2/ If only one sampling event occurs during a month, the sample result shall be reported on the discharge monitoring report as both the monthly average and daily maximum value for all parameters with a monthly average limitation.

3/ See Part IV.A for Best Management Practices (BMP) Plan Requirements.

4/ See Part IV.B for Stormwater Measurement and Sampling Requirements.

5/ For the purpose of demonstration of compliance with this parameter, "Total" and "Total Recoverable" shall be considered equivalent.

DSN 010S (Continued): Stormwater runoff from the closed Ash Stack 5 Area

DSN 013S (Continued): Stormwater runoff from the closed Ash Pond 4 Area

DSN 016S (Continued): Stormwater runoff from the closed Ash Pond 4 Area

DSN 017S (Continued): Stormwater runoff from the closed Ash Pond 4 Area

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 the outfall(s) listed above and described more fully in the Permittee's application. Such discharges shall be limited and monitored by the Permittee as specified below: 3/ 4/

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Frequency[2]	Sample Type[1]	Seasonal
Flow, In Conduit or Thru Treatment Plant (50050) Effluent Gross Value	*****	(Report) Maximum Daily	MGD	*****	*****	*****	*****	Semi-Annually	Estimate	All Months
Solids, Total Dissolved (70295) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months
Mercury, Total (As Hg) (71900) 5/ 6/ Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	ug/l	Semi-Annually	Grab	All Months
Iron, Total (As Fe) (1) (74010) 5/ Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months

THE DISCHARGE SHALL HAVE NO SHEEN, AND THERE SHALL BE NO DISCHARGE OF VISIBLE OIL, FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

1/ Samples collected to comply with the monitoring requirements specified above shall be collected at the following location: At the nearest accessible location just prior to discharge and after final treatment. Unless otherwise specified, composite samples shall be time composite samples collected using automatic sampling equipment or a minimum of eight (8) equal volume grab samples collected over equal time intervals. All composite samples shall be collected for the total period of discharge not to exceed 24 hours.

2/ If only one sampling event occurs during a month, the sample result shall be reported on the discharge monitoring report as both the monthly average and daily maximum value for all parameters with a monthly average limitation.

3/ See Part IV.A for Best Management Practices (BMP) Plan Requirements.

4/ See Part IV.B for Stormwater Measurement and Sampling Requirements.

5/ For the purpose of demonstration of compliance with this parameter, "Total" and "Total Recoverable" shall be considered equivalent.

6/ EPA Method 245.7, 1631E, or alternative method specifically approved by the Department, shall be used for the analysis of this parameter.

B. DISCHARGE MONITORING AND RECORD KEEPING REQUIREMENTS

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge and shall be in accordance with the provisions of this permit.

2. Test Procedures

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

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

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

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

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

c. For parameters without an EPA established ML, interim ML, or matrix-specific ML, a report of less than the detection limit shall constitute compliance if the detection limit of all analytical methods is higher than the permit limit using the most sensitive EPA approved method. 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.

3. 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.

4. Records Retention and Production

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 shall not be submitted unless requested.

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.

5. 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. The permittee shall develop and maintain quality assurance procedures to ensure proper operation and maintenance of all equipment and instrumentation. The quality assurance procedures shall include the proper use, maintenance, and installation, when appropriate, of monitoring equipment at the plant site.

C. DISCHARGE REPORTING REQUIREMENTS

1. Reporting of Monitoring Requirements

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

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.

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 may be done anytime during the quarter, unless restricted elsewhere in this permit, but it should be submitted with the last DMR due for the quarter, i.e., (March, June, September and December DMR's).

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 submitted with the last DMR for the month of the semiannual period, i.e. (June and December DMR's).

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 submitted with the December DMR.

b. The permittee shall submit discharge monitoring reports (DMRs) on the forms provided by the Department and in accordance with the following schedule:

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 (MONTH, YEAR).** 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.

REPORTS OF QUARTERLY TESTING shall be submitted on a **quarterly** basis. 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.

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.

REPORTS OF ANNUAL TESTING shall be submitted on an annual basis. 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.

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 5 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 the 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.

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

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

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

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

d. All reports and forms required to be submitted by this permit, the AWPCA and the Department's Rules, 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
Water Division
Office of Water Services
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
Water Division
Office of Water Services
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
Water Division
Post Office Box 301463
Montgomery, Alabama 36130-1463

Certified and Registered Mail shall be addressed to:

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

g. If this permit is a re-issuance, 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 Notification

a. 24-Hour Noncompliance Reporting

The permittee shall report to the Director, within 24-hours of becoming aware of the noncompliance, any noncompliance which may endanger health or the environment. This shall include but is not limited to the following circumstances:

(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) threatens human health or welfare, fish or aquatic life, or water quality standards;

(3) 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);

(4) contains a quantity of a hazardous substance which has been determined may be harmful to public health or welfare under Section 311(b)(4) of the FWPCA, 33 U.S.C. Section 1321(b)(4);

(5) exceeds any discharge limitation for an effluent characteristic as a result of an unanticipated bypass or upset; and

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

The permittee shall orally report the occurrence and circumstances of such discharge to the Director within 24-hours after the permittee becomes aware of the occurrence of such discharge. In addition to the oral report, the permittee shall submit to the Director or Designee a written report as provided in Part I.C.2.c no later than five (5) days after becoming aware of the occurrence of such discharge.

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

c. Any written report required to be submitted to the Director or Designee by Part I.C.2 a. or b. shall be submitted using a Noncompliance Notification Form (ADEM Form 421) available on the Department's website (http://adem.alabama.gov/DeptForms/Form421.pdf) and include the following information:

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

(2) The period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue; and

(3) A description of the steps taken and/or being taken to reduce or eliminate the noncomplying discharge and to prevent its recurrence.

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, 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.

5. Cooling Water and Boiler Water Additives

a. The permittee shall notify the Director in writing not later than thirty (30) days prior to instituting the use of any biocide corrosion inhibitor or chemical additive in a cooling or boiler system, not identified in the application for this permit, from which discharge is allowed by this permit. Notification is not required for additives that do not contain a heavy metal(s) as an active ingredient and that pass through a wastewater treatment system prior to discharge nor is notification required for additives that should not reasonably be expected to cause the cooling water or boiler water to exhibit toxicity as determined by analysis of manufacturer's data or testing by the permittee. Such notification shall include:

(1) name and general composition of biocide or chemical;

(2) 96-hour median tolerance limit data for organisms representative of the biota of the waterway into which the discharge will ultimately reach;

(3) quantities to be used;

(4) frequencies of use;

(5) proposed discharge concentrations; and

(6) EPA registration number, if applicable.

b. The use of a biocide or additive containing tributyl tin, tributyl tin oxide, zinc, chromium or related compounds in cooling or boiler system(s), from which a discharge regulated by this permit occurs, is prohibited except as exempted below. The use of a biocide or additive containing zinc, chromium or related compounds may be used in special circumstances if (1) the permit contains limits for these substances, or (2) the applicant demonstrates during the application process that the use of zinc, chromium or related compounds as a biocide or additive will not pose a reasonable potential to violate the applicable State water quality standards for these substances. The use of any additive, not identified in this permit or in the

application for this permit or not exempted from notification under this permit is prohibited, prior to a determination by the Department that permit modification to control discharge of the additive is not required or prior to issuance of a permit modification controlling discharge of the additive.

6. Permit Issued Based on Estimated Characteristics

a. If this permit was issued based on estimates of the characteristics of a process discharge reported on an EPA NPDES Application Form 2D (EPA Form 3510-2D), the permittee shall complete and submit an EPA NPDES Application Form 2C (EPA Form 3510-2C) no later than two years after the date that discharge begins. Sampling required for completion of the Form 2C shall occur when a discharge(s) from the process(s) causing the new or increased discharge is occurring. If this permit was issued based on estimates concerning the composition of a stormwater discharge(s), the permittee shall perform the sampling required by EPA NPDES Application Form 2F (EPA Form 3510-2F) no later than one year after the industrial activity generating the stormwater discharge has been fully initiated.

b. This permit shall be reopened if required to address any new information resulting from the completion and submittal of the Form 2C and or 2F.

E. SCHEDULE OF COMPLIANCE

1. 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. 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. Spill Prevention, Control, and Management

The permittee shall provide spill prevention, control, and/or management sufficient to prevent any spills of pollutants from entering a water of the state or a publicly or privately owned treatment works. Any containment system used to implement this requirement shall be constructed of materials compatible with the substance(s) contained and which shall prevent the contamination of groundwater and such containment system shall be capable of retaining a volume equal to 110 percent of the capacity of the largest tank for which containment is provided.

B. OTHER RESPONSIBILITIES

1. Duty to Mitigate Adverse Impacts

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

2. Right of Entry and Inspection

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

a. 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;

b. have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;

c. inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the permit; and

d. sample or monitor, for the purposes of assuring permit compliance or as otherwise authorized by the AWPCA, any substances or parameters at any location.

C. BYPASS AND UPSET

1. Bypass

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

b. A bypass is not prohibited if:

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

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

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

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

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

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

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

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

2. Upset

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

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

(2) No later than five (5) days after becoming aware of the occurrence of the upset, the permittee furnishes the Director with evidence, including properly signed, contemporaneous operating logs, or other relevant evidence, demonstrating that (i) an upset occurred; (ii) the permittee can identify the specific cause(s) of the upset; (iii) the permittee's facility was being properly operated at the time of the upset; and (iv) the permittee promptly took all reasonable steps to minimize any adverse impact on human health or the environment resulting from the upset.

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

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

1. Duty to Comply

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

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

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

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

e. Nothing in this permit shall be construed to preclude and negate the permittee's responsibility or liability to apply for, obtain, or comply with other ADEM, Federal, State, or Local Government permits, certifications, licenses, or other approvals.

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 Blvd., Montgomery, AL 36130.

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

a. The permittee shall apply for a permit modification at least 180 days in advance of any facility expansion, production increase, process change, or other action that could result in the discharge of additional pollutants or increase the quantity of a discharged pollutant such that existing permit limitations would be exceeded or that could result in an additional discharge point. This requirement 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.

b. The permittee shall notify the Director as soon as it is known or there is reason to believe:

(1) That any activity has occurred or will occur which would result in the discharge on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:

(i) one hundred micrograms per liter;

(ii) two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dini-trophenol; and one milligram per liter for antimony;

(iii) five times the maximum concentration value reported for that pollutant in the permit application; or

(2) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:

(i) five hundred micrograms per liter;

(ii) one milligram per liter for antimony;

(iii) ten times the maximum concentration value reported for that pollutant in the permit application.

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.

5. Permit Termination

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

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

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

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

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

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

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

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

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

6. Permit Suspension

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

7. Request for Permit Action Does Not Stay Any Permit Requirement

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. Discharge of Wastewater Generated by Others

The discharge of wastewater, generated by any process, facility, or by any other means not under the operational control of the permittee or not identified in the application for this permit or not identified specifically in the description of an outfall in this permit is not authorized by this permit.

PART III: OTHER PERMIT CONDITIONS

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, trespass, 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 is 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 the paragraph. The entering into a lease with the State of Alabama for exploration and production of hydrocarbons shall also be considered beginning construction.

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 wastes into waters of the state". Code of Alabama 1975, Section 22-22-1(b)(8).

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 5 equal volume samples collected at constant time intervals of not more than 2 hours 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, other than for fecal coliform bacteria, the arithmetic mean of the entire composite or grab samples taken for the daily discharges collected in one month period. The monthly average for fecal coliform bacteria is the geometric mean of daily discharge samples collected in a 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. Permit application - means forms and additional information that is required by ADEM Administrative Code Rule 335-6-6-.08 and applicable permit fees.

31. 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).

32. 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.

33. 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".

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

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

36. 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.

37. 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.

38. Solvent – means any virgin, used or spent organic solvent(s) identified in the F-Listed wastes (F001 through F005) specified in 40 CFR 261.31 that is used for the purpose of solubilizing other materials.

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 12 equal volume samples collected at constant time intervals of not more than 2 hours over a period of 24 hours;

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

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

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

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

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

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

I. SEVERABILITY

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

PART IV: ADDITIONAL REQUIREMENTS, CONDITIONS, AND LIMITATIONS

A. BEST MANAGEMENT PRACTICES (BMP) PLAN REQUIREMENTS

1. BMP Plan

The permittee shall develop and implement a Best Management Practices (BMP) Plan which prevents, or minimizes the potential for, the release of pollutants from ancillary activities, including material storage areas; plant site runoff; in-plant transfer, process and material handling areas; loading and unloading operations, and sludge and waste disposal areas, to the waters of the State through plant site runoff; spillage or leaks; sludge or waste disposal; or drainage from raw material storage.

2. Plan Content

The permittee shall prepare and implement a best management practices (BMP) plan, which shall:

a. Establish specific objectives for the control of pollutants:

(1) Each facility component or system shall be examined for its potential for causing a release of significant amounts of pollutants to waters of the State due to equipment failure, improper operation, natural phenomena such as rain or snowfall, etc.

(2) Where experience indicates a reasonable potential for equipment failure (e.g., a tank overflow or leakage), natural condition (e.g. precipitation), or circumstances to result in significant amounts of pollutants reaching surface waters, the plan should include a prediction of the direction, rate of flow, and total quantity of pollutants which could be discharged from the facility as a result of each condition or circumstance.

b. Establish specific best management practices to meet the objectives identified under paragraph a. of this section, addressing each component or system capable of causing a release of significant amounts of pollutants to the waters of the State, and identifying specific preventative or remedial measures to be implemented;

c. Establish a program to identify and repair leaking equipment items and damaged containment structures, which may contribute to contaminated stormwater runoff. This program must include regular visual inspections of equipment, containment structures and of the facility in general to ensure that the BMP is continually implemented and effective;

d. Prevent the spillage or loss of fluids, oil, grease, gasoline, etc. from vehicle and equipment maintenance activities and thereby prevent the contamination of stormwater from these substances;

e. Prevent or minimize stormwater contact with material stored on site;

f. Designate by position or name the person or persons responsible for the day to day implementation of the BMP;

g. Provide for routine inspections, on days during which the facility is manned, of any structures that function to prevent stormwater pollution or to remove pollutants from stormwater and of the facility in general to ensure that the BMP is continually implemented and effective;

h. Provide for the use and disposal of any material used to absorb spilled fluids that could contaminate stormwater;

i. Develop a solvent management plan, if solvents are used on site. The solvent management plan shall include as a minimum lists of the solvents on site; the disposal method of solvents used instead of dumping, such as reclamation, contract hauling; and the procedures for assuring that solvents do not routinely spill or leak into the stormwater;

j. Provide for the disposal of all used oils, hydraulic fluids, firefighting foams, solvent degreasing material, etc. in accordance with good management practices and any applicable state or federal regulations;

k. Include a diagram of the facility showing the locations where stormwater exits the facility, the locations of any structure or other mechanisms intended to prevent pollution of stormwater or to remove pollutants from stormwater, the locations of any collection and handling systems;

l. Provide control sufficient to prevent or control pollution of stormwater by soil particles to the degree required to maintain compliance with the water quality standard for turbidity applicable to the waterbody(s) receiving discharge(s) under this permit;

m. Provide spill prevention, control, and/or management sufficient to prevent or minimize contaminated stormwater runoff. Any containment system used to implement this requirement shall be constructed of materials compatible with the

substance(s) contained and shall prevent the contamination of groundwater. The containment system shall also be capable of retaining a volume equal to 110 percent of the capacity of the largest tank for which containment is provided;

n. Provide and maintain curbing, diking or other means of isolating process areas to the extent necessary to allow segregation and collection for treatment of contaminated stormwater from process areas;

o. Be reviewed by plant engineering staff and the plant manager; and

p. Bear the signature of the plant manager.

3. Compliance Schedule

The permittee shall have reviewed (and revised if necessary) and fully implemented the BMP plan as soon as practicable but no later than six months after the effective date of this permit.

4. Department Review

a. When requested by the Director or his designee, the permittee shall make the BMP available for Department review.

b. The Director or his designee may notify the permittee at any time that the BMP is deficient and require correction of the deficiency.

c. The permittee shall correct any BMP 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.

5. Administrative Procedures

a. A copy of the BMP shall be maintained at the facility and shall be available for inspection by representatives of the Department.

b. A log of the routine inspection required above shall be maintained at the facility and shall be available for inspection by representatives of the Department. The log shall contain records of all inspections performed for the last three years and each entry shall be signed by the person performing the inspection.

c. The permittee shall provide training for any personnel required to implement the BMP and shall retain documentation of such training at the facility. This documentation shall be available for inspection by representatives of the Department. Training shall be performed prior to the date that implementation of the BMP is required.

d. BMP Plan Modification. The permittee shall amend the BMP plan whenever there is a change in the facility or change in operation of the facility which materially increases the potential for the ancillary activities to result in a discharge of significant amounts of pollutants.

e. BMP Plan Review. The permittee shall complete a review and evaluation of the BMP plan at least once every three years from the date of preparation of the BMP plan. Documentation of the BMP Plan review and evaluation shall be signed and dated by the Plant Manager.

B. STORMWATER FLOW MEASUREMENT AND SAMPLING REQUIREMENTS

1. Stormwater Flow Measurement

a. All stormwater samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches.

b. The total volume of stormwater discharged for the event must be monitored, including the date and duration (in hours) and rainfall (in inches) for 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 according to Part I.B. of this permit.

c. The volume may be measured using flow measuring devices, or estimated based on a modification of the Rational Method using total depth of rainfall, the size of the drainage area serving a stormwater outfall, and an estimate of the runoff coefficient of the drainage area. This information must be recorded as part of the sampling procedure and records retained according to Part I.B. of this permit.

2. Stormwater Sampling

a. A grab sample, if required by this permit, shall be taken during the first thirty minutes of the discharge (or as soon thereafter as practicable); and a flow-weighted composite sample, if required by this permit, shall be taken for the entire event or for the first three hours of the event.

b. All test procedures will be in accordance with part I.B. of this permit.

C. COOLING WATER INTAKE STRUCTURE (CWIS) REQUIREMENTS

The entity providing water to the permittee is a public water system in accordance with Section 1401 of the Safe Drinking Water Act or the water used for cooling consists of effluent, which would otherwise be discharged; therefore, the permittee is exempt from this permit condition.

ADEM PERMIT RATIONALE

PREPARED DATE: March 25, 2024
PREPARED BY: Theo Pinson

Permittee Name: Tennessee Valley Authority

Facility Name: TVA Colbert Combustion Turbines Facility

Permit Number: AL0003867

PERMIT IS A REISSUANCE DUE TO EXPIRATION

DISCHARGE SERIAL NUMBERS (DSN) & DESCRIPTIONS:

001 Process wastewaters including simple cycle power block - EVAP Blowdown, CT fuel secondary containment, and stormwater runoff associated with electric power generation

004 Stormwater runoff from the switchyard and south yard area including groundwater

010 Stormwater runoff from the closed Ash Stack 5 Area

013 Stormwater runoff from the closed Ash Pond 4 Area

016 Stormwater runoff from the closed Ash Pond 4 Area

017 Stormwater runoff from the closed Ash Pond 4 Area

INDUSTRIAL CATEGORY: Non-Categorical

MAJOR: Yes

STREAM INFORMATION:

Outfall:	001, 004, 013, 016, 017	010
Receiving Stream:	Cane Creek	Tennessee River (Pickwick Lake)
Classification:	Swimming, Fish and Wildlife	Public Water Supply, Swimming, Fish and Wildlife
River Basin:	Tennessee	Tennessee
7Q10:	0.29 cfs	7,347.29 cfs
7Q2:	0.97 cfs	12,146.60 cfs
1Q10:	0.22 cfs	5,510.47 cfs
Annual Average Flow:	87.17 cfs	52,482.75 cfs
303(d) List:	Yes	No
Impairment:	Metals (Mercury), Pathogens (E. coli)	No
TMDL:	No	No

DISCUSSION:

The TVA Colbert Combustion Turbine Plant generates electricity utilizing eight simple-cycle combustion turbines with a generating capacity of 392 MW. The dual-fuel machines can be operated on either natural gas or low-sulfur diesel fuel. The facility is situated on the same plant site as the former Colbert Fossil Plant which has been decommissioned and demolished. The site includes closed coal combustion residual (CCR) units that were formerly used to dispose of ash generated wastes from the combustion of coal to generate electricity.

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 water; therefore, the applicant is not required to demonstrate that the discharge is necessary for economic and social development.

The Department determined that the 40 CFR Part 423 Steam Electric Power Generating Point Source effluent guidelines are not applicable since the facility utilizes simple cycle combustion turbines. The 40 CFR Part 423 regulations are applicable if a facility utilizes a combustion turbine in conjunction with a thermal cycle employing a steam water system as the thermodynamic medium. A simple cycle plant uses a turbine to generate electricity but does not capture the exhaust energy to generate electricity from a steam turbine.

EPA has not promulgated specific guidelines for the discharges covered under the proposed permit. Proposed permit limits are based on Best Professional Judgment. The proposed frequencies are based on a review of site specific conditions and an evaluation of similar facilities.

