



**For EPD Use Only
 Assigned Permit No**

Georgia National Pollutant Discharge Elimination System Application Part 1

This application includes Information not subject to disclosure under Georgia Law.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
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Please check all of the applicable box(s) and enter the associated information:

<input checked="" type="checkbox"/>	New discharger		<input type="checkbox"/>	Existing NPDES discharger		<input type="checkbox"/>	Change of Information
				Existing NPDES Permit No.			

Describe Modification Requested:

POLLUTANT CHARACTERISTICS