DSN 0011: Process wastewaters including simple cycle power block - EVAP Blowdown, CT fuel secondary containment, and stormwater runoff associated with electric power generation

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type	Seasonal	Basis
pH (00400) Effluent Gross Value	*****	*****	*****	6.0 Minimum Daily	*****	8.5 Maximum Daily	S.U.	2X Monthly	Grab	All Months	WQBEL
Solids, Total Suspended (00530) Effluent Gross Value	*****	*****	*****	*****	(Report) Monthly Average	(Report) Maximum Daily	mg/l	2X Monthly	Grab	All Months	BPJ
Oil & Grease (00556) Effluent Gross Value	*****	*****	*****	*****	*****	15.0 Maximum Daily	mg/l	2X Monthly	Grab	All Months	BPJ
Nitrogen, Ammonia Total (As N) (00610) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Monthly	Grab	All Months	BPJ
Arsenic, Total (As As) (01002) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Monthly	Grab	All Months	BPJ
Copper, Total (As Cu) (01042) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Monthly	Grab	All Months	BPJ
Iron, Total (As Fe) (01045) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Monthly	Grab	All Months	BPJ
Selenium, Total (As Se) (01147) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Monthly	Grab	All Months	BPJ
Flow, In Conduit or Thru Treatment Plant (50050) Effluent Gross Value	(Report) Monthly Average	(Report) Maximum Daily	MGD	*****	*****	*****	*****	2X Monthly	Calculated	All Months	BPJ
Mercury, Total (As Hg) (71900) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	ug/l	Monthly	Grab	All Months	BPJ

DSN 004S: Stormwater runoff from the switchyard and south yard area including groundwater

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type	Seasonal	Basis
pH (00400) Effluent Gross Value	*****	*****	*****	(Report) Minimum Daily	*****	(Report) Maximum Daily	S.U.	Semi-Annually	Grab	All Months	BPJ
Solids, Total Suspended (00530) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
Oil & Grease (00556) Effluent Gross Value	*****	*****	*****	*****	*****	15.0 Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
Arsenic, Total (As As) (01002) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
Copper, Total (As Cu) (01042) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
Iron, Total (As Fe) (01045) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
Nickel, Total (As Ni) (01067) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
Zinc, Total (As Zn) (01092) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
Flow, In Conduit or Thru Treatment Plant (50050) Effluent Gross Value	*****	(Report) Maximum Daily	MGD	*****	*****	*****	*****	Semi-Annually	Estimate	All Months	BPJ

DSN 010S: Stormwater runoff from the closed Ash Stack 5 Area
DSN 013S: Stormwater runoff from the closed Ash Pond 4 Area
DSN 016S: Stormwater runoff from the closed Ash Pond 4 Area
DSN 017S: Stormwater runoff from the closed Ash Pond 4 Area

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type	Seasonal	Basis
Turbidity (00070) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	NTU	Semi-Annually	Measured	All Months	BPJ
BOD, 5-Day (20 Deg. C) (00310) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
pH (00400) Effluent Gross Value	*****	*****	*****	(Report) Minimum Daily	*****	(Report) Maximum Daily	S.U.	Semi-Annually	Grab	All Months	BPJ
Solids, Total Suspended (00530) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
Oil & Grease (00556) Effluent Gross Value	*****	*****	*****	*****	*****	15.0 Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
Nitrogen, Organic Total (As N) (00605) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
Nitrogen, Ammonia Total (As N) (00610) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
Nitrogen, Kjeldahl Total (As N) (00625) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
Nitrite Plus Nitrate Total 1 Det. (As N) (00630) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
Phosphorus, Total (As P) (00665) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
Arsenic, Total Recoverable (00978) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
Cadmium, Total (As Cd) (01027) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
Chromium, Total (As Cr) (01034) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
Copper, Total (As Cu) (01042) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
Lead, Total (As Pb) (01051) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
Nickel, Total (As Ni) (01067) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
Zinc, Total (As Zn) (01092) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
Selenium, Total (As Se) (01147) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
Flow, In Conduit or Thru Treatment Plant (50050) Effluent Gross Value	*****	(Report) Maximum Daily	MGD	*****	*****	*****	*****	Semi-Annually	Estimate	All Months	BPJ
Solids, Total Dissolved (70295) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
Mercury, Total (As Hg) (71900) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	ug/l	Semi-Annually	Grab	All Months	BPJ
Iron, Total (As Fe) (1) (74010) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ

*Basis for Permit Limitation

- BPJ – Best Professional Judgment
- WQBEL – Water Quality Based Effluent Limits
- EGL – Federal Effluent Guideline Limitations
- 303(d) – 303(d) List of Impaired Waters

Discussion

The parameters of concern for this facility are based on the parameters of concern listed in the permit application and from the current permit. These parameters are consistent with similar facilities in the state and have been proven to be reflective of the operations at this facility.

Best Management Practices (BMPs) are believed to be the most effective way to control the contamination of stormwater from areas of industrial activities. This facility is required to maintain a BMP plan. The requirements of the BMP plan call for minimization of stormwater contact with waste materials, products and by-products, and for prevention of spills or loss of fluids from equipment maintenance activities. The effectiveness of the BMPs will be measured through the monitoring of the pollutants of concern.

Outfall 001

Discharges from Outfall 001 include process wastewaters from the simple cycle power block - EVAP Blowdown, CT fuel secondary containment, and stormwater runoff associated with electric power generation. The simple cycle units utilize municipal water for inlet air evaporative cooling in summer ambient temperatures and for producing demineralized water for CT compressor washing. The compressor wash water is transported off site for disposal. The Department performed a Reasonable Potential Analysis (RPA) of the discharge using discharge data submitted in the permit application and through discharge monitoring reports (DMRs). The RPA indicated that no pollutants demonstrated the potential to exceed water quality criteria.

pH

ADEM Administrative Code, Division 6 Regulations, specifically 335-6-10-.09(3) – Specific Water Quality for streams classified as Swimming and Other Whole Body Water-Contact Sports states: "Sewage, industrial waste or other wastes shall not cause the pH to deviate more than one unit from then normal or natural pH, nor be less than 6.0, nor greater than 8.5 standard units."

Oil & Grease

The daily maximum limit for Oil and Grease should prevent the occurrence of a visible sheen in the stream and has been shown to be achievable through the use of proper BMPs.

Report Only Parameters

Monitoring has been proposed based on previous and current operations at the site to evaluate the effectiveness of the facility BMP plan and the impact of the discharge on the receiving stream. The Permittee is required to use approved analytical methods that are capable of detecting and measuring at, or below, applicable water quality criteria.

Temperature

ADEM Administrative Code, Division 6 Regulations, specifically 335-6-10-.09(3) – Specific Water Quality for streams classified as Swimming and Other Whole Body Water-Contact Sports indicates that the maximum temperature in streams, lakes, and reservoirs shall not exceed 86°F in the Tennessee River Basin. Numeric limitations have not been proposed based on the small amount of cooling water utilized and the retention time provided in the process pond before the discharge reaches the receiving stream.

Chlorine

The Department has not proposed chlorine limitations based on the small amount of cooling water utilized and the retention time provided in the process pond before the discharge reaches the receiving stream. Chlorine is expected to volatize and not be a parameter of concern.

Water Additives

The discharge of biocides and corrosion inhibitors can introduce the potential for toxicity in receiving waters. If the facility uses water additives, they are expected to verify that the use of these chemicals will not present potential toxic effects to representative organisms in the receiving waters and to ensure that the chemicals are used in a manner that is consistent with their labeling and standard industry practices.

Outfall 004

Outfall 004 consists of stormwater runoff from the switchyard and south yard area including groundwater. The switchyard sits on top of a hill. Stormwater falling on the switchyard and adjacent areas flows down the hill and into the former cooling water discharge canal and ultimately to Cane Creek. Groundwater emanates from the hill and enters the stormwater conveyances to the outfall. The groundwater is not expected to be impacted from prior Coal Combustion Residual (CCR) disposal areas due to the location of those areas in relation to the outfall. After a review of available Discharge Monitoring Report (DMR) data, the monitoring frequency has been proposed to be reduced from quarterly to semi-annually as requested by the Permittee.

DSN 010S: Stormwater runoff from the closed Ash Stack 5 Area
DSN 013S: Stormwater runoff from the closed Ash Pond 4 Area
DSN 016S: Stormwater runoff from the closed Ash Pond 4 Area
DSN 017S: Stormwater runoff from the closed Ash Pond 4 Area

Outfalls 010, 013, 016, and 017 serve as stormwater outfalls for discharges from the closed and capped former CCR Units. The proposed monitoring requirements and parameter lists have been proposed to be consistent with requirements in similar permits.

303(d) List of Impaired Waters/Total Maximum Daily Load (TMDL)

Cane Creek is listed on the 303(d) List of Impaired Waters for Metals (Mercury) and Pathogens (E. coli). E. coli is not expected to be present in the discharge. The facility utilizes a septic system. Mercury monitoring has been proposed for the discharge from the process pond and for stormwater discharges from the closed CCR Units.

Cooling Water intake Structure

The entity providing water to the permittee is a public water system in accordance with Section 1401 of the Safe Drinking Water Act or the water used for cooling consists of effluent, which would otherwise be discharged; therefore, the permittee is exempt from this permit condition. The facility no longer operates a cooling water intake structure.

Removal of Outfalls 002, 005, 009, and Internal Outfall 001A

The Permittee has requested removal of Outfalls 002, 005, 009, and 001A on the basis that they no longer exist due to the closure, decommissioning, and demolition of the former Colbert Fossil Plant and completion of construction of the new Combustion Turbines Facility. Outfalls 002, 005, and 009 previously severed as discharge locations for miscellaneous waters including but not limited to stormwater runoff, AC cooling water, fire protection system water, waters associated with construction activities, and raw river water. These discharges have either been eliminated or directed to another outfall. Internal Outfall 001A served as a monitoring point for sanitary wastewaters. The facility no longer discharges sanitary wastewater through the NPDES permit. Sanitary wastewater generated at the facility is now managed through a septic system.

Facility Name: **TVA Colbert DSN001**

NPDES No.: **AL0003867**

$Q_d*C_d + Q_{d2}*C_{d2} + Q_s*C_s = Q_r*C_r$

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	Background Instream (C_s) Monthly Ave	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)
				ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	
1	Antimony		Metals	0	0	0	0	0	0	-
2	**Arsenic*,****	YES	Metals	0	0	0	0	0	0	0.574
3	Beryllium		Metals	0	0	0	0	0	0	-
4	Cadmium**		Metals	0	0	0	0	0	0	0.236
5	Chromium / Chromium III**		Metals	0	0	0	0	0	0	0.210
6	Chromium / Chromium VI**		Metals	0	0	0	0	0	0	
7	Copper**		Metals	0	0	0	0	0	0	0.388
8	Lead**		Metals	0	0	0	0	0	0	0.206
9	Mercury**		Metals	0	0	0	0	0.0102	0.00184	0.302
10	Nickel**		Metals	0	0	0	0	0	0	0.505
11	Selenium		Metals	0	0	0	0	0	0	-
12	Silver		Metals	0	0	0	0	0	0	-
13	Thallium		Metals	0	0	0	0	0	0	-
14	Zinc**		Metals	0	0	0	0	0	0	0.330
15	Cyanide		Metals	0	0	0	0	0	0	-
16	Total Phenolic Compounds		Metals	0	0	0	0	0	0	-
17	Hardness (As CaCO3)		Metals	0	0	0	0	0	0	-
18	Acrolein		VOC	0	0	0	0	0	0	-
19	**Acrylonitrile***	YES	VOC	0	0	0	0	0	0	-
20	**Aldrin**	YES	VOC	0	0	0	0	0	0	-
21	**Benzene***	YES	VOC	0	0	0	0	0	0	-
22	**Bromoform***	YES	VOC	0	0	0	0	0	0	-
23	**Carbon Tetrachloride***	YES	VOC	0	0	0	0	0	0	-
24	**Chlordane**	YES	VOC	0	0	0	0	0	0	-
25	Clorobenzene		VOC	0	0	0	0	0	0	-
26	**Chlorodibromo-Methane***	YES	VOC	0	0	0	0	0	0	-
27	Chloroethane		VOC	0	0	0	0	0	0	-
28	2-Chloro-Ethylvinyl Ether		VOC	0	0	0	0	0	0	-
29	**ChloroForm***	YES	VOC	0	0	0	0	0	0	-
30	**4,4'-DDD**	YES	VOC	0	0	0	0	0	0	-
31	**4,4'-DDE**	YES	VOC	0	0	0	0	0	0	-
32	**4.4'-DDT**	YES	VOC	0	0	0	0	0	0	-
33	**Dichlorobromo-Methane***	YES	VOC	0	0	0	0	0	0	-
34	1, 1-Dichloroethane		VOC	0	0	0	0	0	0	-
35	**1, 2-Dichloroethane***	YES	VOC	0	0	0	0	0	0	-
36	Trans-1, 2-Dichloro-Ethylene		VOC	0	0	0	0	0	0	-
37	**1, 1-Dichloroethylene***	YES	VOC	0	0	0	0	0	0	-
38	1, 2-Dichloropropane		VOC	0	0	0	0	0	0	-
39	1, 3-Dichloro-Propylene		VOC	0	0	0	0	0	0	-
40	**Dieldrin**	YES	VOC	0	0	0	0	0	0	-
41	Ethylbenzene		VOC	0	0	0	0	0	0	-
42	Methyl Bromide		VOC	0	0	0	0	0	0	-
43	Methyl Chloride		VOC	0	0	0	0	0	0	-
44	**Methylene Chloride***	YES	VOC	0	0	0	0	0	0	-
45	**1, 1, 2, 2-Tetrachloro-Ethane***	YES	VOC	0	0	0	0	0	0	-
46	**Tetrachloro-Ethylene***	YES	VOC	0	0	0	0	0	0	-
47	Toluene		VOC	0	0	0	0	0	0	-
48	**Toxaphene**	YES	VOC	0	0	0	0	0	0	-
49	**Tributyltine (TBT)**	YES	VOC	0	0	0	0	0	0	-
50	1, 1, 1-Trichloroethane		VOC	0	0	0	0	0	0	-
51	**1, 1, 2-Trichloroethane***	YES	VOC	0	0	0	0	0	0	-
52	**Trichlorethylene***	YES	VOC	0	0	0	0	0	0	-
53	**Vinyl Chloride***	YES	VOC	0	0	0	0	0	0	-
54	P-Chloro-M-Cresol		Acids	0	0	0	0	0	0	-
55	2-Chlorophenol		Acids	0	0	0	0	0	0	-
56	2, 4-Dichlorophenol		Acids	0	0	0	0	0	0	-
57	2, 4-Dimethylphenol		Acids	0	0	0	0	0	0	-
58	4, 6-Dinitro-O-Cresol		Acids	0	0	0	0	0	0	-
59	2, 4-Dinitrophenol		Acids	0	0	0	0	0	0	-
60	**4,6-Dintro-2-methylophenol**	YES	Acids	0	0	0	0	0	0	-
61	**Dioxin (2,3,7,8-TCDD)**	YES	Acids	0	0	0	0	0	0	-
62	2-Nitrophenol		Acids	0	0	0	0	0	0	-
63	4-Nitrophenol		Acids	0	0	0	0	0	0	-
64	**Pentachlorophenol***	YES	Acids	0	0	0	0	0	0	-
65	Phenol		Acids	0	0	0	0	0	0	-
66	**2, 4, 6-Trichlorophenol***	YES	Acids	0	0	0	0	0	0	-
67	Acenaphthene		Bases	0	0	0	0	0	0	-
68	Acenaphthylene		Bases	0	0	0	0	0	0	-
69	Anthracene		Bases	0	0	0	0	0	0	-
70	Benzidine		Bases	0	0	0	0	0	0	-
71	**Benzo(A)Anthracene***	YES	Bases	0	0	0	0	0	0	-
72	**Benzo(A)Pyrene***	YES	Bases	0	0	0	0	0	0	-
73	3, 4 Benzo-Fluoranthene		Bases	0	0	0	0	0	0	-
74	Benzo(GHI)Perylene		Bases	0	0	0	0	0	0	-
75	Benzo(K)Fluoranthene		Bases	0	0	0	0	0	0	-
76	Bis (2-Chloroethoxy) Methane		Bases	0	0	0	0	0	0	-
77	**Bis (2-Chloroethyl)-Ether***	YES	Bases	0	0	0	0	0	0	-
78	Bis (2-Chloroiso-Propyl) Ether		Bases	0	0	0	0	0	0	-
79	**Bis (2-Ethylhexyl) Phthalate***	YES	Bases	0	0	0	0	0	0	-
80	4-Bromophenyl Phenyl Ether		Bases	0	0	0	0	0	0	-
81	Butyl Benzyl Phthalate		Bases	0	0	0	0	0	0	-
82	2-Chloronaphthalene		Bases	0	0	0	0	0	0	-
83	4-Chlorophenyl Phenyl Ether		Bases	0	0	0	0	0	0	-
84	**Chrysene***	YES	Bases	0	0	0	0	0	0	-
85	Di-N-Butyl Phthalate		Bases	0	0	0	0	0	0	-
86	Di-N-Octyl Phthalate		Bases	0	0	0	0	0	0	-
87	**Dibenzo(A,H)Anthracene***	YES	Bases	0	0	0	0	0	0	-
88	1, 2-Dichlorobenzene		Bases	0	0	0	0	0	0	-
89	1, 3-Dichlorobenzene		Bases	0	0	0	0	0	0	-
90	1, 4-Dichlorobenzene		Bases	0	0	0	0	0	0	-
91	**3, 3-Dichlorobenzidine***	YES	Bases	0	0	0	0	0	0	-
92	Diethyl Phthalate		Bases	0	0	0	0	0	0	-
93	Dimethyl Phthalate		Bases	0	0	0	0	0	0	-
94	**2, 4-Dinitrotoluene***	YES	Bases	0	0	0	0	0	0	-
95	2, 6-Dinitrotoluene		Bases	0	0	0	0	0	0	-
96	1,2-Diphenylhydrazine		Bases	0	0	0	0	0	0	-
97	**Endosulfan (alpha)**	YES	Bases	0	0	0	0	0	0	-
98	**Endosulfan (beta)**	YES	Bases	0	0	0	0	0	0	-
99	**Endosulfan sulfate**	YES	Bases	0	0	0	0	0	0	-
100	**Endrin**	YES	Bases	0	0	0	0	0	0	-
101	**Endrin Aldeyhide**	YES	Bases	0	0	0	0	0	0	-
102	Fluoranthene		Bases	0	0	0	0	0	0	-
103	Fluorene		Bases	0	0	0	0	0	0	-
104	Heptochlor	YES	Bases	0	0	0	0	0	0	-
105	Heptachlor Epoxide	YES	Bases	0	0	0	0	0	0	-
106	**Hexachlorobenzene***	YES	Bases	0	0	0	0	0	0	-
107	**Hexachlorobutadiene***	YES	Bases	0	0	0	0	0	0	-
108	**Hexachlorocyclohexan (alpa)**	YES	Bases	0	0	0	0	0	0	-
109	**Hexachlorocyclohexan (beta)**	YES	Bases	0	0	0	0	0	0	-
110	**Hexachlorocyclohexan (gamma)**	YES	Bases	0	0	0	0	0	0	-
111	HexachlorocycloPentadiene		Bases	0	0	0	0	0	0	-
112	Hexachloroethane		Bases	0	0	0	0	0	0	-
113	**Indeno(1, 2, 3-CK)Pyrene***	YES	Bases	0	0	0	0	0	0	-
114	Isophorone		Bases	0	0	0	0	0	0	-
115	Naphthalene		Bases	0	0	0	0	0	0	-
116	Nitrobenzene		Bases	0	0	0	0	0	0	-
117	**N-Nitrosodi-N-Propylamine***	YES	Bases	0	0	0	0	0	0	-
118	**N-Nitrosodi-N-Methylamine***	YES	Bases	0	0	0	0	0	0	-
119	**N-Nitrosodi-N-Phenylamine***	YES	Bases	0	0	0	0	0	0	-
120	**PCB-1016**	YES	Bases	0	0	0	0	0	0	-
121	**PCB-1221**	YES	Bases	0	0	0	0	0	0	-
122	**PCB-1232**	YES	Bases	0	0	0	0	0	0	-
123	**PCB-1242**	YES	Bases	0	0	0	0	0	0	-
124	**PCB-1248**	YES	Bases	0	0	0	0	0	0	-
125	**PCB-1254**	YES	Bases	0	0	0	0	0	0	-
126	**PCB-1260**	YES	Bases	0	0	0	0	0	0	-
127	Phenanthrene		Bases	0	0	0	0	0	0	-
128	Pyrene		Bases	0	0	0	0	0	0	-
129	1, 2, 4-Trichlorobenzene		Bases	0	0	0	0	0	0	-

0.871	Enter Q_d = wastewater discharge flow from facility (MGD)
1.34763646	Q_d = wastewater discharge flow (cfs) (this value is calculated from the MGD)
0	Enter flow from upstream discharge Qd2 = background stream flow in MGD above point of discharge
0	Qd2 = background stream flow from upstream source (cfs)
0.29	Enter 7Q10, Q_s = background stream flow in cfs above point of discharge
0.22	Enter or estimated, 1Q10, Q_s = background stream flow in cfs above point of discharge (1Q10 estimated at 75% of 7Q10)
87.17	Enter Mean Annual Flow, Q_s = background stream flow in cfs above point of discharge
0.97	Enter 7Q2, Q_s = background stream flow in cfs above point of discharge (For LWF class streams)
Enter in 1.e9	Enter C_s = background in-stream pollutant concentration in µg/l (assuming this is zero "0" unless there is data)
Q_d +Qd2+Q_s	Q_r = resultant in-stream flow, after discharge
Calculated on other	C_r = resultant in-stream pollutant concentration in µg/l in the stream (after complete mixing occurs)
100.00	Enter, Background Hardness above point of discharge (assumed 50 South of Birmingham and 100 North of Birmingham)
7.00 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

March 25, 2024

Facility Name: TVA Colbert DSN001

NPDES No.: AL0003867

Freshwater F&W classification.						Freshwater Acute (µg/l) Q_s =1Q10					Freshwater Chronic (µg/l) Q_s = 7Q10					Human Health Consumption Fish only (µg/l) Carcinogen Q_s = Annual Average Non-Carcinogen Q_s = 7Q10			
ID	Pollutant	RP?	Carcinogen yes	Background from upstream source (Cd2) Daily Max	Max Daily Discharge as reported by Applicant (C_{max})	Water Quality Criteria (C_a)	Draft Permit Limit (C_{max})	20% of Draft Permit Limit	RP?	Background from upstream source (Cd2) Monthly Ave	Avg Daily Discharge as reported by Applicant (C_{ave})	Water Quality Criteria (C_a)	Draft Permit Limit (C_{ave})	20% of Draft Permit Limit	RP?	Water Quality Criteria (C_a)	Draft Permit Limit (C_{ave})	20% of Draft Permit Limit	RP?
1	Antimony			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.54E+02	9.07E+01	No
2	Arsenic		YES	0	0	[illegible]	689.032	137.806	No	0	0	[illegible]	317.559	63.512	No	0.30	19.90	3.98	No
3	Berylium			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
4	Cadmium			0	0	[illegible]	9.926	1.985	No	0	0	[illegible]	1.267	0.253	No	-	-	-	-
5	Chromium/ Chromium III			0	0	[illegible]	3156.079	631.216	No	0	0	[illegible]	428.873	85.775	No	-	-	-	-
6	Chromium/ Chromium VI			0	0	[illegible]	18.612	3.722	No	0	0	[illegible]	13.367	2.673	No	-	-	-	-
7	Copper			0	0	[illegible]	40.291	8.058	No	0	0	[illegible]	28.049	5.610	No	-	-	-	-
8	Lead			0	0	[illegible]	364.681	72.936	No	0	0	[illegible]	14.846	2.969	No	-	-	-	-
9	Mercury			0	0.0102	[illegible]	2.792	0.558	No	0	0.00184	[illegible]	0.015	0.003	No	0.0424	0.0516	0.0103	No
10	Nickel			0	0	[illegible]	1078.564	215.713	No	0	0	[illegible]	125.144	25.029	No	9.93E+02	1.21E+03	2.41E+02	No
11	Selenium			0	0	[illegible]	23.265	4.653	No	0	0	[illegible]	6.076	1.215	No	[illegible]	2.95E+03	5.91E+02	No
12	Silver			0	0	[illegible]	3.742	0.748	No	0	0	-	-	-	-	-	-	-	-
13	Thallium			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	0.33	0.07	No
14	Zinc			0	0	[illegible]	413.061	82.612	No	0	0	[illegible]	435.035	87.007	No	1.49E+04	1.81E+04	3.62E+03	No
15	Cyanide			0	0	[illegible]	25.591	5.118	No	0	0	[illegible]	6.319	1.264	No	[illegible]	1.13E+04	2.27E+03	No
16	Total Phenolic Compounds			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
17	Hardness (As CaCO3)			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
18	Acrolein			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	6.56E+00	1.32E+00	No
19	Acrylonitrile		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	9.48E+00	1.89E+00	No
20	Aldrin		YES	0	0	[illegible]	3.490	0.698	No	0	0	-	-	-	-	[illegible]	1.93E-03	3.86E-04	No
21	Benzene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.02E+03	2.03E+02	No
22	Bromoform		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	5.17E+03	1.03E+03	No
23	Carbon Tetrachloride		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	6.29E+01	1.26E+01	No
24	Chlordane		YES	0	0	[illegible]	2.792	0.558	No	0	0	[illegible]	0.005	0.001	No	[illegible]	3.11E-02	6.21E-03	No
25	Clorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.10E+03	2.20E+02	No
26	Chlorodibromo-Methane		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.87E+02	9.73E+01	No
27	Chloroethane			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
28	2-Chloro-Ethylvinyl Ether			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
29	ChloroForm		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	6.70E+03	1.34E+03	No
30	4,4' - DDD		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.19E-02	2.38E-03	No
31	4,4' - DDE		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	8.41E-03	1.68E-03	No
32	4,4' - DDT		YES	0	0	1.100	1.280	0.256	No	0	0	0.001	0.001	0.000	No	[illegible]	8.41E-03	1.68E-03	No
33	Dichlorobromo-Methane		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	6.56E+02	1.32E+02	No
34	1, 1-Dichloroethane			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
35	1, 2-Dichloroethane		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.40E+03	2.81E+02	No
36	Trans-1, 2-Dichloro-Ethylene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.18E+03	1.44E+03	No
37	1, 1-Dichloroethylene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.74E+05	5.47E+04	No
38	1, 2-Dichloropropane			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.03E+01	2.06E+00	No
39	1, 3-Dichloro-Propylene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.49E+01	2.98E+00	No
40	Dieldrin		YES	0	0	[illegible]	0.279	0.056	No	0	0	[illegible]	0.068	0.014	No	[illegible]	2.05E-03	4.10E-04	No
41	Ethylbenzene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.51E+03	3.02E+02	No
42	Methyl Bromide			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.06E+03	2.12E+02	No
43	Methyl Chloride			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
44	Methylene Chloride		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.27E+04	4.54E+03	No
45	1, 1, 2, 2-Tetrachloro-Ethane		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.53E+02	3.07E+01	No
46	Tetrachloro-Ethylene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.26E+02	2.52E+01	No
47	Toluene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.06E+04	2.12E+03	No
48	Toxaphene		YES	0	0	[illegible]	0.849	0.170	No	0	0	[illegible]	0.000	0.000	No	[illegible]	1.06E-02	2.13E-03	No
49	Tributyltin (TBT)		YES	0	0	[illegible]	0.535	0.107	No	0	0	[illegible]	0.067	0.017	No	-	-	-	-
50	1, 1, 1-Trichloroethane			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
51	1, 1, 2-Trichloroethane		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	5.98E+02	1.20E+02	No
52	Trichlorethylene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.15E+03	2.30E+02	No
53	Vinyl Chloride		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	9.36E+01	1.87E+01	No
54	P-Chloro-M-Cresol			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
55	2-Chlorophenol			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.06E+02	2.12E+01	No
56	2, 4-Dichlorophenol			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.09E+02	4.18E+01	No
57	2, 4-Dimethylphenol			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	6.05E+02	1.21E+02	No
58	4, 6-Dinitro-O-Cresol			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
59	2, 4-Dinitrophenol			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.78E+03	7.56E+02	No
60	4,6-Dinitro-2-methylphenol		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.09E+04	2.17E+03	No
61	Dioxin (2,3,7,8-TCDD)		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.75E-06	3.50E-07	No
62	2-Nitrophenol			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
63	4-Nitrophenol			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
64	Pentachlorophenol		YES	0	0	[illegible]	10.147	2.029	No	0	0	[illegible]	8.133	1.627	No	[illegible]	1.16E+02	2.32E+01	No
65	Phenol			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	6.08E+05	1.22E+05	No
66	2, 4, 6-Trichlorophenol		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	9.29E+01	1.86E+01	No
67	Acenaphthene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.03E+02	1.41E+02	No
68	Acenaphthylene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
69	Anthracene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.84E+04	5.67E+03	No
70	Benzidine			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.41E-04	2.82E-05	No
71	Benzo(A)Anthracene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.00E-01	1.40E-01	No
72	Benzo(A)Pyrene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.00E-01	1.40E-01	No
73	Benzo(b)fluoranthene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.29E-02	2.59E-03	No
74	Benzo(GHI)Perylene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
75	Benzo(K)Fluoranthene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.29E-02	2.59E-03	No
76	Bis (2-Chloroethoxy) Methane			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
77	Bis (2-Chloroethyl)-Ether		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.02E+01	4.04E+00	No
78	Bis (2-Chloroiso-Propyl) Ether			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.59E+04	9.18E+03	No
79	Bis (2-Ethylhexyl) Phthalate		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	8.42E+01	1.68E+01	No
80	4-Bromophenyl Phenyl Ether			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
81	Butyl Benzyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.37E+03	2.74E+02	No
82	2-Chloronaphthalene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.12E+03	2.25E+02	No
83	4-Chlorophenyl Phenyl Ether			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
84	Chrysene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.00E-01	1.40E-01	No
85	Di-N-Butyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.19E+03	6.37E+02	No
86	Di-N-Octyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
87	Dibenzo(A,H)Anthracene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.00E-01	1.40E-01	No
88	1, 2-Dichlorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	9.18E+02	1.84E+02	No
89	1, 3-Dichlorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	6.83E+02	1.37E+02	No
90	1, 4-Dichlorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.37E+02	2.73E+01	No
91	3, 3-Dichlorobenzidine		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.09E+00	2.18E-01	No
92	Diethyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.11E+04	6.21E+03	No
93	Dimethyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.88E+05	1.58E+05	No
94	2, 4-Dinitrotoluene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.30E+02	2.60E+01	No
95	2, 6-Dinitrotoluene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
96	1,2-Diphenylhydrazine			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.42E-01	2.85E-02	No
97	Endosulfan (alpha)		YES	0	0	[illegible]	0.256	0.051	No	0	0	[illegible]	0.068	0.014	No	[illegible]	3.41E+03	6.81E+02	No
98	Endosulfan (beta)		YES	0	0	[illegible]	0.256	0.051	No	0	0	[illegible]	0.068	0.014	No	[illegible]	3.41E+03	6.81E+02	No
99	Endosulfan sulfate		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.41E+03	6.81E+02	No
100	Endrin		YES	0	0	[illegible]	0.100	0.020	No	0	0	[illegible]	0.044	0.009	No	[illegible]	2.32E+00	4.63E-01	No
101	Endrin Aldeyhde		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.16E+01	2.32E+00	No
102	Fluoranthene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	9.86E+01	1.97E+01	No
103	Fluorene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.78E+03	7.56E+02	No
104	Heptochlor		YES	0	0	[illegible]	0.605	0.121	No	0	0	[illegible]	0.005	0.001	No	[illegible]	3.04E-03	6.08E-04	No
105	Heptachlor Epoxide		YES	0	0	[illegible]	0.605	0.121	No	0	0	[illegible]	0.005	0.001	No	[illegible]	1.50E-03	3.01E-04	No
106	Hexachlorobenzene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.10E-02	2.20E-03	No
107	Hexachlorobutadiene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.07E+02	1.41E+02	No
108	Hexachlorocyclohexan (alpha)		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.87E-01	3.74E-02	No
109	Hexachlorocyclohexan (beta)		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	6.55E-01	1.31E-01	No
110	Hexachlorocyclohexan (gamma)		YES	0	0	[illegible]	1.105	0.221	No	0	0	[illegible]	-	-	-	[illegible]	7.07E+01	1.41E+01	No
111	HexachlorocycloPentadiene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.84E+02	1.57E+02	No
112	Hexachloroethane			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.33E+00	4.66E-01	No
113	Indeno(1, 2, 3-CK)Pyrene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.00E-01	1.40E-01	No
114	Isophorone			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	6.81E+02	1.36E+02	No
115	Naphthalene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
116	Nitrobenzene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.91E+02	9.81E+01	No
117	N-Nitrosodi-N-Propylamine		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.94E+01	3.88E+00	No
118	N-Nitrosodimethylamine		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.16E+02	2.31E+01	No
119	N-Nitrosodiphenylamine		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.30E+02	4.60E+01	No
120	PCB-1016		YES	0	0	-	-	-	-	0	0	[illegible]	0.017	0.003	No	[illegible]	2.46E-03	4.91E-04	No
121	PCB-1221		YES	0	0	-	-	-	-	0	0	[illegible]	0.017	0.003	No	[illegible]	2.46E-03	4.91E-04	No
122	PCB-1232		YES	0	0	-	-	-	-	0	0	[illegible]	0.017	0.003	No	[illegible]	2.46E-03	4.91E-04	No
123	PCB-1242		YES	0	0	-	-	-	-	0	0	[illegible]	0.017	0.003	No	[illegible]	2.46E-03	4.91E-04	No
124	PCB-1248		YES	0	0	-	-	-	-	0	0	[illegible]	0.017	0.003	No	[illegible]	2.46E-03	4.91E-04	No
125	PCB-1254		YES	0	0	-	-	-	-	0	0	[illegible]	0.017	0.003	No	[illegible]	2.46E-03	4.91E-04	No
126	PCB-1260		YES	0	0	-	-	-	-	0	0	[illegible]	0.017	0.003	No	[illegible]	2.46E-03	4.91E-04	No
127	Phenanthrene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
128	Pyrene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.84E+03	5.67E+02	No
129	1, 2, 4-Trichlorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.97E+01	9.95E+00	No

NPDES Individual Permit Mod/Reissue (Form 187) - Supplementary Information for Industrial Facilities

version 2.7

(Submission #: HPS-5GK3-GK8PH, version 2)

Details

Submission ID HPS-5GK3-GK8PH

Form Input

General Instructions

This form should be used to submit the following permit requests for permitted Industrial Individual NPDES facilities

-Permit Transfers
-Permittee/Facility Name Changes
-Minor Modifications, for example:
> Frequency of monitoring or reporting modifications
> Changes to interim compliance dates in a schedule of compliance, not including the final compliance date.
> Removal of a point source outfall, provided the discharge is terminated and does not result in discharge of pollutants from other outfalls, except in accordance with permit limits.
-Major Modifications, (Any modifications not covered by minor mod◆s, whether Effluent Limit changes occur or not)
-Reissuances
-Reissuance of a permit due to approaching expiration
-Revocation and Reissuance of permit prior to its scheduled expiration

Applicable Base Fees:
-Permit Transfers and/or Permittee/Facility Name Changes
> $800
-Minor Modifications (see examples above)
> $3,940 (Major Sources)
> $3,120 (Minor Sources)
-Major Modifications
> $17,990 (Major Sources)
> $5,615 (Minor Sources)
-Reissuances
> $17,990 (Major Sources)
> $5,615 (Minor Sources)

For assistance, please click here to determine the permit staff responsible for the site or call (334) 271-7943

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

If applicable, briefly describe any planned changes at the facility that are included in this reissuance application:
NONE PROVIDED

General Information

SID Permit Number (if your facility currently holds an SID permit, please provide that number below):
NONE PROVIDED

NPDES or General Permit Numbers (if applicable, please list all permit numbers):
AL0003867

Is this facility/site only applying for permit coverage for discharges from stormwater?
No

Is a new stormwater outfall being added?
No

Permit Information

Permit Number
AL0003867

Current Permittee Name
Tennessee Valley Authority

Permittee

Permittee Name
Tennessee Valley Authority

Mailing Address

1101 Market Street LP 3K

Chattanooga, TN 37402

Per ADEM Admin. Code r. 335-6-6-.09 (1), a Responsible Official is defined as CEO, President, any position at a level of Vice President or higher, Owner, Partner, Managing Member (LLC), or ranking elected official. Please provide the contact information for the person meeting this definition.

Do NOT enter information for a person that is/will be a Duly Authorized Representative (DAR) (i.e. a person that has been delegated signatory permissions by a Responsible Official). A person that is a Duly Authorized Representative is NOT considered a RESPONSIBLE OFFICIAL.

Responsible Official

Prefix
Mr.

First Name	Last Name
David	*Bowling*

Title
Vice President Power Operations Gas, Hydro, & Integration

Organization Name
Tennessee Valley Authority

Phone Type	Number	Extension
Business	865-632-6964	

Email
dlbowling@tva.gov

Mailing Address

400 West Summit Hill DR
WT 11A-K
Knoxville, TN 37902

Does the Responsible Official intend to delegate signatory authority for DMRs or other compliance reports to an individual as a duly authorized representative (DAR) for this site?
No

Existing Permit Contacts

Affiliation Type	Contact Information	Remove?
Notification Recipient,Responsible Official	Allen A. Clare, Tennessee Valley Authority	Remove
DMR Contact	Mark B. Rutland, Tennessee Valley Authority	Remove
Permittee	Tennessee Valley Authority	Keep

Facility/Site Information

Facility/Site Name
Colbert Combustion Turbines Facility

Organization/Ownership Type
Federal

Facility/Site Address or Location Description
307 Gas Turbine RD
Tuscumbia, AL 35674

CORRECTION REQUEST *(CORRECTED)*
Facility Address Change

Per the Permittee's request to update the facility address from 900 Steam Plant Road to 307 Gas Turbine Road to reflect the location of power generation.
Created on 5/31/2023 8:59 AM by **Theo Pinson**

Facility/Site County
Colbert

Detailed Directions to the Facility/Site
Hwy 72 West from Florence, right on Steam plant Road

Facility Map

CCT site map.pdf - 05/01/2023 01:40 PM

Comment

NONE PROVIDED

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

Map Instruction Help

Facility/Site Front Gate Latitude and Longitude

34.74099999999999,-87.84940000000000

900 Colbert Steam Plant Rd, Tuscumbia, AL

SIC Code(s) [Please enter Primary SIC Code first followed by any additional applicable SIC Codes]

4911-Electric Services

NAICS Code(s) [Please enter Primary NAICS Code first followed by any additional applicable NAICS Codes]

221118-Other Electric Power Generation

Facility/Site Contact

Prefix

Mr.

First Name	Last Name
David	*Bowling*

Title

Vice President Power Operations Gas, Hydro, & Integration

Organization Name

Tennessee Valley Authority

Phone Type	Number	Extension
Business	865-632-6964	

Email

dlbowling@tva.gov

Address

400 West Summit Hill DR

WT 11A-K

Knoxville, TN 37902

DMR Contact(s) (1 of 1)

DMR Contact

Prefix

Mr.

First Name	Last Name
Micheal	*Gean*

Title

Environmental Scientist

Phone Type	Number	Extension
Business	265-386-2684	

Email

magean@tva.gov

Address

OSA 1D-M

Muscle Shoals, AL 35662

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

Business Activity

A facility with processes inclusive in the business areas shown below may be covered by Environmental Protection Agency's (EPA) categorical effluent guideline standards. These facilities are termed "categorical users". If unsure, please call the Industrial Section at (334) 271-7943 to discuss or use the link below to contact the Permit Engineer for the county the facility is/will be located in.
Industrial Section Assignment Map

If your facility conducts or will be conducting any of the processes listed below (regardless of whether they generate wastewater, waste sludge, or hazardous wastes), please check the category of business activity:
Steam and Electric

Give a brief description of all operations at this facility including primary products or services:
TVA plans to construct a new combustion turbine (CT) plant at CCT for commercial operation no later than December 31, 2023 due to the retirement of 1,400 megawatts of CTs at TVA's Allen and Johnsonville sites. The proposed Colbert CT plant would require up to 100 gpm of municipal water for inlet air evaporative cooling in summer ambient temperatures and for producing demineralized water for CT compressor washing. As shown on the enclosed schematic, approximately 0.020 million gallons per day of evaporative cooling water will be discharged via the existing Process Water Basin. The compressor wash water will be transported off site for disposal. TVA does not anticipate any impacts from increased thermal loading to the Process Water Basin which ultimately discharges to Cane Creek from this waste stream. All water needed for this facility would be provided from an existing public water supply.

Water Supply

Water Sources (check all that apply):
Municipal Water Utility

Please specify the City of the Municipal Water Utility:
Sheffield

Name of Utility	Million Gallons per Day (MGD)
Sheffield Utilities	0.020

Cooling Water Intake Structure Information

Does the provider of your source water operate a surface water intake?
No

Is the provider a public water system (defined as a system which provides water to the public for human consumption or which provides only treated water, not raw water)?
Yes

Outfalls (1 of 10)

001

Please click below if this discharge no longer exists or is no longer required:
NONE PROVIDED

Outfall Identifier
001

Receiving Water
Cane Creek

Does the discharge enter the named receiving water via an unnamed tributary?
NONE PROVIDED

Indicate if either of the following characteristics apply to this discharge:
Process Water commingled with Stormwater

Estimated Average Daily Flow (MGD)
0.871

Monitoring/Sampling Point Location
34.73750000000000, -87.84999999999999

Outfalls (2 of 10)

002

Please click below if this discharge no longer exists or is no longer required:
Delete this Outfall

Provide the reason this outfall is being deleted.
Outfall Location No Longer Exists

Outfall Identifier
002

Indicate if either of the following characteristics apply to this discharge:
Intermittent Discharge

Outfalls (3 of 10)

004

Please click below if this discharge no longer exists or is no longer required:
NONE PROVIDED

Outfall Identifier
004

Receiving Water
Cane Creek

Does the discharge enter the named receiving water via an unnamed tributary?
NONE PROVIDED

Indicate if either of the following characteristics apply to this discharge:
Intermittent Discharge

Estimated Average Daily Flow (MGD)
0.209

Monitoring/Sampling Point Location
34.74166700000000, -87.84999999999999

Outfalls (4 of 10)

005

Please click below if this discharge no longer exists or is no longer required:
Delete this Outfall

Provide the reason this outfall is being deleted.
Outfall Location No Longer Exists

Outfall Identifier
005

Indicate if either of the following characteristics apply to this discharge:
Intermittent Discharge

Outfalls (5 of 10)

009

Please click below if this discharge no longer exists or is no longer required:
Delete this Outfall

Provide the reason this outfall is being deleted.
Outfall Location No Longer Exists

Outfall Identifier
009

Indicate if either of the following characteristics apply to this discharge:
Intermittent Discharge

Outfalls (6 of 10)

010

Please click below if this discharge no longer exists or is no longer required:
NONE PROVIDED

Outfall Identifier
010

Receiving Water
Tennessee River

Does the discharge enter the named receiving water via an unnamed tributary?
NONE PROVIDED

Indicate if either of the following characteristics apply to this discharge:
Intermittent Discharge

Estimated Average Daily Flow (MGD)
0.164

Monitoring/Sampling Point Location
34.735288678134026,-87.83530710583497

Outfalls (7 of 10)

013

Please click below if this discharge no longer exists or is no longer required:
NONE PROVIDED

Outfall Identifier
013

Receiving Water
Cane Creek

Does the discharge enter the named receiving water via an unnamed tributary?
NONE PROVIDED

Indicate if either of the following characteristics apply to this discharge:
Intermittent Discharge

Estimated Average Daily Flow (MGD)
0.232

Monitoring/Sampling Point Location
34.74583300000000, -87.83333300000000

Outfalls (8 of 10)

016

Please click below if this discharge no longer exists or is no longer required:
NONE PROVIDED

Outfall Identifier
016

Receiving Water
Cane Creek

Does the discharge enter the named receiving water via an unnamed tributary?
NONE PROVIDED

Indicate if either of the following characteristics apply to this discharge:
Intermittent Discharge

Estimated Average Daily Flow (MGD)
0.083

Monitoring/Sampling Point Location
34.73750000000000, -87.84999999999999

Outfalls (9 of 10)

017

Please click below if this discharge no longer exists or is no longer required:
NONE PROVIDED

Outfall Identifier
017

Receiving Water
Cane Creek

Does the discharge enter the named receiving water via an unnamed tributary?
NONE PROVIDED

Indicate if either of the following characteristics apply to this discharge:
Intermittent Discharge

Estimated Average Daily Flow (MGD)
0.083

Monitoring/Sampling Point Location
34.73101731641237,-87.84640772232056

Outfalls (10 of 10)

018

Please click below if this discharge no longer exists or is no longer required:
Delete this Outfall

Provide the reason this outfall is being deleted.
Entered in Error

Outfall Identifier
018

Indicate if either of the following characteristics apply to this discharge:
None apply

Estimated Average Daily Flow (MGD)
0

Process Flow Schematic with Wastewater Treatment(s), If Applicable

For an example of a process flow diagram, please use the link below.
Figure 1: Example of Process Flow Schematic

Process Flow Schematic
CCT Flow Schematic.pdf - 03/15/2023 03:53 PM
Comment
NONE PROVIDED

Anti-Degradation Evaluation

Is this a new or increased discharge that began after April 3, 1991?
No

Additional Information

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	No

Current	Yes/No
Automatic Sampling Equipment	No

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

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

Please attach the process schematic with sampling equipment locations.

CCT Flow Schematic.pdf - 05/01/2023 01:43 PM

Comment

NONE PROVIDED

Are any process changes or expansions planned during the next three years that could alter wastewater volumes or characteristics (Consider production processes as well as air or water pollution treatment processes that may affect the discharge.)?

No

Do you use biocides, corrosion inhibitors, or chemical additives in your cooling or blowdown water?

No

Biocide/Corrosion Inhibitor Summary Sheet

NONE PROVIDED

Comment

NONE PROVIDED

Treatment

Is any form of wastewater treatment (see list below) practiced at this facility?

Yes

Treatment devices or processes used or proposed for treating wastewater or sludge (check as many as appropriate).

Sedimentation

Is any form of wastewater treatment (or changes to an existing wastewater treatment) planned for this facility within the next three years?

No

Facility Operational Characteristics

Indicate whether the facility discharge is:

Continuous through the year

Comments:

NONE PROVIDED

Non-Discharged Wastes

Are any waste liquids or sludges generated and not disposed of in the sanitary sewer system?

No

Does any outside firm remove any of the above checked wastes?

No

EPA Application Forms

All Applicants must submit certain EPA permit application forms. More than one application form may be required.

Form 1 - General Information Form required for all applications

Form 2C - Should be submitted for facilities with existing discharge(s) of process wastewater.

Form 2D - Should be submitted for facilities that have not yet commenced discharge(s) of process wastewater.

Form 2E - Should be submitted for facilities who discharge non-process wastewater, such as non-contact cooling water or boiler blowdown.

Form 2F - Should be submitted for all discharges of storm water associated with an industrial activity.
The EPA application forms are found on the Department's website here.

EPA Form 1

Signed_EPA_Form1.pdf - 05/02/2023 12:38 PM
Comment
NONE PROVIDED

Additional EPA Forms (EPA Form 2C, 2D, 2E and/or 2F)

Signed_Form2C.pdf - 05/02/2023 12:41 PM
DSN0011_Tables.pdf - 05/02/2023 12:44 PM
form_2f_Tables.pdf - 05/02/2023 12:45 PM
Form 2F Signature David Bowling Permit Colbert CT NPDES__05.02.2023.pdf - 05/02/2023 12:59 PM
Comment
NONE PROVIDED

Other attachments (as needed)

02c_CCT NPDES Form 1 - Attachment 1.pdf - 05/02/2023 12:47 PM
06_Section 3 - Outfall 0011 Attachment.pdf - 05/02/2023 12:48 PM
Comment
NONE PROVIDED

Additional Attachments

Please attach any additional information as needed.

NONE PROVIDED
Comment
NONE PROVIDED

Application Preparer

Application Preparer

Prefix
Mr.

First Name	**Last Name**
Craig	*Phillips*

Title
Water Permitting Specalist

Organization Name
TVA Water Permits, Compliance, & Monitoring Regulatory Environmental Programs

Phone Type	**Number**	**Extension**
Mobile	865-599-6183	

Email
clphillips@tva.gov

Address

400 West Summit Hill Drive

Knoxville, TN 37921

Revisions

Revision	Revision Date	Revision By
Revision 1	3/15/2023 1:40 PM	Craig Phillips
Revision 2	5/31/2023 1:47 PM	Craig Phillips

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.

"I certify under penalty of lawthat 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 further certify under penalty of lawthat all analyses reported as less than detectable in this application or attachments thereto were performed using the EPA approved test method having the lowest detection limit for the substance tested."

NOTE: 335-6-5-.14 SIGNATORIES TO PERMIT APPLICATIONS AND REPORTS.
The application shall be signed by a responsible official, a request for variance from categorical pretreatment standards, and a category determination request shall be signed by a responsible official, as indicated below.

- *In the case of a corporation, by a principal executive officer of at least the level of vice president;*
- *In the case of a partnership, by a general partner;*
- *In the case of a sole proprietorship, by the proprietor; or*
- *In the case of a municipal, state, federal, or other public entity, by either a principal executive officer, or ranking elected official*

Signed By David Bowling on 05/31/2023 at 5:12 PM

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
AL7640006675	AL0022080	Colbert CT	

Form 1 NPDES

EPA

U.S. Environmental Protection Agency
Application for NPDES Permit to Discharge Wastewater

GENERAL INFORMATION

SECTION 1. ACTIVITIES REQUIRING AN NPDES PERMIT (40 CFR 122.21(f) and (f)(1))

Activities Requiring an NPDES Permit

1.1 Applicants *Not Required* to Submit Form 1

1.1.1	Is the facility a new or existing **publicly owned treatment works**? If yes, STOP. Do NOT complete Form 1. Complete Form 2A. ☑ No	1.1.2	Is the facility a new or existing **treatment works treating domestic sewage**? If yes, STOP. Do NOT complete Form 1. Complete Form 2S. ☑ No

1.2 Applicants *Required* to Submit Form 1

1.2.1	Is the facility a **concentrated animal feeding operation** or a **concentrated aquatic animal production facility?** ☐ Yes → Complete Form 1 ***and*** Form 2B. ☑ No	1.2.2	Is the facility an **existing** manufacturing, commercial, mining, or silvicultural **facility** that **is currently discharging process wastewater?** ☑ Yes → Complete Form 1 ***and*** Form 2C. ☐ No
1.2.3	Is the facility a **new** manufacturing, commercial, mining, or silvicultural **facility** that has **not yet commenced to discharge?** ☐ Yes → Complete Form 1 ***and*** Form 2D. ☑ No	1.2.4	Is the facility a **new or existing** manufacturing, commercial, mining, or silvicultural **facility** that **discharges only nonprocess wastewater?** ☐ Yes → Complete Form 1 ***and*** Form 2E. ☑ No
1.2.5	Is the facility a **new or existing facility** whose discharge is composed entirely of **stormwater associated with industrial activity** or whose discharge is composed of **both stormwater and non-stormwater**? ☑ Yes → Complete Form 1 ***and*** Form 2F unless exempted by 40 CFR 122.26(b)(14)(x) or (b)(15). ☐ No		

SECTION 2. NAME, MAILING ADDRESS, AND LOCATION (40 CFR 122.21(f)(2))

Name, Mailing Address, and Location

2.1 Facility Name

TVA Colbert Combustion Turbine Plant

2.2 EPA Identification Number

AL7640006675

2.3 Facility Contact

Name (first and last)	Title	Phone number
David Bowling	Vice President Power Operations Gas, Hydr	(865) 632-6964

Email address
dlbowling@tva.gov

2.4 Facility Mailing Address

Street or P.O. box
400 West Summit Hill DR

City or town	State	ZIP code
Knoxville	TN	37902

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
AL7640006675	AL0022080	Colbert CT	

Name, Mailing Address, and Location Continued

2.5 **Facility Location**

Street, route number, or other specific identifier: 307 Gas Turbine Road

County name	County code (if known)	
Colbert		

City or town	State	ZIP code
Tuscumbia	Alabama	35674

SECTION 3. SIC AND NAICS CODES (40 CFR 122.21(f)(3))

SIC and NAICS Codes

3.1

SIC Code(s)	Description (optional)
4911	Electric Services

3.2

NAICS Code(s)	Description (optional)
22111	Electric Power Generation

SECTION 4. OPERATOR INFORMATION (40 CFR 122.21(f)(4))

Operator Information

4.1 **Name of Operator**

Tennessee Valley Authority

4.2 Is the name you listed in Item 4.1 also the owner?

☑ Yes ☐ No

4.3 **Operator Status**

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

☐ Private ☐ Other (specify) _____

4.4 **Phone Number of Operator**

(865) 632-6964

Operator Information Continued

4.5 **Operator Address**

Street or P.O. Box: 400 West Summit Hill DR

City or town	State	ZIP code
Knoxville	Tennessee	37902

Email address of operator: dlbowling@tva.gov

SECTION 5. INDIAN LAND (40 CFR 122.21(f)(5))

Indian Land

5.1 Is the facility located on Indian Land?

☐ Yes ☑ No

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
AL7640006675	AL0022080	Colbert CT	

SECTION 6. EXISTING ENVIRONMENTAL PERMITS (40 CFR 122.21(f)(6))

Existing Environmental Permits

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

☑ NPDES (discharges to surface water) AL0022080	☐ RCRA (hazardous wastes) AL7640006675	☐ UIC (underground injection of fluids)
☐ PSD (air emissions)	☐ Nonattainment program (CAA)	☐ NESHAPs (CAA)
☐ Ocean dumping (MPRSA)	☐ Dredge or fill (CWA Section 404)	☑ Other (specify) see attachment 1

SECTION 7. MAP (40 CFR 122.21(f)(7))

Map

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

☑ Yes ☐ No ☐ CAFO—Not Applicable (See requirements in Form 2B.)

SECTION 8. NATURE OF BUSINESS (40 CFR 122.21(f)(8))

Nature of Business

8.1 Describe the nature of your business.

The Colbert Facility is located between Tuscumbia and Cherokee, Alabama, on the south side of Pickwick Reservoir at Tennessee River Mile 245. The Colbert Combustion Turbine (CT) site consists of 8 simple cycle General Electric 7B combustion turbines with total generating capacity of 400MW. The dual fuel machines can be operated on either natural gas or low-sulfur diesel fuel.

SECTION 9. COOLING WATER INTAKE STRUCTURES (40 CFR 122.21(f)(9))

Cooling Water Intake Structures

9.1 Does your facility use cooling water?

☐ Yes ☑ No → SKIP to Item 10.1.

9.2 Identify the source of cooling water. (Note that facilities that use a cooling water intake structure as described at 40 CFR 125, Subparts I and J may have additional application requirements at 40 CFR 122.21(r). Consult with your NPDES permitting authority to determine what specific information needs to be submitted and when.)

SECTION 10. VARIANCE REQUESTS (40 CFR 122.21(f)(10))

Variance Requests

10.1 Do you intend to request or renew one or more of the variances authorized at 40 CFR 122.21(m)? (Check all that apply. Consult with your NPDES permitting authority to determine what information needs to be submitted and when.)

- ☐ Fundamentally different factors (CWA Section 301(n))
- ☐ Water quality related effluent limitations (CWA Section 302(b)(2))
- ☐ Non-conventional pollutants (CWA Section 301(c) and (g))
- ☐ Thermal discharges (CWA Section 316(a))
- ☑ Not applicable

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
AL7640006675	AL0022080	Colbert CT	

SECTION 11. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d))

Checklist and Certification Statement

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

Column 1	Column 2
☑ Section 1: Activities Requiring an NPDES Permit	☐ w/ attachments
☑ Section 2: Name, Mailing Address, and Location	☐ w/ attachments
☑ Section 3: SIC Codes	☐ w/ attachments
☑ Section 4: Operator Information	☐ w/ attachments
☑ Section 5: Indian Land	☐ w/ attachments
☑ Section 6: Existing Environmental Permits	☐ w/ attachments
☑ Section 7: Map	☑ w/ topographic map ☐ w/ additional attachments
☑ Section 8: Nature of Business	☐ w/ attachments
☐ Section 9: Cooling Water Intake Structures	☐ w/ attachments
☐ Section 10: Variance Requests	☐ w/ attachments
☑ Section 11: Checklist and Certification Statement	☐ w/ attachments

11.2 **Certification Statement**

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

Name (print or type first and last name)	Official title
David Bowling	Vice President Power Operations Gas, Hydro, & Integration
Signature 	Date signed **05/02/2023**

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AL7640006675	AL0003867	Colbert CT Facility	

Form 2C NPDES

U.S. Environmental Protection Agency
Application for NPDES Permit to Discharge Wastewater
EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURE OPERATIONS

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	Longitude
0011	Cane Creek	34° 44′ 15″ N	87° 51′ 00″ W
		° ′ ″	° ′ ″
		° ′ ″	° ′ ″

SECTION 2. LINE DRAWING (40 CFR 122.21(g)(2))

Line Drawing

2.1 Have you attached a line drawing to this application that shows the water flow through your facility with a water balance? (See instructions for drawing requirements. See Exhibit 2C–1 at end of instructions for example.)

☑ Yes ☐ No

SECTION 3. AVERAGE FLOWS AND TREATMENT (40 CFR 122.21(g)(3))

Average Flows and Treatment

3.1 For each outfall identified under Item 1.1, provide average flow and treatment information. Add additional sheets if necessary.

****Outfall Number**** 0011

Operations Contributing to Flow

Operation	Average Flow
See Attached	mgd
	mgd
	mgd
	mgd

Treatment Units

Description (include size, flow rate through each treatment unit, retention time, etc.)	Code from Table 2C-1	Final Disposal of Solid or Liquid Wastes Other Than by Discharge
See Attached		

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Average Flows and Treatment Continued

3.1 cont.

****Outfall Number**** _____

Operations Contributing to Flow

Operation	Average Flow
	mgd
	mgd
	mgd
	mgd

Treatment Units

Description (include size, flow rate through each treatment unit, retention time, etc.)	Code from Table 2C-1	Final Disposal of Solid or Liquid Wastes Other Than by Discharge

****Outfall Number**** _____

Operations Contributing to Flow

Operation	Average Flow
	mgd
	mgd
	mgd
	mgd

Treatment Units

Description (include size, flow rate through each treatment unit, retention time, etc.)	Code from Table 2C-1	Final Disposal of Solid or Liquid Wastes Other Than by Discharge

System Users

3.2 Are you applying for an NPDES permit to operate a privately owned treatment works?

☐ Yes ☑ No ➔ SKIP to Section 4.

3.3 Have you attached a list that identifies each user of the treatment works?

☐ Yes ☐ No

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SECTION 4. INTERMITTENT FLOWS (40 CFR 122.21(g)(4))

Intermittent Flows

4.1 Except for storm runoff, leaks, or spills, are any discharges described in Sections 1 and 3 intermittent or seasonal?

☐ Yes ☑ No ➔ SKIP to Section 5.

4.2 Provide information on intermittent or seasonal flows for each applicable outfall. Attach additional pages, if necessary.

Outfall Number	Operation (list)	Frequency		Flow Rate		Duration
		Average Days/Week	Average Months/Year	Long-Term Average	Maximum Daily	
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days

SECTION 5. PRODUCTION (40 CFR 122.21(g)(5))

Applicable ELGs

5.1 Do any effluent limitation guidelines (ELGs) promulgated by EPA under Section 304 of the CWA apply to your facility?

☐ Yes ☑ No ➔ SKIP to Section 6.

5.2 Provide the following information on applicable ELGs.

ELG Category	ELG Subcategory	Regulatory Citation

Production-Based Limitations

5.3 Are any of the applicable ELGs expressed in terms of production (or other measure of operation)?

☐ Yes ☑ No ➔ SKIP to Section 6.

5.4 Provide an actual measure of daily production expressed in terms and units of applicable ELGs.

Outfall Number	Operation, Product, or Material	Quantity per Day	Unit of Measure

SECTION 6. IMPROVEMENTS (40 CFR 122.21(g)(6))

Upgrades and Improvements

6.1 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?

☐ Yes ☑ No ➔ SKIP to Item 6.3.

6.2 Briefly identify each applicable project in the table below.

Brief Identification and Description of Project	Affected Outfalls (list outfall number)	Source(s) of Discharge	Final Compliance Dates	
			Required	Projected

6.3 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)*

☐ Yes ☐ No ☑ Not applicable

SECTION 7. EFFLUENT AND INTAKE CHARACTERISTICS (40 CFR 122.21(g)(7))

Effluent and Intake Characteristics

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.

Table A. Conventional and Non-Conventional Pollutants

7.1 Are you requesting a waiver from your NPDES permitting authority for one or more of the Table A pollutants for any of your outfalls?

☐ Yes ☑ No ➔ SKIP to Item 7.3.

7.2 If yes, indicate the applicable outfalls below. Attach waiver request and other required information to the application.

Outfall Number _____ Outfall Number _____ Outfall Number _____

7.3 Have you completed monitoring for all Table A pollutants at each of your outfalls for which a waiver has not been requested and attached the results to this application package?

☑ Yes ☐ No; a waiver has been requested from my NPDES permitting authority for all pollutants at all outfalls.

Table B. Toxic Metals, Cyanide, Total Phenols, and Organic Toxic Pollutants

7.4 Do any of the facility's processes that contribute wastewater fall into one or more of the primary industry categories listed in Exhibit 2C-3? (See end of instructions for exhibit.)

☑ Yes ☐ No ➔ SKIP to Item 7.8.

7.5 Have you checked "Testing Required" for all toxic metals, cyanide, and total phenols in Section 1 of Table B?

☑ Yes ☐ No

7.6 List the applicable primary industry categories and check the boxes indicating the required GC/MS fraction(s) identified in Exhibit 2C-3.

Primary Industry Category	Required GC/MS Fraction(s) (Check applicable boxes.)			
Fossil Fuel Electric Power Generation (gas-fired)	☑ Volatile	☑ Acid	☐ Base/Neutral	☐ Pesticide
	☐ Volatile	☐ Acid	☐ Base/Neutral	☐ Pesticide
	☐ Volatile	☐ Acid	☐ Base/Neutral	☐ Pesticide

Effluent and Intake Characteristics Continued

7.7	Have you checked "Testing Required" for all required pollutants in Sections 2 through 5 of Table B for each of the GC/MS fractions checked in Item 7.6? ☑ Yes ☐ No
7.8	Have you checked "Believed Present" or "Believed Absent" for all pollutants listed in Sections 1 through 5 of Table B where testing is not required? ☑ Yes ☐ No
7.9	Have you provided (1) quantitative data for those Section 1, Table B, pollutants for which you have indicated testing is required or (2) quantitative data or other required information for those Section 1, Table B, pollutants that you have indicated are "Believed Present" in your discharge? ☑ Yes ☐ No
7.10	Does the applicant qualify for a small business exemption under the criteria specified in the instructions? ☐ Yes ➔ Note that you qualify at the top of Table B, then SKIP to Item 7.12. ☑ No
7.11	Have you provided (1) quantitative data for those Sections 2 through 5, Table B, pollutants for which you have determined testing is required or (2) quantitative data or an explanation for those Sections 2 through 5, Table B, pollutants you have indicated are "Believed Present" in your discharge? ☐ Yes ☑ No
Table C. Certain Conventional and Non-Conventional Pollutants	
7.12	Have you indicated whether pollutants are "Believed Present" or "Believed Absent" for all pollutants listed on Table C for all outfalls? ☑ Yes ☐ No
7.13	Have you completed Table C by providing (1) quantitative data for those pollutants that are limited either directly or indirectly in an ELG and/or (2) quantitative data or an explanation for those pollutants for which you have indicated "Believed Present"? ☑ Yes ☐ No
Table D. Certain Hazardous Substances and Asbestos	
7.14	Have you indicated whether pollutants are "Believed Present" or "Believed Absent" for all pollutants listed in Table D for all outfalls? ☑ Yes ☐ No
7.15	Have you completed Table D by (1) describing the reasons the applicable pollutants are expected to be discharged and (2) by providing quantitative data, if available? ☑ Yes ☐ No
Table E. 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (2,3,7,8-TCDD)	
7.16	Does the facility use or manufacture one or more of the 2,3,7,8-TCDD congeners listed in the instructions, or do you know or have reason to believe that TCDD is or may be present in the effluent? ☐ Yes ➔ Complete Table E. ☑ No ➔ SKIP to Section 8.
7.17	Have you completed Table E by reporting *qualitative* data for TCDD? ☐ Yes ☐ No

SECTION 8. USED OR MANUFACTURED TOXICS (40 CFR 122.21(g)(9))

Used or Manufactured Toxics

8.1	Is any pollutant listed in Table B a substance or a component of a substance used or manufactured at your facility as an intermediate or final product or byproduct? ☐ Yes ☑ No ➔ SKIP to Section 9.
8.2	List the pollutants below.

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

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AL7640006675	AL0003867	Colbert CT Facility	

SECTION 9. BIOLOGICAL TOXICITY TESTS (40 CFR 122.21(g)(11))

Biological Toxicity Tests

9.1 Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made within the last three years on (1) any of your discharges or (2) on a receiving water in relation to your discharge?

☐ Yes ☑ No ➔ SKIP to Section 10.

9.2 Identify the tests and their purposes below.

Test(s)	Purpose of Test(s)	Submitted to NPDES Permitting Authority?	Date Submitted
		☐ Yes ☐ No	
		☐ Yes ☐ No	
		☐ Yes ☐ No	

SECTION 10. CONTRACT ANALYSES (40 CFR 122.21(g)(12))

Contract Analyses

10.1 Were any of the analyses reported in Section 7 performed by a contract laboratory or consulting firm?

☑ Yes ☐ No ➔ SKIP to Section 11.

10.2 Provide information for each contract laboratory or consulting firm below.

	Laboratory Number 1	Laboratory Number 2	Laboratory Number 3
Name of laboratory/firm	Pace Analytical National		
Laboratory address	12065 Lebanon RD Mount Juliet, TN 37122		
Phone number	(615) 758-5858		
Pollutant(s) analyzed	All pollutants except field parameters.		

SECTION 11. ADDITIONAL INFORMATION (40 CFR 122.21(g)(13))

Additional Information

11.1 Has the NPDES permitting authority requested additional information?

☐ Yes ☑ No ➔ SKIP to Section 12.

11.2 List the information requested and attach it to this application.

1.	4.
2.	5.
3.	6.

SECTION 12. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d))

Checklist and Certification Statement

12.1 In Column 1 below, mark the sections of Form 2C 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			
☑ Section 1: Outfall Location	☑ w/ attachments			
☑ Section 2: Line Drawing	☑ w/ line drawing		☐ w/ additional attachments	
☑ Section 3: Average Flows and Treatment	☑ w/ attachments		☐ w/ list of each user of privately owned treatment works	
☑ Section 4: Intermittent Flows	☐ w/ attachments			
☑ Section 5: Production	☐ w/ attachments			
☑ Section 6: Improvements	☐ w/ attachments		☐ w/ optional additional sheets describing any additional pollution control plans	
☑ Section 7: Effluent and Intake Characteristics	☐ w/ request for a waiver and supporting information		☐ w/ explanation for identical outfalls	
	☐ w/ small business exemption request		☐ w/ other attachments	
	☑ w/ Table A		☑ w/ Table B	
	☑ w/ Table C		☑ w/ Table D	
	☑ w/ Table E		☐ w/ analytical results as an attachment	
☑ Section 8: Used or Manufactured Toxics	☐ w/ attachments			
☑ Section 9: Biological Toxicity Tests	☐ w/ attachments			
☑ Section 10: Contract Analyses	☐ w/ attachments			
☑ Section 11: Additional Information	☐ w/ attachments			
☑ Section 12: Checklist and Certification Statement	☐ w/ attachments			

12.2 **Certification Statement**

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

Name (print or type first and last name)	Official title
David Bowling	VP Power Operations, Gas, Hydro, & Innov
Signature 	Date signed **05/02/2023**

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AL7640006675	AL0022080	Colbert CT Facility	0011

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

TABLE A. CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(iii))[1]

	Pollutant	Waiver Requested (if applicable)	Units (specify)		Effluent: Maximum Daily Discharge (required)	Effluent: Maximum Monthly Discharge (if available)	Effluent: Long-Term Average Daily Discharge (if available)	Effluent: Number of Analyses	Intake (Optional): Long-Term Average Value	Intake (Optional): Number of Analyses
☐	Check here if you have applied to your NPDES permitting authority for a waiver for *all* of the pollutants listed on this table for the noted outfall.									
1.	Biochemical oxygen demand (BOD_5)	☐	Concentration	mg/l	<3.33			1		
			Mass							
2.	Chemical oxygen demand (COD)	☐	Concentration	mg/L	<20.0			1		
			Mass							
3.	Total organic carbon (TOC)	☐	Concentration	mg/L	1.91			1		
			Mass							
4.	Total suspended solids (TSS)	☐	Concentration	mg/L	6.99			1		
			Mass							
5.	Ammonia (as N)	☐	Concentration	mg/L	<0.250			1		
			Mass							
6.	Flow	☐	Rate							
7.	Temperature (winter)	☐	°C	°C						
	Temperature (summer)	☐	°C	°C						
8.	pH (minimum)	☐	Standard units	s.u.						
	pH (maximum)	☐	Standard units	s.u.						

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

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EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
☐	Check here if you qualify as a small business per the instructions to Form 2C and, therefore, do not need to submit quantitative data for any of the organic toxic pollutants in Sections 2 through 5 of this table. Note, however, that you must still indicate in the appropriate column of this table if you believe any of the pollutants listed are present in your discharge.											
Section 1. Toxic Metals, Cyanide, and Total Phenols												
1.1	Antimony, total (7440-36-0)	☐	☑	☐	Concentration	mg/L	<0.005			1		
					Mass							
1.2	Arsenic, total (7440-38-2)	☐	☑	☐	Concentration	mg/L	<0.001			1		
					Mass							
1.3	Beryllium, total (7440-41-7)	☐	☑	☐	Concentration	mg/L	<0.001			1		
					Mass							
1.4	Cadmium, total (7440-43-9)	☐	☑	☐	Concentration	mg/L	<0.001			1		
					Mass							
1.5	Chromium, total (7440-47-3)	☐	☑	☐	Concentration	mg/L	<0.02			1		
					Mass							
1.6	Copper, total (7440-50-8)	☐	☑	☐	Concentration	mg/L	<0.001			1		
					Mass							
1.7	Lead, total (7439-92-1)	☐	☑	☐	Concentration	mg/L	<0.002			1		
					Mass							
1.8	Mercury, total (7439-97-6)	☐	☑	☐	Concentration	mg/L	<0.002			1		
					Mass							
1.9	Nickel, total (7440-02-0)	☐	☑	☐	Concentration	mg/L	<0.002			1		
					Mass							
1.10	Selenium, total (7782-49-2)	☐	☑	☐	Concentration	mg/L	<0.002			1		
					Mass							
1.11	Silver, total (7440-22-4)	☐	☑	☐	Concentration	mg/L	<0.001			1		
					Mass							

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	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
1.12	Thallium, total (7440-28-0)	☐	☑	☐	Concentration	mg/L	<0.001			1		
					Mass							
1.13	Zinc, total (7440-66-6)	☐	☑	☐	Concentration	mg/L	<0.02			1		
					Mass							
1.14	Cyanide, total (57-12-5)	☐	☐	☑	Concentration							
					Mass							
1.15	Phenols, total	☐	☐	☑	Concentration							
					Mass							
Section 2. Organic Toxic Pollutants (GC/MS Fraction—Volatile Compounds)												
2.1	Acrolein (107-02-8)	☐	☑	☐	Concentration	mg/L	<0.05			1		
					Mass							
2.2	Acrylonitrile (107-13-1)	☐	☑	☐	Concentration	mg/L	<0.01			1		
					Mass							
2.3	Benzene (71-43-2)	☐	☑	☐	Concentration	mg/L	<0.001			1		
					Mass							
2.4	Bromoform (75-25-2)	☐	☑	☐	Concentration	mg/L	<0.001			1		
					Mass							
2.5	Carbon tetrachloride (56-23-5)	☐	☑	☐	Concentration	mg/L	<0.001			1		
					Mass							
2.6	Chlorobenzene (108-90-7)	☐	☑	☐	Concentration	mg/L	<0.001			1		
					Mass							
2.7	Chlorodibromomethane (124-48-1)	☐	☑	☐	Concentration	mg/L	<0.001			1		
					Mass							
2.8	Chloroethane (75-00-3)	☐	☑	☐	Concentration	mg/L	<0.005			1		
					Mass							

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	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
2.9	2-chloroethylvinyl ether (110-75-8)	☐	☐	☑	Concentration							
					Mass							
2.10	Chloroform (67-66-3)	☐	☐	☑	Concentration							
					Mass							
2.11	Dichlorobromomethane (75-27-4)	☐	☐	☑	Concentration							
					Mass							
2.12	1,1-dichloroethane (75-34-3)	☐	☐	☑	Concentration							
					Mass							
2.13	1,2-dichloroethane (107-06-2)	☐	☐	☑	Concentration							
					Mass							
2.14	1,1-dichloroethylene (75-35-4)	☐	☐	☑	Concentration							
					Mass							
2.15	1,2-dichloropropane (78-87-5)	☐	☐	☑	Concentration							
					Mass							
2.16	1,3-dichloropropylene (542-75-6)	☐	☐	☑	Concentration							
					Mass							
2.17	Ethylbenzene (100-41-4)	☐	☐	☑	Concentration							
					Mass							
2.18	Methyl bromide (74-83-9)	☐	☐	☑	Concentration							
					Mass							
2.19	Methyl chloride (74-87-3)	☐	☐	☑	Concentration							
					Mass							
2.20	Methylene chloride (75-09-2)	☐	☐	☑	Concentration							
					Mass							
2.21	1,1,2,2- tetrachloroethane (79-34-5)	☐	☐	☑	Concentration							
					Mass							

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	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
2.22	Tetrachloroethylene (127-18-4)	☐	☐	☑	Concentration							
					Mass							
2.23	Toluene (108-88-3)	☐	☐	☑	Concentration							
					Mass							
2.24	1,2-trans-dichloroethylene (156-60-5)	☐	☐	☑	Concentration							
					Mass							
2.25	1,1,1-trichloroethane (71-55-6)	☐	☐	☑	Concentration							
					Mass							
2.26	1,1,2-trichloroethane (79-00-5)	☐	☐	☑	Concentration							
					Mass							
2.27	Trichloroethylene (79-01-6)	☐	☐	☑	Concentration							
					Mass							
2.28	Vinyl chloride (75-01-4)	☐	☐	☑	Concentration							
					Mass							
Section 3. Organic Toxic Pollutants (GC/MS Fraction—Acid Compounds)												
3.1	2-chlorophenol (95-57-8)	☐	☐	☑	Concentration							
					Mass							
3.2	2,4-dichlorophenol (120-83-2)	☐	☐	☑	Concentration							
					Mass							
3.3	2,4-dimethylphenol (105-67-9)	☐	☐	☑	Concentration							
					Mass							
3.4	4,6-dinitro-o-cresol (534-52-1)	☐	☐	☑	Concentration							
					Mass							
3.5	2,4-dinitrophenol (51-28-5)	☐	☐	☑	Concentration							
					Mass							

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	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
3.6	2-nitrophenol (88-75-5)	☐	☐	☑	Concentration							
					Mass							
3.7	4-nitrophenol (100-02-7)	☐	☐	☑	Concentration							
					Mass							
3.8	p-chloro-m-cresol (59-50-7)	☐	☐	☑	Concentration							
					Mass							
3.9	Pentachlorophenol (87-86-5)	☐	☐	☑	Concentration							
					Mass							
3.10	Phenol (108-95-2)	☐	☐	☑	Concentration							
					Mass							
3.11	2,4,6-trichlorophenol (88-05-2)	☐	☐	☑	Concentration							
					Mass							
Section 4: Organic Toxic Pollutants (GC/MS Fraction—Base /Neutral Compounds)												
4.1	Acenaphthene (83-32-9)	☐	☐	☑	Concentration							
					Mass							
4.2	Acenaphthylene (208-96-8)	☐	☐	☑	Concentration							
					Mass							
4.3	Anthracene (120-12-7)	☐	☐	☑	Concentration							
					Mass							
4.4	Benzidine (92-87-5)	☐	☐	☑	Concentration							
					Mass							
4.5	Benzo (a) anthracene (56-55-3)	☐	☐	☑	Concentration							
					Mass							
4.6	Benzo (a) pyrene (50-32-8)	☐	☐	☑	Concentration							
					Mass							

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	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
4.7	3,4-benzofluoranthene (205-99-2)	☐	☐	☑	Concentration							
					Mass							
4.8	Benzo (ghi) perylene (191-24-2)	☐	☐	☑	Concentration							
					Mass							
4.9	Benzo (k) fluoranthene (207-08-9)	☐	☐	☑	Concentration							
					Mass							
4.10	Bis (2-chloroethoxy) methane (111-91-1)	☐	☐	☑	Concentration							
					Mass							
4.11	Bis (2-chloroethyl) ether (111-44-4)	☐	☐	☑	Concentration							
					Mass							
4.12	Bis (2-chloroisopropyl) ether (102-80-1)	☐	☐	☑	Concentration							
					Mass							
4.13	Bis (2-ethylhexyl) phthalate (117-81-7)	☐	☐	☑	Concentration							
					Mass							
4.14	4-bromophenyl phenyl ether (101-55-3)	☐	☐	☑	Concentration							
					Mass							
4.15	Butyl benzyl phthalate (85-68-7)	☐	☐	☑	Concentration							
					Mass							
4.16	2-chloronaphthalene (91-58-7)	☐	☐	☑	Concentration							
					Mass							
4.17	4-chlorophenyl phenyl ether (7005-72-3)	☐	☐	☑	Concentration							
					Mass							
4.18	Chrysene (218-01-9)	☐	☐	☑	Concentration							
					Mass							
4.19	Dibenzo (a,h) anthracene (53-70-3)	☐	☐	☑	Concentration							
					Mass							

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	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
4.20	1,2-dichlorobenzene (95-50-1)	☐	☐	☑	Concentration							
					Mass							
4.21	1,3-dichlorobenzene (541-73-1)	☐	☐	☑	Concentration							
					Mass							
4.22	1,4-dichlorobenzene (106-46-7)	☐	☐	☑	Concentration							
					Mass							
4.23	3,3-dichlorobenzidine (91-94-1)	☐	☐	☑	Concentration							
					Mass							
4.24	Diethyl phthalate (84-66-2)	☐	☐	☑	Concentration							
					Mass							
4.25	Dimethyl phthalate (131-11-3)	☐	☐	☑	Concentration							
					Mass							
4.26	Di-n-butyl phthalate (84-74-2)	☐	☐	☑	Concentration							
					Mass							
4.27	2,4-dinitrotoluene (121-14-2)	☐	☐	☑	Concentration							
					Mass							
4.28	2,6-dinitrotoluene (606-20-2)	☐	☐	☑	Concentration							
					Mass							
4.29	Di-n-octyl phthalate (117-84-0)	☐	☐	☑	Concentration							
					Mass							
4.30	1,2-Diphenylhydrazine (as azobenzene) (122-66-7)	☐	☐	☑	Concentration							
					Mass							
4.31	Fluoranthene (206-44-0)	☐	☐	☑	Concentration							
					Mass							
4.32	Fluorene (86-73-7)	☐	☐	☑	Concentration							
					Mass							

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	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
4.33	Hexachlorobenzene (118-74-1)	☐	☐	☑	Concentration							
					Mass							
4.34	Hexachlorobutadiene (87-68-3)	☐	☐	☑	Concentration							
					Mass							
4.35	Hexachlorocyclopentadiene (77-47-4)	☐	☐	☑	Concentration							
					Mass							
4.36	Hexachloroethane (67-72-1)	☐	☐	☑	Concentration							
					Mass							
4.37	Indeno (1,2,3-cd) pyrene (193-39-5)	☐	☐	☑	Concentration							
					Mass							
4.38	Isophorone (78-59-1)	☐	☐	☑	Concentration							
					Mass							
4.39	Naphthalene (91-20-3)	☐	☐	☑	Concentration							
					Mass							
4.40	Nitrobenzene (98-95-3)	☐	☐	☑	Concentration							
					Mass							
4.41	N-nitrosodimethylamine (62-75-9)	☐	☐	☑	Concentration							
					Mass							
4.42	N-nitrosodi-n-propylamine (621-64-7)	☐	☐	☑	Concentration							
					Mass							
4.43	N-nitrosodiphenylamine (86-30-6)	☐	☐	☑	Concentration							
					Mass							
4.44	Phenanthrene (85-01-8)	☐	☐	☑	Concentration							
					Mass							
4.45	Pyrene (129-00-0)	☐	☐	☑	Concentration							
					Mass							

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	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
4.46	1,2,4-trichlorobenzene (120-82-1)	☐	☐	☑	Concentration							
					Mass							
Section 5. Organic Toxic Pollutants (GC/MS Fraction—Pesticides)												
5.1	Aldrin (309-00-2)	☐	☐	☑	Concentration							
					Mass							
5.2	α-BHC (319-84-6)	☐	☐	☑	Concentration							
					Mass							
5.3	β-BHC (319-85-7)	☐	☐	☑	Concentration							
					Mass							
5.4	γ-BHC (58-89-9)	☐	☐	☑	Concentration							
					Mass							
5.5	δ-BHC (319-86-8)	☐	☐	☑	Concentration							
					Mass							
5.6	Chlordane (57-74-9)	☐	☐	☑	Concentration							
					Mass							
5.7	4,4'-DDT (50-29-3)	☐	☐	☑	Concentration							
					Mass							
5.8	4,4'-DDE (72-55-9)	☐	☐	☑	Concentration							
					Mass							
5.9	4,4'-DDD (72-54-8)	☐	☐	☑	Concentration							
					Mass							
5.10	Dieldrin (60-57-1)	☐	☐	☑	Concentration							
					Mass							
5.11	α-endosulfan (115-29-7)	☐	☐	☑	Concentration							
					Mass							

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AL7640006675	AL0022080	Colbert CT Facility	0011

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
5.12	β-endosulfan (115-29-7)	☐	☐	☑	Concentration							
					Mass							
5.13	Endosulfan sulfate (1031-07-8)	☐	☐	☑	Concentration							
					Mass							
5.14	Endrin (72-20-8)	☐	☐	☑	Concentration							
					Mass							
5.15	Endrin aldehyde (7421-93-4)	☐	☐	☑	Concentration							
					Mass							
5.16	Heptachlor (76-44-8)	☐	☐	☑	Concentration							
					Mass							
5.17	Heptachlor epoxide (1024-57-3)	☐	☐	☑	Concentration							
					Mass							
5.18	PCB-1242 (53469-21-9)	☐	☐	☑	Concentration							
					Mass							
5.19	PCB-1254 (11097-69-1)	☐	☐	☑	Concentration							
					Mass							
5.20	PCB-1221 (11104-28-2)	☐	☐	☑	Concentration							
					Mass							
5.21	PCB-1232 (11141-16-5)	☐	☐	☑	Concentration							
					Mass							
5.22	PCB-1248 (12672-29-6)	☐	☐	☑	Concentration							
					Mass							
5.23	PCB-1260 (11096-82-5)	☐	☐	☑	Concentration							
					Mass							
5.24	PCB-1016 (12674-11-2)	☐	☐	☑	Concentration							
					Mass							

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
5.25	Toxaphene (8001-35-2)	☐	☐	☑	Concentration							
					Mass							

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

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EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
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TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))[1]

	Pollutant	Presence or Absence (check one)		Units (specify)		Effluent				Intake (Optional)	
		Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
☐	Check here if you believe all pollutants on Table C to be ***present*** in your discharge from the noted outfall. You need *not* complete the "Presence or Absence" column of Table C for *each* pollutant.										
☐	Check here if you believe all pollutants on Table C to be ***absent*** in your discharge from the noted outfall. You need *not* complete the "Presence or Absence" column of Table C for *each* pollutant.										
1.	Bromide (24959-67-9)	☑	☐	Concentration	mg/L	<1.00			1		
				Mass							
2.	Chlorine, total residual	☐	☑	Concentration							
				Mass							
3.	Color	☑	☐	Concentration	PCU	20			1		
				Mass							
4.	Fecal coliform	☐	☑	Concentration							
				Mass							
5.	Fluoride (16984-48-8)	☑	☐	Concentration	mg/L	0.150			1		
				Mass							
6	Nitrate-nitrite	☑	☐	Concentration	mg/L	<0.100			1		
				Mass							
7.	Nitrogen, total organic (as N)	☑	☐	Concentration	mg/L	0.924			1		
				Mass							
8.	Oil and grease	☐	☐	Concentration							
				Mass							
9.	Phosphorus (as P), total (7723-14-0)	☑	☐	Concentration	mg/L	<0.100			1		
				Mass							
10.	Sulfate (as SO_4) (14808-79-8)	☑	☐	Concentration	mg/L	40.3			1		
				Mass							
11.	Sulfide (as S)	☑	☐	Concentration	mg/L	0.0500			1		
				Mass							

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TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))[1]

	Pollutant	Presence or Absence (check one)		Units (specify)		Effluent				Intake (Optional)	
		Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
12.	Sulfite (as SO_3) (14265-45-3)	☐	☑	Concentration							
				Mass							
13.	Surfactants	☑	☐	Concentration	mg/L	<0.100			1		
				Mass							
14.	Aluminum, total (7429-90-5)	☑	☐	Concentration	mg/L	0.267			1		
				Mass							
15.	Barium, total (7440-39-3)	☑	☐	Concentration	mg/L	0.0547			1		
				Mass							
16.	Boron, total (7440-42-8)	☑	☐	Concentration	mg/L	0.150			1		
				Mass							
17.	Cobalt, total (7440-48-4)	☑	☐	Concentration	mg/L	<0.002			1		
				Mass							
18.	Iron, total (7439-89-6)	☑	☐	Concentration	mg/L	0.156			1		
				Mass							
19.	Magnesium, total (7439-95-4)	☑	☐	Concentration	mg/L	3.19			1		
				Mass							
20.	Molybdenum, total (7439-98-7)	☑	☐	Concentration	mg/L	<0.005			1		
				Mass							
21.	Manganese, total (7439-96-5)	☑	☐	Concentration	mg/L	<0.0306			1		
				Mass							
22.	Tin, total (7440-31-5)	☑	☐	Concentration	mg/L	<0.004			1		
				Mass							
23.	Titanium, total (7440-32-6)	☑	☐	Concentration	mg/L	0.0118			1		
				Mass							

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TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))[1]

	Pollutant	Presence or Absence (check one)		Units (specify)	Effluent				Intake (Optional)	
		Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
24.	**Radioactivity**									
	Alpha, total	☐	☑	Concentration						
				Mass						
	Beta, total	☐	☑	Concentration						
				Mass						
	Radium, total	☐	☑	Concentration						
				Mass						
	Radium 226, total	☐	☑	Concentration						
				Mass						

[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. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
1.	Asbestos	☐	☑		
2.	Acetaldehyde	☐	☑		
3.	Allyl alcohol	☐	☑		
4.	Allyl chloride	☐	☑		
5.	Amyl acetate	☐	☑		
6.	Aniline	☐	☑		
7.	Benzonitrile	☐	☑		
8.	Benzyl chloride	☐	☑		
9.	Butyl acetate	☐	☑		
10.	Butylamine	☐	☑		
11.	Captan	☐	☑		
12.	Carbaryl	☐	☑		
13.	Carbofuran	☐	☑		
14.	Carbon disulfide	☐	☑		
15.	Chlorpyrifos	☐	☑		
16.	Coumaphos	☐	☑		
17.	Cresol	☐	☑		
18.	Crotonaldehyde	☐	☑		
19.	Cyclohexane	☐	☑		

TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
20.	2,4-D (2,4-dichlorophenoxyacetic acid)	☐	☑		
21.	Diazinon	☐	☑		
22.	Dicamba	☐	☑		
23.	Dichlobenil	☐	☑		
24.	Dichlone	☐	☑		
25.	2,2-dichloropropionic acid	☐	☑		
26.	Dichlorvos	☐	☑		
27.	Diethyl amine	☐	☑		
28.	Dimethyl amine	☐	☑		
29.	Dintrobenzene	☐	☑		
30.	Diquat	☐	☑		
31.	Disulfoton	☐	☑		
32.	Diuron	☐	☑		
33.	Epichlorohydrin	☐	☑		
34.	Ethion	☐	☑		
35.	Ethylene diamine	☐	☑		
36.	Ethylene dibromide	☐	☑		
37.	Formaldehyde	☐	☑		
38.	Furfural	☐	☑		

TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
39.	Guthion	☐	☑		
40.	Isoprene	☐	☑		
41.	Isopropanolamine	☐	☑		
42.	Kelthane	☐	☑		
43.	Kepone	☐	☑		
44.	Malathion	☐	☑		
45.	Mercaptodimethur	☐	☑		
46.	Methoxychlor	☐	☑		
47.	Methyl mercaptan	☐	☑		
48.	Methyl methacrylate	☐	☑		
49.	Methyl parathion	☐	☑		
50.	Mevinphos	☐	☑		
51.	Mexacarbate	☐	☑		
52.	Monoethyl amine	☐	☑		
53.	Monomethyl amine	☐	☑		
54.	Naled	☐	☑		
55.	Naphthenic acid	☐	☑		
56.	Nitrotoluene	☐	☑		
57.	Parathion	☐	☑		

TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
58.	Phenolsulfonate	☐	☑		
59.	Phosgene	☐	☑		
60.	Propargite	☐	☑		
61.	Propylene oxide	☐	☑		
62.	Pyrethrins	☐	☑		
63.	Quinoline	☐	☑		
64.	Resorcinol	☐	☑		
65.	Strontium	☐	☑		
66.	Strychnine	☐	☑		
67.	Styrene	☐	☑		
68.	2,4,5-T (2,4,5-trichlorophenoxyacetic acid)	☐	☑		
69.	TDE (tetrachlorodiphenyl ethane)	☐	☑		
70.	2,4,5-TP [2-(2,4,5-trichlorophenoxy) propanoic acid]	☐	☑		
71.	Trichlorofon	☐	☑		
72.	Triethanolamine	☐	☑		
73.	Triethylamine	☐	☑		
74.	Trimethylamine	☐	☑		
75.	Uranium	☐	☑		
76.	Vanadium	☐	☑		

TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
77.	Vinyl acetate	☐	☑		
78.	Xylene	☐	☑		
79.	Xylenol	☐	☑		
80.	Zirconium	☐	☑		

[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 E. 2,3,7,8 TETRACHLORODIBENZO P DIOXIN (2,3,7,8 TCDD) (40 CFR 122.21(g)(7)(viii))

Pollutant	TCDD Congeners Used or Manufactured	Presence or Absence (check one)		Results of Screening Procedure
		Believed Present	Believed Absent	
2,3,7,8-TCDD	☐	☐	☑	

Permit Name	Permit Number	Held by
Air Permits (U1-U8 turbines)	701-0010-Z001 through -Z008	Colbert Fossil Plant
Air Permits (U1-U5 boilers)	701-0010-Z009 through -Z013	Colbert Fossil Plant
NPDES Permit	AL0003867	Colbert Fossil Plant
Construction Storm Water Permit	ALR109175	Colbert Fossil Plant
RCRA ID	AL7640006675 (ID#)	Colbert Fossil Plant

Section 3. Average Flows and Treatment (40 CFR 122.21(g)(3)) – Attachment

Outfall Number 0011	
Operations Contributing to Flow	
Operation	**Average Flow (MGD)**
Process Basin:	**0.871**
(a) Simple Cycle Power Block – EVAP Blowdown Oil-Water Separator	(0.020)
(c) CT Fuel Tank secondary containment oil-water separator	(0.004)
(d) CT yard area runoff	(0.200)
(e) Precipitation	(0.022)
(f) Less evaporation	(-0.015)

Treatment Units		
Description	**Code from Table 2C-1**	**Final Disposal of Solid or Liquid Wastes Other Than by Discharge**
Discharge to surface water Settling Neutralization / pH adjustment Precipitation Coagulation Flocculation	**4-A** **1-U** **2-K** **2-C** **2-D** **1-G**	Any solids removed from the Process Water Basin would be managed as a solid waste and properly disposed.

United States Environmental Protection Agency | Office of Water Washington, D.C. | EPA Form 3510-2E Revised March 2019

Water Permits Division

EPA

Application Form 2E

Manufacturing, Commercial, Mining, and Silvicultural Facilities Which Discharge Only Nonprocess Wastewater

NPDES Permitting Program

Note: Complete this form ***and*** Form 1 if your facility is a new or existing manufacturing, commercial, mining, and silvicultural facility that discharges only nonprocess wastewater.

Paperwork Reduction Act Notice

The U.S. Environmental Protection Agency estimates the average burden to collect and complete Form 2E to be 13.5 hours. This estimate includes time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing and reviewing the collection of information. Send comments about the burden estimate or any other aspect of this collection of information to the Chief, Information Policy Branch (PM-223), U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, Washington, DC 20503, marked "Attention: Desk Officer for EPA."

General Instructions

Who Must Complete Form 2E?

You must complete Form 2E if you answered "Yes" to Item 1.2.4 on Form 1—that is, if you are a new or existing facility (including manufacturing, commercial, mining, and silvicultural facilities) that discharges only nonprocess wastewater.

Where to File Your Completed Form

Submit your completed application package (Forms 1 and 2E) to your National Pollutant Discharge Elimination System (NPDES) permitting authority. Consult Exhibit 1–1 of Form 1's "General Instructions" to identify your NPDES permitting authority.

Public Availability of Submitted Information

The U.S. Environmental Protection Agency (EPA) will make information from NPDES permit application forms available to the public for inspection and copying upon request. You may not claim any information on Form 2E (or related attachments) as confidential.

You may make a claim of confidentiality for any information that you submit to EPA that goes beyond the information required by Form 2E. Note that NPDES permitting authorities will deny claims for treating any effluent data as confidential. If you do not assert a claim of confidentiality at the time you submit your information to the NPDES permitting authority, EPA may make the information available to the public without further notice to you. EPA will handle claims of confidentiality in accordance with the Agency's business confidentiality regulations at Part 2 of Title 40 of the *Code of Federal Regulations* (CFR).

Completion of Forms

Print or type in the specified areas only. If you do not have enough space on the form to answer a question, you may continue on additional sheets, as necessary, using a format consistent with the form.

Provide your EPA Identification Number from the Facility Registry Service, NPDES permit number, and facility name at the top of each page of Form 2E and any attachments. If you do not know your EPA Identification Number, contact your NPDES permitting authority. See Exhibit 1–1 of Form 1's "General Instructions" for contact information.

Do not leave any response areas blank unless the form directs you to skip them. If the form directs you to respond to an item that does not apply to your facility or activity, enter "NA" for "not applicable" to demonstrate that you considered the item and determined a response was not necessary for your facility.

The NPDES permitting authority will consider your application complete when it and any supplementary material are received and completed according to the authority's satisfaction. The NPDES permitting authority will judge the completeness of any application independently of the status of any other permit application or permit for the same facility or activity.

Definitions

The legal definitions of all key terms used in these instructions and Form 2E are in the "Glossary" at the end of the "General Instructions" in Form 1.

Follow-up Requirements for New Dischargers

Note that no later than 24 months after commencement of discharge from the proposed facility, you must complete and submit Section 4 of this form. At that time you must test and report *actual* rather than estimated data for the pollutants or parameters listed, unless waived by the NPDES permitting authority.

Line-by-Line Instructions

If you have multiple outfalls, you must submit a separate Form 2E for each (Sections 1, 3, and 4 only).

Section 1. Outfall Location

Item 1.1. Complete sections 1 through 6 for each outfall. Provide the latitude and longitude to the nearest 15 seconds for the outfall. Latitude and longitude coordinates may be obtained in a variety of ways, including use of hand held devices (e.g., a GPS enabled smartphone), internet mapping tools (e.g., https://mynasadata.larc.nasa.gov/latitudelongitude-finder/), geographic information systems (e.g., ArcView), or paper maps from trusted sources (e.g., U.S. Geological Survey or USGS). The location of each outfall (i.e., where the coordinates are collected) shall be the point where the discharge is released into a water of the United States. If you need further guidance in responding to Item 1.1, refer to http://www.epa.gov/geospatial/latitudelongitude-data-standard.

Section 2. Discharge Date

Item 2.1. Indicate whether you are a new or an existing discharger. If you are an existing discharger, skip to Section 3 after completing this item.

Item 2.2. Indicate the date on which the facility will or is estimated to commence discharge.

Section 3. Waste Types

Item 3.1. Indicate the general type(s) of wastes being discharged or to be discharged, depending on whether you are an existing or new discharger. If you mark the response "Other Nonprocess Wastewater," specify the nature of your discharge.

Item 3.2. Indicate if the facility uses cooling water additives. If yes, continue. If no, skip to Section 4.

Item 3.3. List the cooling water additives being used (or to be used) and specify the composition of the additives, if such information is available to you. You can generally find composition information on product labels or from manufacturers' data sheets.

Section 4. Effluent Characteristics

Items 4.1 to 4.8. These items require you to collect and report data for the parameters and pollutants listed in Section 4. The instructions are distinct for applicants with existing discharges versus applicants that are new.

Important note: Read the "General Instructions for Reporting, Sampling, and Analysis" on pages 2E-3 and 2E-4 before completing Section 4.

Item 4.1. Indicate whether you have completed monitoring for all parameters in the table under Item 4.2 and attached it to the application package. If you answer "No" because you have requested a waiver from your NPDES authority, skip to Section 5. If "Yes," continue to Item 4.2.

Item 4.2. Provide the sampling data requested in the table per the "General Instructions for Reporting, Sampling, and Analysis" for biochemical oxygen demand (BOD), total suspended solids (TSS), oil and grease, ammonia (as N), flow, pH, and temperature (winter and summer).

Item 4.3. Answer whether you believe fecal coliform to be present in your discharge or whether sanitary waste is discharged (or will be discharged). If you answer "No," skip to Item 4.5. Otherwise, continue to Item 4.4.

Item 4.4. Provide the sampling data requested in the table per the "General Instructions for Reporting, Sampling, and Analysis" for fecal coliform, *Escherichia coli (E. coli)*, and enterococci.

Item 4.5. Indicate whether chlorine is used (or will be used). If no, skip to Item 4.7. Otherwise, continue to Item 4.6.

Item 4.6. Provide the sampling data requested in the table per the "General Instructions for Reporting, Sampling, and Analysis" for total residual chlorine.

Item 4.7. Answer whether non-contact cooling water is (or will be) discharged from your facility. If no, skip to Section 5. If yes, continue to Item 4.8.

Item 4.8. Provide the sampling data requested in the table per the "General Instructions for Reporting, Sampling, and Analysis" for chemical oxygen demand (COD), and total organic carbon (TOC).

Section 5. Flow

Item 5.1. Indicate whether any of the discharges that you described in Sections 1 and 3 (except for stormwater runoff, leaks, or spills) are intermittent or seasonal. If yes, continue to Item 5.2. If no, skip to Section 6.

Item 5.2. Describe the average frequency of flow and duration of any intermittent or seasonal discharge (except for stormwater runoff, leaks, or spills) in gallons or million gallons per day (gpd or mgd), whichever is appropriate. The frequency of flow is the number of days or months per year there is an intermittent discharge. Duration is the number of days or hours per discharge. For new dischargers, report your best estimate.

Section 6. Treatment System

Item 6.1. Briefly describe any treatment system(s) used (or to be used for new dischargers), indicating whether the treatment system is physical, chemical, biological, sludge and disposal, or other. Also give the particular type(s) of process(es) used (or to be used). For example, if a physical treatment system is used (or will be used), specify the processes applied (or to be applied), such as grit removal, ammonia stripping, dialysis, etc.

Section 7. Other Information

Item 7.1. OPTIONAL ITEM. Report any additional information or data (such as sampling results) that you believe the NPDES permitting authority should consider when establishing permit limitations. If you wish to demonstrate your eligibility for a "net" effluent limitation (i.e., an effluent limitation adjusted to provide credit for the pollutant(s) present in your intake water) add a short statement as to why you believe you are eligible. See also 40 CFR 122.45(g). You will be contacted by the NPDES permitting authority with further instructions.

Section 8. Checklist and Certification Statement

Item 8.1. Review the checklist provided on the application. In Column 1, mark the sections of Form 2E that you have completed and are submitting with your application. For each section in Column 2, indicate whether you are submitting attachments.

Item 8.2. The Clean Water Act (CWA) provides for severe penalties for submitting false information on this application form. CWA Section 309(c)(2) provides that "Any person who knowingly makes any false statement, representation, or certification in any application, ...shall upon conviction, be punished by a fine of no more than $10,000 or by imprisonment for not more than six months, or both."

FEDERAL REGULATIONS AT 40 CFR 122.22 REQUIRE THIS APPLICATION TO BE SIGNED AS FOLLOWS:

A. For a corporation, by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (2) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

B. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively.

C. For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes: (1) The chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

END

Submit your completed Form 1, Form 2E, and all associated attachments (and any other required NPDES application forms) to your NPDES permitting authority.

General Instructions for Reporting, Sampling, and Analysis

Important note: Read these instructions before completing Section 4 of Form 2E.

General Items

Complete the applicable tables for each outfall at your facility. Be sure to note the EPA Identification Number, NPDES permit number, facility name, and applicable outfall number at the top of each page of any associated attachments.

You may report some or all of the required data by attaching separate sheets of paper instead of completing Section 4 for each of your outfalls so long as the sheets contain all of the required information and are similar in format to Section 4.

Reporting of Effluent Data

Report pollutant levels for all pollutants in Section 4 as concentration *and* total mass, with the exception of flow, pH, and temperature. Total mass is the total weight of pollutants discharged over a day.

Flow, temperature, pH, and fecal coliform organisms must be reported as mgd, degrees Celsius (°C), standard units, and most probable number per 100 milliliters (MPN/100 mL), respectively. Use the following abbreviations in the columns requiring "units" in Section 4.

Concentration	Mass
ppm = parts per million	lbs = pounds
mg/L = milligrams per liter	ton = tons (English tons)
ppb = parts per billion	mg = milligrams
µg/L = micrograms per liter	g = grams
MPN = most probable number per 100 milliliters	kg = kilograms T = tonnes (metric tons)

Existing Dischargers

You must provide at least one analysis for each parameter or pollutant, including the following: BOD, TSS, oil and grease, ammonia (as N), fecal coliform including *E. coli* and enterococci (if believed present or if sanitary waste is or will be discharged), total residual chlorine (if chlorine is or will be used), COD, and TOC (if non-contact cooling water is or will be discharged), discharge flow, pH, and temperature (winter and summer).

You may report quantitative data that you have collected over the past 365 days if they are representative of your current operations. The data reported must include maximum daily discharge, average daily discharge, and number of analyses. Most existing facilities routinely monitor the pollutants and parameters listed in Section 4 as part of their existing NPDES permit requirements.

You must collect and analyze samples in accordance with 40 CFR 136. Grab samples must be used for analyses of pH, temperature, total residual chlorine, oil and grease, fecal coliform (including *E. coli)*, and enterococci (previously known as fecal streptococcus) and volatile organic compounds. Twenty-four-hour composite samples must be used for all other pollutants, using at least four grab samples unless otherwise specified at 40 CFR 136. For a composite sample, only one analysis of the composite of aliquots is required.

If you have sampling and analysis questions, direct them to your NPDES permitting authority. The authority may request that you do additional testing, if appropriate, on a case-by-case basis under CWA Section 308.

New Dischargers

You must provide maximum daily and average daily discharge *estimates* for the parameters or pollutants listed in Section 4, unless specifically indicated on the form. Note that if you have the results of *actual* analyses for the listed parameters or pollutants, you are required to report those results rather than submit estimates.

Report or estimate all parameter or pollutant levels as concentration *and* as total mass, except for flow, pH, and temperature. Indicate the source of all estimates in the appropriate column in the Section 4 tables using the engineering study codes below. Note that you are required to conduct follow-up testing and reporting no later than two years once your facility commences discharge.

Engineering Report Codes

Actual data from pilot plants 1
Estimates from other engineering reports 2
Data from other similar plants 3
Best professional estimates 4
Others .....*specify on the form*

Base your determination of whether a pollutant will be present in your discharge on your knowledge of the proposed facility's use of maintenance chemicals and any analyses of your effluent or of any similar effluent. You may also provide the estimates based on available in-house or contractor engineering reports or any other studies performed on the proposed facility.

Pollutants Solely in Intake Water

If you expect a pollutant to be present solely because of its presence in your intake water, you must still provide an estimate or analytical result in Section 4; however, you should indicate in Section 7 in Item 7.1 that you believe the pollutant or parameter to be present only due to its presence in your source water. See the instructions under Item 7.1.

Testing Waivers

The NPDES permitting authority may waive the testing and reporting requirements for flow or any of the pollutants listed in Section 4 if you submit a written request for such a waiver before or with your application. Contact your NPDES permitting authority for more information.

Sampling

The collection of samples for the reported analyses should be supervised by a person experienced in performing sampling of industrial wastewater. You may contact your NPDES permitting authority for detailed guidance on sampling techniques and for answers to specific questions. See Exhibit 1–1 of Form 1 for contact information. Any specific requirements in the applicable analytical methods—for example, sample containers, sample preservation, holding times, and the collection of duplicate samples—must be followed.

General Instructions for Reporting, Sampling, and Analysis Continued	
The time when you sample should be representative of your normal operation, to the extent feasible, with all processes that contribute wastewater in normal operation, and with your treatment system operating properly with no system upsets. Collect samples from the center of the flow channel, where turbulence is at a maximum, at a site specified in your present NPDES permit, or at any site adequate for the collection of a representative sample. **Analysis** Except as specified below, all required quantitative data shall be collected in accordance with sufficiently sensitive analytical methods approved under 40 CFR 136 or required under 40 CFR chapter I, subchapter N or O. A method is "sufficiently sensitive" when: • The method minimum level (ML) is at or below the level of the applicable water quality criterion for the measured pollutant or pollutant parameter. • The method ML is above the water quality criterion, but the amount of the pollutant or pollutant parameter in the facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge. • The method has the lowest ML of the analytical methods approved under 40 CFR 136 or required under 40 CFR chapter I, subchapter N or O for the measured pollutant or pollutant parameter. Consistent with 40 CFR 136, you may provide matrix- or sample-specific MLs rather than the published levels. Further, where you can demonstrate that, despite a good faith effort to use a method that would otherwise meet the definition of "sufficiently sensitive," the analytical results are not consistent with the quality assurance (QA)/quality control (QC) specifications for that method, then the NPDES permitting authority may determine that the method is not performing adequately and the NPDES permitting authority should select a different method from the remaining EPA-approved methods that is sufficiently sensitive consistent with 40 CFR 122.21(e)(3)(i). Where no other EPA-approved methods exist, you must select a method consistent with 40 CFR 122.21(e)(3)(ii). When there is no analytical method that has been approved under 40 CFR 136; required under 40 CFR chapter I, subchapter N or O, and is not otherwise required by the NPDES permitting authority, you may use any suitable method but shall provide a description of the method. When selecting a suitable method, other factors such as a method's precision, accuracy, or resolution, may be considered when assessing the performance of the method.	

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004

FORM 2E NPDES

U.S. Environmental Protection Agency
Application for NPDES Permit to Discharge Wastewater

MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURAL FACILITIES WHICH DISCHARGE ONLY NONPROCESS WASTEWATER

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

Outfall Location

1.1 Provide information on each of the facility's outfalls in the table below.

Outfall Number	Receiving Water Name	Latitude	Longitude
		° 44′ 30″ N	87° 51′ 00″ W
		° ′ ″	° ′ ″
		° ′ ″	° ′ ″

SECTION 2. DISCHARGE DATE (40 CFR 122.21(h)(2))

Discharge Date

2.1 Are you a new or existing discharger? (Check only one response.)

☐ New discharger ☑ Existing discharger ➔ SKIP to Section 3.

2.2 Specify your anticipated discharge date:

SECTION 3. WASTE TYPES (40 CFR 122.21(h)(3))

Waste Types

3.1 What types of wastes are currently being discharged if you are an existing discharger or will be discharged if you are a new discharger? (Check all that apply.)

☐ Sanitary wastes
☐ Restaurant or cafeteria waste
☐ Non-contact cooling water
☑ Other nonprocess wastewater (describe/explain directly below)

Groundwater

3.2 Does the facility use cooling water additives?

☐ Yes ☑ No ➔ SKIP to Section 4.

3.3 List the cooling water additives used and describe their composition.

Cooling Water Additives (list)	Composition of Additives (if available to you)

SECTION 4. EFFLUENT CHARACTERISTICS (40 CFR 122.21(h)(4))

Effluent Characteristics

4.1 Have you completed monitoring for all parameters in the table below at each of your outfalls and attached the results to this application package?

☐ Yes ☑ No; a waiver has been requested from my NPDES permitting authority (attach waiver request and additional information) ➔ SKIP to Section 5.

4.2 Provide data as requested in the table below.[1] (See instructions for specifics.)

Parameter or Pollutant	Number of Analyses (if actual data reported)	Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Source (use codes per instructions)
		Mass	Conc.	Mass	Conc.	
Biochemical oxygen demand (BOD_5)						
Total suspended solids (TSS)						
Oil and grease						
Ammonia (as N)						
Discharge flow						
pH (report as range)						
Temperature (winter)						
Temperature (summer)						

[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).

Effluent Characteristics Continued

4.3 Is fecal coliform believed present, or is sanitary waste discharged (or will it be discharged)?

☐ Yes ☑ No ➔ SKIP to Item 4.5.

4.4 Provide data as requested in the table below.[1] (See instructions for specifics.)

Parameter or Pollutant	Number of Analyses (if actual data reported)	Maximum Daily Discharge (specify units) Mass	Maximum Daily Discharge (specify units) Conc.	Average Daily Discharge (specify units) Mass	Average Daily Discharge (specify units) Conc.	Source (Use codes per instructions.)
Fecal coliform						
E. coli						
Enterococci						

4.5 Is chlorine used (or will it be used)?

☐ Yes ☑ No ➔ SKIP to Item 4.7.

4.6 Provide data as requested in the table below.[1] (See instructions for specifics.)

Parameter or Pollutant	Number of Analyses (if actual data reported)	Maximum Daily Discharge (specify units) Mass	Maximum Daily Discharge (specify units) Conc.	Average Daily Discharge (specify units) Mass	Average Daily Discharge (specify units) Conc.	Source (use codes per instructions)
Total Residual Chlorine						

4.7 Is non-contact cooling water discharged (or will it be discharged)?

☐ Yes ☑ No ➔ SKIP to Section 5.

4.8 Provide data as requested in the table below.[1] (See instructions for specifics.)

Parameter or Pollutant	Number of Analyses (if actual data reported)	Maximum Daily Discharge (specify units) Mass	Maximum Daily Discharge (specify units) Conc.	Average Daily Discharge (specify units) Mass	Average Daily Discharge (specify units) Conc.	Source (use codes per instructions)
Chemical oxygen demand (COD)						
Total organic carbon (TOC)						

SECTION 5. FLOW (40 CFR 122.21(h)(5))

Flow

5.1 Except for stormwater water runoff, leaks, or spills, are any of the discharges you described in Sections 1 and 3 of this application intermittent or seasonal?

☑ Yes ➔ Complete this section. ☐ No ➔ SKIP to Section 6.

5.2 Briefly describe the frequency and duration of flow.

Low flows during winter/ spring. Typically dry during summer/ fall.

SECTION 6. TREATMENT SYSTEM (40 CFR 122.21(h)(6))

Treatment System

6.1 Briefly describe any treatment system(s) used (or to be used).

None

[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).

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004

SECTION 7. OTHER INFORMATION (40 CFR 122.21(h)(7))

Other Information

7.1 Use the space below to expand upon any of the above items. Use this space to provide any information you believe the reviewer should consider in establishing permit limitations. Attach additional sheets as needed.

SECTION 8. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d))

Checklist and Certification Statement

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

Column 1	Column 2
☐ Section 1: Outfall Location	☐ w/ attachments (e.g., responses for additional outfalls)
☐ Section 2: Discharge Date	☐ w/ attachments
☐ Section 3: Waste Types	☐ w/ attachments
☐ Section 4: Effluent Characteristics	☐ w/ attachments
☐ Section 5: Flow	☐ w/ attachments
☐ Section 6: Treatment System	☐ w/ attachments
☑ Section 7: Other Information	☐ w/ attachments
☐ Section 8: Checklist and Certification Statement	☐ w/ attachments

8.2 **Certification Statement**

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

Name (print or type first and last name)	Official title
David Bowling	Vice President Power Operations, Gas, Hydro, & Innovation
Signature 	Date signed 01/10/2024

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
AL7640006675	AL0003867	Cobert CT Facility	

Form 2F NPDES

EPA

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	Longitude
004	Cane Creek	34° ′ ″	° ′ ″
		° ′ ″	° ′ ″
		° ′ ″	° ′ ″
016	Cane Creek	34° 44′ 15″ N	87° 51′ 00″ W
017	Cane Creek	34° 43′ 45″ N	87° 50′ 45″ W
		° ′ ″	° ′ ″

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?

☐ Yes ☐ 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)

☐ Yes ☐ No

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AL7640006675	AL0003867	Cobert CT Facility	

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.)

☑ Yes ☐ No

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.

Outfall Number	Impervious Surface Area (within a mile radius of the facility)		Total Surface Area Drained (within a mile radius of the facility)	
004	7.8	specify units: acres	17.5	specify units: acres
010	0.0	specify units: acres	79.7	specify units: acres
013	0.0	specify units: acres	31.3	specify units: acres
016	0.0	specify units: acres	26.0	specify units: acres
017	0.0	specify units: acres	26.0	specify units: acres
		specify units		specify units

4.2 Provide a narrative description of the facility's significant material in the space below. (See instructions for content requirements.)

The CCT Integrated Pollution Prevention (IPP) Plan lists measures for oil spill prevention, containment, and clean up. All lawn areas around buildings are fertilized annually. In addition, small quantities of pesticides are applied for rodent and insect control. Herbicides are applied in areas only as needed. All fertilizers, pesticides, and herbicides are applied by TVA or certified contractor personnel according to manufacturer's recommended application rates.

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.)

Stormwater Treatment		
Outfall Number	Control Measures and Treatment	Codes from Exhibit 2F–1 (list)
DSN 013	Constructed Wetlands	X-X

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
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SECTION 5. NON STORMWATER DISCHARGES (40 CFR 122.26(c)(1)(i)(C))

Non-Stormwater Discharges

5.1 *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.*

Name (print or type first and last name)	Official title
David Bowling	
Signature	**Date signed**
David Bowling	**05/02/2023**

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
	None		

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.

None

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?

☐ Yes → See instructions regarding submission of *estimated* data.

☑ No → See instructions regarding submission of *actual* data.

Tables A, B, C, and D

7.2 Have you completed Table A for each outfall?

☑ Yes ☐ No

Discharge Information Continued

7.3	Is the facility subject to an effluent limitation guideline (ELG) or effluent limitations in an NPDES permit for its process wastewater? ☑ Yes ☐ No ➔ SKIP to Item 7.5.
7.4	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? ☑ Yes ☐ No
7.5	Do you know or have reason to believe any pollutants in Exhibit 2F–2 are present in the discharge? ☑ Yes ☐ No ➔ SKIP to Item 7.7.
7.6	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? ☑ Yes ☐ No
7.7	Do you qualify for a small business exemption under the criteria specified in the Instructions? ☐ Yes ➔ SKIP to Item 7.18. ☑ No
7.8	Do you know or have reason to believe any pollutants in Exhibit 2F–3 are present in the discharge? ☑ Yes ☐ No ➔ SKIP to Item 7.10.
7.9	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? ☑ Yes ☐ No
7.10	Do you expect any of the pollutants in Exhibit 2F–3 to be discharged in concentrations of 10 ppb or greater? ☑ Yes ☐ No ➔ SKIP to Item 7.12.
7.11	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? ☑ Yes ☐ No
7.12	Do you expect acrolein, acrylonitrile, 2,4-dinitrophenol, or 2-methyl-4,6-dinitrophenol to be discharged in concentrations of 100 ppb or greater? ☐ Yes ☑ No ➔ SKIP to Item 7.14.
7.13	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? ☐ Yes ☐ No
7.14	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)? ☑ Yes ☐ No
7.15	Do you know or have reason to believe any pollutants in Exhibit 2F–4 are present in the discharge? ☐ Yes ☑ No ➔ SKIP to Item 7.17.
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? ☐ Yes ☑ No
7.17	Have you provided information for the storm event(s) sampled in Table D? ☑ Yes ☐ No

Discharge Information Continued

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?

☐ Yes ☑ No → SKIP to Section 8.

7.19 List the pollutants below, including TCDD if applicable.

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?

☐ Yes ☑ 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?	Date Submitted
		☐ Yes ☐ No	
		☐ Yes ☐ No	
		☐ Yes ☐ 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 (on Tables A through C) performed by a contract laboratory or consulting firm?

☑ Yes ☐ 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	Pace Laboratory		
Laboratory address			
Phone number			
Pollutant(s) analyzed			

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
AL7640006675	AL0003867	Cobert CT Facility	

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
☑ Section 1	☑ w/ attachments (e.g., responses for additional outfalls)
☑ Section 2	☐ w/ attachments
☑ Section 3	☐ w/ site drainage map
☑ Section 4	☐ w/ attachments
☑ Section 5	☐ w/ attachments
☑ Section 6	☐ w/ attachments
☑ Section 7	☑ Table A ☐ w/ small business exemption request ☑ Table B ☐ w/ analytical results as an attachment ☑ Table C ☑ Table D
☑ Section 8	☐ w/attachments
☑ Section 9	☐ w/attachments (e.g., responses for additional contact laboratories or firms)
☑ Section 10	☐

10.2 **Certification Statement**

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

Name (print or type first and last name)	Official title
David Bowling	Vice President Power Operations, Gas, Hydro, & Innovation
Signature: David Bowling	Date signed: 05/02/2023

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AL7640006675	AL0003867	Colbert CT Plant	DSN 004

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

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	<5.44 mg/L		NA		1	
2.	Biochemical oxygen demand (BOD_5)	<3.33 mg/L	<3.33 mg/L	NA	NA	1	
3.	Chemical oxygen demand (COD)	<20.0 mg/L	<20.0 mg/L	NA	NA	1	
4.	Total suspended solids (TSS)	24.8 mg/L	12.0 mg/L	NA	NA	1	
5.	Total phosphorus	0.112 mg/L	<0.100 mg/L	NA	NA	1	
6.	Total Kjeldahl nitrogen (TKN)	0.344 mg/L	0.276 mg/L	NA	NA	1	
7.	Total nitrogen (as N)	0.739 mg/L	0.640 mg/L	NA	NA	1	
8.	pH (minimum)	7.74		NA		1	
	pH (maximum)	7.87		NA		1	

[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).

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AL7640006675	AL0003867	Colbert CT Plant	DSN 004

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

TABLE B. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(A))[1]

List each pollutant that is limited in an effluent limitation guideline (ELG) that the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number (if available)	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		
Copper	0.00378 mg/L	0.00301 mg/L	NA	NA	1	
Lead	0.00815 mg/L	0.00531 mg/L	NA	NA	1	
Nickel	<0.002 mg/L	<0.002 mg/L	NA	NA	1	
Selenium	<0.002 mg/L	<0.002 mg/L	NA	NA	1	
Silver	<0.001 mg/L	<0.001 mg/L	NA	NA	1	
Thallium	<0.001 mg/L	<0.001 mg/L	NA	NA	1	
Zinc	0.0226 mg/L	<0.020 mg/L	NA	NA	1	
Ammonia (as N)	<0.250 mg/L	<0.250 mg/L	NA	NA	1	
Kjeldahl Nitrogen	0.344 mg/L	0.276 mg/L	NA	NA	1	
Nitrate Nitrite	0.395 mg/L	0.364 mg/L	NA	NA	1	
Surfactants	0.154 mg/L	<0.100 mg/L	NA	NA	1	
Total Organic Nitrogen	0.739 mg/L	0.64 mg/L	NA	NA	1	
Mercury	<0.0002 mg/L	<0.0002 mg/L	NA	NA	1	
Sulfate	12.4 mg/L	12.5 mg/L	NA	NA	1	
Color	100 mg/L	20.0 PCU	NA	NA	1	

[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).

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AL7640006675	AL0003867	Colbert CT Plant	DSN 004

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TABLE B. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(A))[1]

List each pollutant that is limited in an effluent limitation guideline (ELG) that the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number (if available)	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		
Aluminum	0.424 mg/L	0.404 mg/L	NA	NA	1	
Iron	0.245 mg/L	0.226 mg/L	NA	NA	1	
Magnesium	2.31 mg/L	2.90 mg/L	NA	NA	1	
Manganese	0.0470 mg/L	0.0309 mg/L	NA	NA	1	
Molybdenum	<0.005 mg/L	<0.005 mg/L	NA	NA	1	
Boron	0.0932 mg/L	0.0856 mg/L	NA	NA	1	
Cobalt	<0.002 mg/L	<0.002 mg/L	NA	NA	1	

[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).

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AL7640006675	AL0003867	Colbert CT Plant	DSN 004

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TABLE C. TOXIC POLLUTANTS, CERTAIN HAZARDOUS SUBSTANCES, AND ASBESTOS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(B) and (vii))[1]

List each pollutant shown in Exhibits 2F–2, 2F–3, and 2F–4 that you know or have reason to believe is present. Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number (if available)	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		
Temperature	13 °C	NA	NA	NA	1	
Total Residual Chlorine	0.04 mg/L	NA	NA	NA	1	

[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).

EPA Identification Number	NPDES Permit Number	Facility name	Outfall Number
AL7640006675	AL0003867	Colbert CT Plant	DSN 004

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)
02/08/2023	11	0.60	148	8.886 MGD	8.886 MGD

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

The modified Rational Method was used to calculate the total flow.

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AL7640006675	AL0003867	Colbert CT Plant	DSN 010

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

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	<5.56 mg/L		NA		1	
2.	Biochemical oxygen demand (BOD_5)	<3.33 mg/L	<3.33 mg/L	NA	NA	1	
3.	Chemical oxygen demand (COD)	22.1 mg/L	26.1 mg/L	NA	NA	1	
4.	Total suspended solids (TSS)	<2.50 mg/L	<2.50 mg/L	NA	NA	1	
5.	Total phosphorus	0.365 mg/L	0.360 mg/L	NA	NA	1	
6.	Total Kjeldahl nitrogen (TKN)	0.535 mg/L	0.363 mg/L	NA	NA	1	
7.	Total nitrogen (as N)	2.57 mg/L	2.26 mg/L	NA	NA	1	
8.	pH (minimum)	7.78		NA		1	
	pH (maximum)	7.78		NA		1	

[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).

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AL7640006675	AL0003867	Colbert CT Plant	DSN 010

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

TABLE B. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(A))[1]

List each pollutant that is limited in an effluent limitation guideline (ELG) that the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number (if available)	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		
Copper	<0.01 mg/L	<0.001 mg/L	NA	NA	1	
Lead	<0.005 mg/L	<0.005 mg/L	NA	NA	1	
Nickel	<0.01 mg/L	<0.01 mg/L	NA	NA	1	
Selenium	<0.01 mg/L	<0.01 mg/L	NA	NA	1	
Silver	<0.005 mg/L	<0.005 mg/L	NA	NA	1	
Thallium	<0.01 mg/L	<0.010 mg/L	NA	NA	1	
Zinc	<0.05 mg/L	<0.05 mg/L	NA	NA	1	
Ammonia (as N)	<0.250 mg/L	<0.250 mg/L	NA	NA	1	
Kjeldahl Nitrogen	0.535 mg/L	0.363 mg/L	NA	NA	1	
Nitrate Nitrite	2.03 mg/L	1.90 mg/L	NA	NA	1	
Surfactants	<0.1 mg/L	<0.100 mg/L	NA	NA	1	
Total Organic Nitrogen	2.57 mg/L	2.26 mg/L	NA	NA	1	
Mercury	<0.0002 mg/L	<0.0002 mg/L	NA	NA	1	
Sulfate	<0.1 mg/L	27.4 mg/L	NA	NA	1	
Color	30.0 PCU	30.0 PCU	NA	NA	1	
Barium	0.049 mg/L	0.0507 mg/L	NA	NA	1	

[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).

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AL7640006675	AL0003867	Colbert CT Plant	DSN 010

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TABLE B. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(A))[1]

List each pollutant that is limited in an effluent limitation guideline (ELG) that the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number (if available)	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		
Aluminum	0.209 mg/L	<0.200 mg/L	NA	NA	1	
Iron	0.167 mg/L	<0.1 mg/L	NA	NA	1	
Magnesium	5.37 mg/L	7.71 mg/L	NA	NA	1	
Manganese	<0.01 mg/L	<0.01 mg/L	NA	NA	1	
Molybdenum	0.0784 mg/L	<0.005 mg/L	NA	NA	1	
Boron	0.528 mg/L	<0.200 mg/L	NA	NA	1	
Cobalt	<0.01 mg/L	<0.01 mg/L	NA	NA	1	

[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).

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AL7640006675	AL0003867	Colbert CT Plant	DSN 010

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TABLE C. TOXIC POLLUTANTS, CERTAIN HAZARDOUS SUBSTANCES, AND ASBESTOS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(B) and (vii))[1]

List each pollutant shown in Exhibits 2F–2, 2F–3, and 2F–4 that you know or have reason to believe is present. Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number (if available)	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		
Temperature	12°C	NA	NA	NA	1	
Total Residual Chlorine	0.04 mg/L	NA	NA	NA	1	

[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).

EPA Identification Number	NPDES Permit Number	Facility name	Outfall Number
AL7640006675	AL0003867	Colbert CT Plant	DSN 010

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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)
02/24/2023	34	0.38	174	27.785 MGD	27.785 MGD

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

The modified Rational Method was used to calculate the total flow.

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AL7640006675	AL0003867	Colbert CT Plant	DSN 013

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

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	<5.62 mg/L		NA		1	
2.	Biochemical oxygen demand (BOD_5)	<3.33 mg/L	<3.33 mg/L	NA	NA	1	
3.	Chemical oxygen demand (COD)	<20.0 mg/L	22.5 mg/L	NA	NA	1	
4.	Total suspended solids (TSS)	<2.50 mg/L	<2.50 mg/L	NA	NA	1	
5.	Total phosphorus	<0.1 mg/L	<0.1 mg/L	NA	NA	1	
6.	Total Kjeldahl nitrogen (TKN)	0.445 mg/L	0.406 mg/L	NA	NA	1	
7.	Total nitrogen (as N)	0.635 mg/L	<0.250 mg/L	NA	NA	1	
8.	pH (minimum)	6.75		NA		1	
	pH (maximum)	6.78		NA		1	

[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).

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AL7640006675	AL0003867	Colbert CT Plant	DSN 013

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TABLE B. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(A))[1]

List each pollutant that is limited in an effluent limitation guideline (ELG) that the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number (if available)	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		
Copper	<0.001 mg/L	<0.001 mg/L	NA	NA	1	
Lead	<0.002 mg/L	<0.002 mg/L	NA	NA	1	
Nickel	0.00446 mg/L	0.00475 mg/L	NA	NA	1	
Selenium	<0.002 mg/L	<0.002 mg/L	NA	NA	1	
Silver	<0.001 mg/L	<0.001 mg/L	NA	NA	1	
Thallium	<0.001 mg/L	<0.001 mg/L	NA	NA	1	
Zinc	<0.0200 mg/L	<0.020 mg/L	NA	NA	1	
Ammonia (as N)	<0.250 mg/L	<0.250 mg/L	NA	NA	1	
Kjeldahl Nitrogen	0.445 mg/L	0.406 mg/L	NA	NA	1	
Nitrate Nitrite	0.190 mg/L	0.186 mg/L	NA	NA	1	
Surfactants	<0.100 mg/L	<0.100 mg/L	NA	NA	1	
Total Organic Nitrogen	0.635 mg/L	0.592 mg/L	NA	NA	1	
Mercury	<0.0002 mg/L	<0.0002 mg/L	NA	NA	1	
Sulfate	148 mg/L	145 mg/L	NA	NA	1	
Color	10 PCU	10 PCU	NA	NA	1	
Barium	0.0211 mg/L	0.0235 mg/L	NA	NA	1	

[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).

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AL7640006675	AL0003867	Colbert CT Plant	DSN 013

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TABLE B. CERTAIN CONVENTIONAL AND NON-CONVENTIONAL POLLUTANTS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(A))[1]

List each pollutant that is limited in an effluent limitation guideline (ELG) that the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number (if available)	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		
Aluminum	<0.1 mg/L	<0.1 mg/L	NA	NA	1	
Iron	0.236 mg/L	0.246 mg/L	NA	NA	1	
Magnesium	3.18 mg/L	3.39 mg/L	NA	NA	1	
Manganese	5.77 mg/L	6.15 mg/L	NA	NA	1	
Molybdenum	0.00555 mg/L	0.00574 mg/L	NA	NA	1	
Boron	1.30 mg/L	1.25 mg/L	NA	NA	1	
Cobalt	0.0120 mg/L	0.0133 mg/L	NA	NA	1	

[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).

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AL7640006675	AL0003867	Colbert CT Plant	DSN 013

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TABLE C. TOXIC POLLUTANTS, CERTAIN HAZARDOUS SUBSTANCES, AND ASBESTOS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(B) and (vii))[1]

List each pollutant shown in Exhibits 2F–2, 2F–3, and 2F–4 that you know or have reason to believe is present. Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number (if available)	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		
Temperature	11.15 °C	NA	NA	NA	1	
Total Residual Chlorine	0.00 mg/L	NA	NA	NA	1	

[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).

EPA Identification Number	NPDES Permit Number	Facility name	Outfall Number
AL7640006675	AL0003867	Colbert CT Plant	DSN 013

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)
03/22/2023	14	0.67	112	14.880 MGD	14.880 MGD

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

The Modified Rational Method was used to calculate total flow.

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AL7640006675	AL0003867	Colbert CT Plant	DSN 016

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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	<5.62 mg/L		NA		1	
2.	Biochemical oxygen demand (BOD_5)	<3.33 mg/L	<3.33 mg/L	NA	NA	1	
3.	Chemical oxygen demand (COD)	<20.0 mg/L	<20.0 mg/L	NA	NA	1	
4.	Total suspended solids (TSS)	<2.50 mg/L	<2.50 mg/L	NA	NA	1	
5.	Total phosphorus	<0.100 mg/L	<0.100 mg/L	NA	NA	1	
6.	Total Kjeldahl nitrogen (TKN)	<0.250 mg/L	<0.250 mg/L	NA	NA	1	
7.	Total nitrogen (as N)	0.399 mg/L	0.367 mg/L	NA	NA	1	
8.	pH (minimum)	7.13		NA		1	
	pH (maximum)	7.14		NA		1	

[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).

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AL7640006675	AL0003867	Colbert CT Plant	DSN 016

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OMB No. 2040-0004

TABLE B. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(A))[1]

List each pollutant that is limited in an effluent limitation guideline (ELG) that the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number (if available)	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		
Copper	<0.250 mg/L	<0.001 mg/L	NA	NA	1	
Lead	<0.005 mg/L	<0.005 mg/L	NA	NA	1	
Nickel	<0.01 mg/L	<0.01 mg/L	NA	NA	1	
Selenium	<0.01 mg/L	<0.01 mg/L	NA	NA	1	
Silver	<0.005 mg/L	<0.005 mg/L	NA	NA	1	
Thallium	<0.01 mg/L	<0.01 mg/L	NA	NA	1	
Zinc	<0.05 mg/L	<0.05 mg/L	NA	NA	1	
Ammonia (as N)	<0.250 mg/L	<0.250 mg/L	NA	NA	1	
Kjeldahl Nitrogen	<0.250 mg/L	<0.250 mg/L	NA	NA	1	
Nitrate Nitrite	0.399 mg/L	0.367 mg/L	NA	NA	1	
Surfactants	<0.1 mg/L	<0.1 mg/L	NA	NA	1	
Total Organic Nitrogen	0.399 mg/L	0.367 mg/L	NA	NA	1	
Mercury	<0.0002 mg/L	<0.0002 mg/L	NA	NA	1	
Sulfate	28.3 mg/L	30.3 mg/L	NA	NA	1	
Color	5.00 PCU	5.00 PCU	NA	NA	1	
Barium	0.0254 mg/L	0.0265 mg/L	NA	NA	1	

[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).

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AL7640006675	AL0003867	Colbert CT Plant	DSN 016

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OMB No. 2040-0004

TABLE B. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(A))[1]

List each pollutant that is limited in an effluent limitation guideline (ELG) that the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number (if available)	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		
Aluminum	<0.2 mg/L	<0.2 mg/L	NA	NA	1	
Iron	<0.1 mg/L	<0.1 mg/L	NA	NA	1	
Magnesium	7.10 mg/L	7.71 mg/L	NA	NA	1	
Manganese	<0.01 mg/L	<0.01 mg/L	NA	NA	1	
Molybdenum	<0.005 mg/L	<0.005 mg/L	NA	NA	1	
Boron	<0.2 mg/L	<0.2 mg/L	NA	NA	1	
Cobalt	<0.01 mg/L	<0.01 mg/L	NA	NA	1	

[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).

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AL7640006675	AL0003867	Colbert CT Plant	DSN 016

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TABLE C. TOXIC POLLUTANTS, CERTAIN HAZARDOUS SUBSTANCES, AND ASBESTOS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(B) and (vii))[1]

List each pollutant shown in Exhibits 2F–2, 2F–3, and 2F–4 that you know or have reason to believe is present. Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number (if available)	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		
Temperature	14.7 °C	NA	NA	NA	1	
Total Residual Chlorine	0.01 mg/L	NA	NA	NA	1	

[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).

EPA Identification Number	NPDES Permit Number	Facility name	Outfall Number
AL7640006675	AL0003867	Colbert CT Plant	DSN 016

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

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)
02/24/2023	34	0.38	174	3.936 MGD	3.936 MGD

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

The modified Rational Method was used to calculate the total flow.

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AL7640006675	AL0003867	Colbert CT Plant	DSN 017

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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	<5.44 mg/L		NA		1	
2.	Biochemical oxygen demand (BOD_5)	<3.33 mg/L	6.72 mg/L	NA	NA	1	
3.	Chemical oxygen demand (COD)	43.3 mg/L	<20.0 mg/L	NA	NA	1	
4.	Total suspended solids (TSS)	<2.50 mg/L	<2.50 mg/L	NA	NA	1	
5.	Total phosphorus	0.174 mg/L	0.155 mg/L	NA	NA	1	
6.	Total Kjeldahl nitrogen (TKN)	0.825 mg/L	0.712 mg/L	NA	NA	1	
7.	Total nitrogen (as N)	0.948 mg/L	0.835 mg/L	NA	NA	1	
8.	pH (minimum)	7.03		NA		1	
	pH (maximum)	7.07		NA		1	

[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).

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AL7640006675	AL0003867	Colbert CT Plant	DSN 017

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TABLE B. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(A))[1]

List each pollutant that is limited in an effluent limitation guideline (ELG) that the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number (if available)	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		
Copper	<0.001 mg/L	<0.001 mg/L	NA	NA	1	
Lead	<0.002 mg/L	<0.002 mg/L	NA	NA	1	
Nickel	<0.002 mg/L	<0.002 mg/L	NA	NA	1	
Selenium	<0.002 mg/L	<0.002 mg/L	NA	NA	1	
Silver	<0.001 mg/L	<0.001 mg/L	NA	NA	1	
Thallium	<0.001 mg/L	<0.001 mg/L	NA	NA	1	
Zinc	<0.0200 mg/L	<0.0200 mg/L	NA	NA	1	
Ammonia (as N)	<0.250 mg/L	<0.250 mg/L	NA	NA	1	
Kjeldahl Nitrogen	0.825 mg/L	0.712 mg/L	NA	NA	1	
Nitrate Nitrite	0.123 mg/L	0.123 mg/L	NA	NA	1	
Surfactants	0.154 mg/L	0.201 mg/L	NA	NA	1	
Total Organic Nitrogen	0.739 mg/L	0.835 mg/L	NA	NA	1	
Mercury	<0.0002 mg/L	<0.0002 mg/L	NA	NA	1	
Sulfate	8.42 mg/L	8.64 mg/L	NA	NA	1	
Color	60 PCU	60 PCU	NA	NA	1	

[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).

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AL7640006675	AL0003867	Colbert CT Plant	DSN 017

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TABLE B. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(A))[1]

List each pollutant that is limited in an effluent limitation guideline (ELG) that the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number (if available)	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		
Aluminum	0.444 mg/L	0.382 mg/L	NA	NA	1	
Iron	0.303 mg/L	0.302 mg/L	NA	NA	1	
Magnesium	2.31 mg/L	2.36 mg/L	NA	NA	1	
Manganese	0.0209 mg/L	0.00666 mg/L	NA	NA	1	
Molybdenum	<0.005 mg/L	<0.005 mg/L	NA	NA	1	
Boron	0.0777 mg/L	0.0836 mg/L	NA	NA	1	
Cobalt	<0.002 mg/L	<0.002 mg/L	NA	NA	1	

[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).

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
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TABLE C. TOXIC POLLUTANTS, CERTAIN HAZARDOUS SUBSTANCES, AND ASBESTOS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(B) and (vii))[1]

List each pollutant shown in Exhibits 2F–2, 2F–3, and 2F–4 that you know or have reason to believe is present. Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number (if available)	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		
Temperature	13.5 °C	NA	NA	NA	1	
Total Residual Chlorine	0.04 mg/L	NA	NA	NA	1	

[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).

EPA Identification Number	NPDES Permit Number	Facility name	Outfall Number
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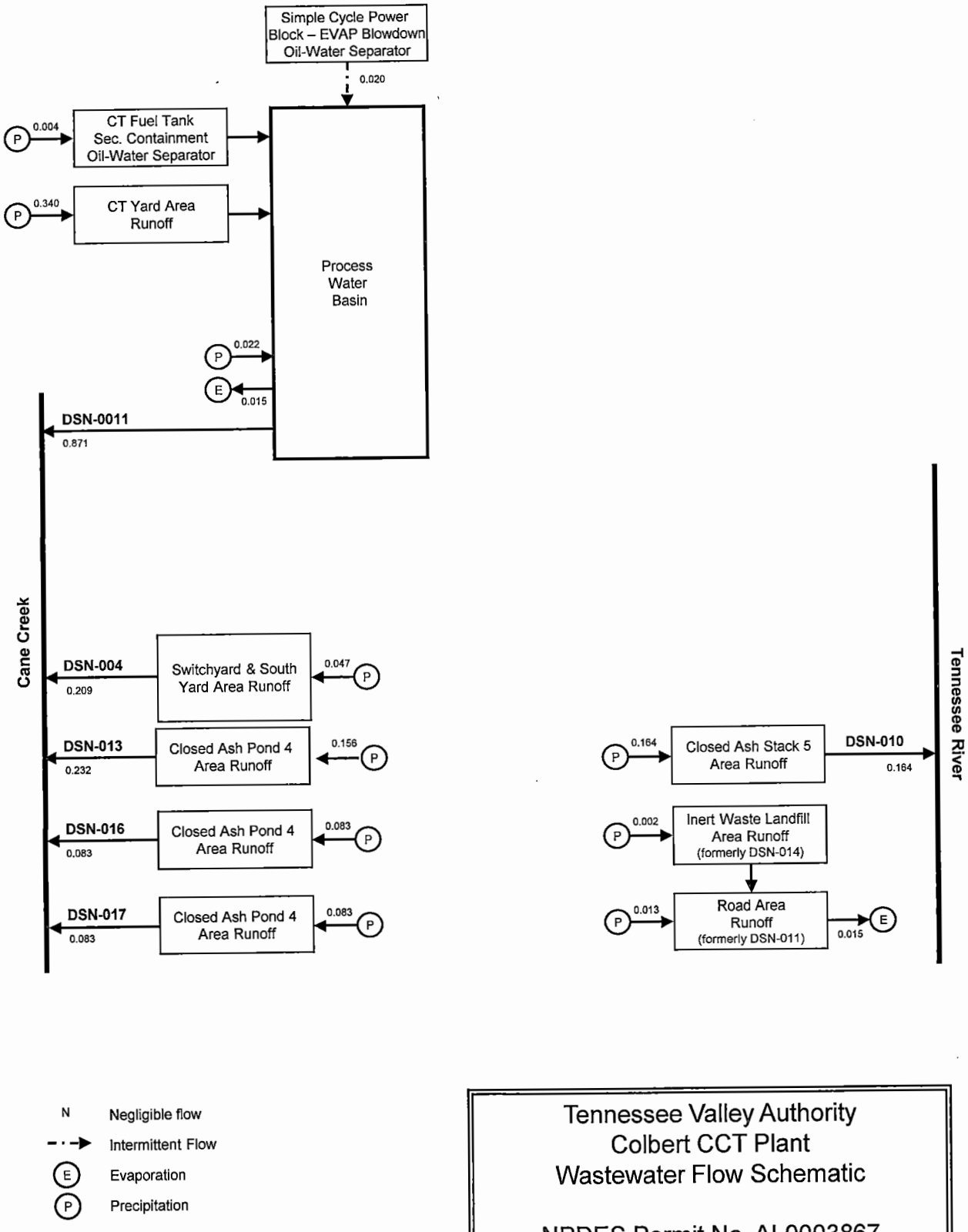
TABLE D. STORM EVENT INFORMATION (40 CFR 122.26(c)(1)(i)(E)(6))

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)
02/08/2023	11	0.60	148	8.886 MGD	8.886 MGD

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

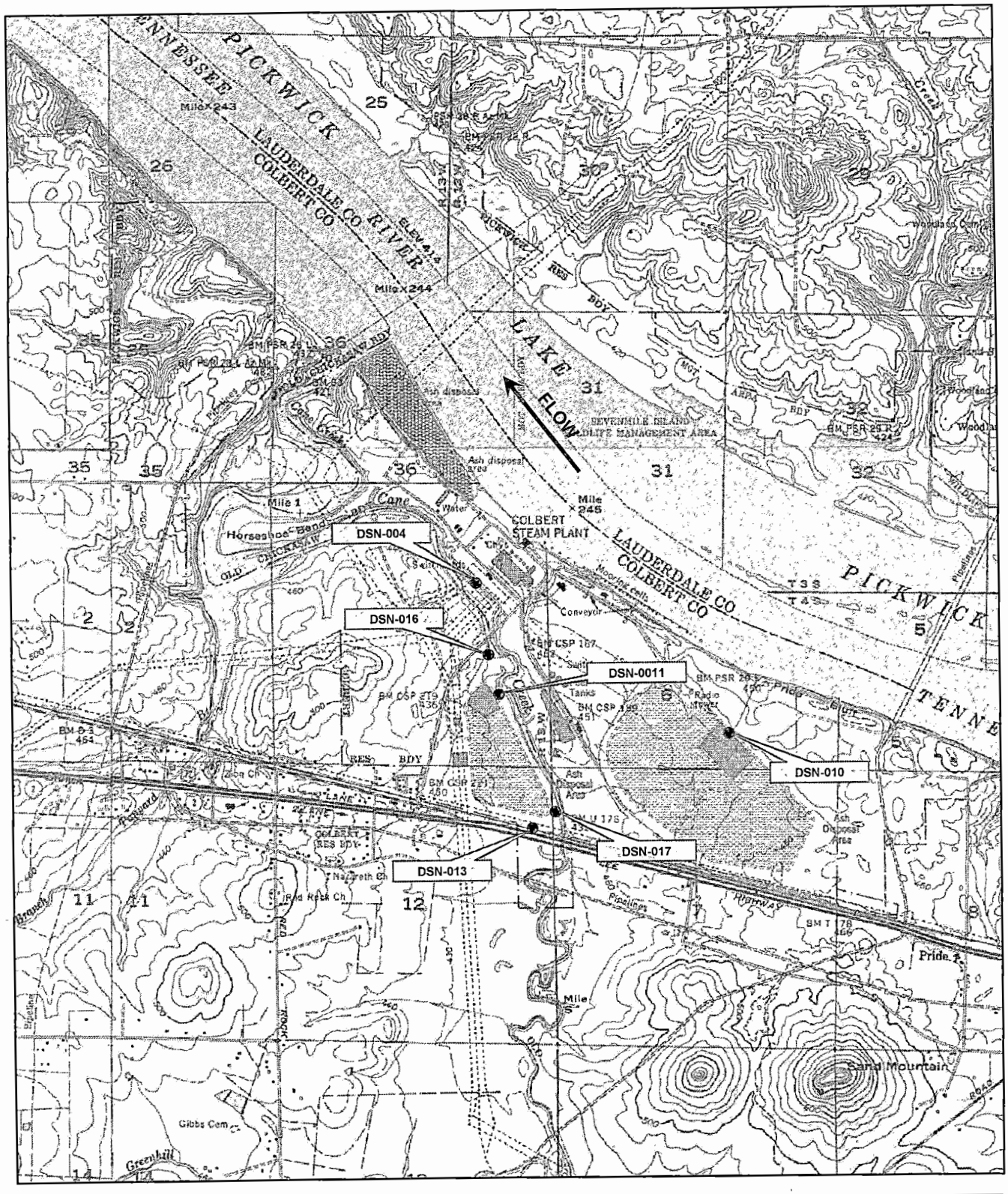
The Modified Rational Method was used to calculate the total flow.



Tennessee Valley Authority
Colbert CCT Plant
Wastewater Flow Schematic

NPDES Permit No. AL0003867

All flows shown in million gallons per day (MGD)



TVA COLBERT CT PLANT
Tuscumbia, Colbert Co., Alabama
NPDES Permit No. AL0003867

Cherokee, Sinking Creek, Barton, & Pride,
Alabama 7.5-minute Quadrangles

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
AL7640006675	AL0022080	Colbert CT	

Form 1 NPDES

EPA

U.S. Environmental Protection Agency
Application for NPDES Permit to Discharge Wastewater

GENERAL INFORMATION

SECTION 1. ACTIVITIES REQUIRING AN NPDES PERMIT (40 CFR 122.21(f) and (f)(1))

Activities Requiring an NPDES Permit

1.1 Applicants *Not Required* to Submit Form 1

1.1.1	Is the facility a new or existing **publicly owned treatment works**? If yes, STOP. Do NOT complete Form 1. Complete Form 2A. ☑ No	1.1.2	Is the facility a new or existing **treatment works treating domestic sewage**? If yes, STOP. Do NOT complete Form 1. Complete Form 2S. ☑ No

1.2 Applicants *Required* to Submit Form 1

1.2.1	Is the facility a **concentrated animal feeding operation** or a **concentrated aquatic animal production facility**? ☐ Yes → Complete Form 1 ***and*** Form 2B. ☑ No	1.2.2	Is the facility an **existing** manufacturing, commercial, mining, or silvicultural **facility** that **is currently discharging process wastewater**? ☑ Yes → Complete Form 1 ***and*** Form 2C. ☐ No
1.2.3	Is the facility a **new** manufacturing, commercial, mining, or silvicultural **facility** that has **not yet commenced to discharge**? ☐ Yes → Complete Form 1 ***and*** Form 2D. ☑ No	1.2.4	Is the facility a **new or existing** manufacturing, commercial, mining, or silvicultural **facility** that **discharges only nonprocess wastewater**? ☐ Yes → Complete Form 1 ***and*** Form 2E. ☑ No
1.2.5	Is the facility a **new or existing facility** whose discharge is composed entirely of **stormwater associated with industrial activity** or whose discharge is composed of **both stormwater and non-stormwater**? ☑ Yes → Complete Form 1 ***and*** Form 2F unless exempted by 40 CFR 122.26(b)(14)(x) or (b)(15). ☐ No		

SECTION 2. NAME, MAILING ADDRESS, AND LOCATION (40 CFR 122.21(f)(2))

Name, Mailing Address, and Location

2.1 Facility Name

TVA Colbert Combustion Turbine Plant

2.2 EPA Identification Number

AL7640006675

2.3 Facility Contact

Name (first and last)	Title	Phone number
David Bowling	Vice President Power Operations Gas, Hydr	(865) 632-6964

Email address
dlbowling@tva.gov

2.4 Facility Mailing Address

Street or P.O. box
400 West Summit Hill DR

City or town	State	ZIP code
Knoxville	TN	37902

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
AL7640006675	AL0022080	Colbert CT	

Name, Mailing Address, and Location Continued

2.5	Facility Location		
	Street, route number, or other specific identifier 900 Colbert Steam Plant Road		
	County name Colbert	County code (if known)	
	City or town Tuscumbia	State Alabama	ZIP code 35674

SECTION 3. SIC AND NAICS CODES (40 CFR 122.21(f)(3))

SIC and NAICS Codes

3.1	SIC Code(s)	Description (optional)
	4911	Electric Services

3.2	NAICS Code(s)	Description (optional)
	22111	Electric Power Generation

SECTION 4. OPERATOR INFORMATION (40 CFR 122.21(f)(4))

Operator Information

4.1	Name of Operator
	Tennessee Valley Authority

4.2	Is the name you listed in Item 4.1 also the owner?
	☑ Yes ☐ No

4.3	Operator Status
	☑ Public—federal ☐ Public—state ☐ Other public (specify)_____ ☐ Private ☐ Other (specify) _____

4.4	Phone Number of Operator
	(865) 632-6964

Operator Information Continued

4.5	Operator Address		
	Street or P.O. Box 400 West Summit Hill DR		
	City or town Knoxville	State Tennessee	ZIP code 37902
	Email address of operator dlbowling@tva.gov		

SECTION 5. INDIAN LAND (40 CFR 122.21(f)(5))

Indian Land

5.1	Is the facility located on Indian Land?
	☐ Yes ☑ No

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
AL7640006675	AL0022080	Colbert CT	

SECTION 6. EXISTING ENVIRONMENTAL PERMITS (40 CFR 122.21(f)(6))

Existing Environmental Permits

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

☑ NPDES (discharges to surface water) AL0022080	☐ RCRA (hazardous wastes) AL7640006675	☐ UIC (underground injection of fluids)
☐ PSD (air emissions)	☐ Nonattainment program (CAA)	☐ NESHAPs (CAA)
☐ Ocean dumping (MPRSA)	☐ Dredge or fill (CWA Section 404)	☑ Other (specify) see attachment 1

SECTION 7. MAP (40 CFR 122.21(f)(7))

Map

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

☑ Yes ☐ No ☐ CAFO—Not Applicable (See requirements in Form 2B.)

SECTION 8. NATURE OF BUSINESS (40 CFR 122.21(f)(8))

Nature of Business

8.1 Describe the nature of your business.

The Colbert Facility is located between Tuscumbia and Cherokee, Alabama, on the south side of Pickwick Reservoir at Tennessee River Mile 245. The Colbert Combustion Turbine (CT) site consists of 8 simple cycle General Electric 7B combustion turbines with total generating capacity of 400MW. The dual fuel machines can be operated on either natural gas or low-sulfur diesel fuel.

SECTION 9. COOLING WATER INTAKE STRUCTURES (40 CFR 122.21(f)(9))

Cooling Water Intake Structures

9.1 Does your facility use cooling water?

☐ Yes ☑ No ➔ SKIP to Item 10.1.

9.2 Identify the source of cooling water. (Note that facilities that use a cooling water intake structure as described at 40 CFR 125, Subparts I and J may have additional application requirements at 40 CFR 122.21(r). Consult with your NPDES permitting authority to determine what specific information needs to be submitted and when.)

SECTION 10. VARIANCE REQUESTS (40 CFR 122.21(f)(10))

Variance Requests

10.1 Do you intend to request or renew one or more of the variances authorized at 40 CFR 122.21(m)? (Check all that apply. Consult with your NPDES permitting authority to determine what information needs to be submitted and when.)

☐ Fundamentally different factors (CWA Section 301(n))	☐ Water quality related effluent limitations (CWA Section 302(b)(2))
☐ Non-conventional pollutants (CWA Section 301(c) and (g))	☐ Thermal discharges (CWA Section 316(a))
☑ Not applicable	

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
AL7640006675	AL0022080	Colbert CT	

SECTION 11. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d))

Checklist and Certification Statement

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

Column 1	Column 2
☑ Section 1: Activities Requiring an NPDES Permit	☐ w/ attachments
☑ Section 2: Name, Mailing Address, and Location	☐ w/ attachments
☑ Section 3: SIC Codes	☐ w/ attachments
☑ Section 4: Operator Information	☐ w/ attachments
☑ Section 5: Indian Land	☐ w/ attachments
☑ Section 6: Existing Environmental Permits	☐ w/ attachments
☑ Section 7: Map	☑ w/ topographic map ☐ w/ additional attachments
☑ Section 8: Nature of Business	☐ w/ attachments
☐ Section 9: Cooling Water Intake Structures	☐ w/ attachments
☐ Section 10: Variance Requests	☐ w/ attachments
☑ Section 11: Checklist and Certification Statement	☐ w/ attachments

11.2 **Certification Statement**

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

Name (print or type first and last name)	Official title
David Bowling	Vice President Power Operations Gas, Hydro, & Integration
Signature: David Bowling	Date signed: **05/02/2023**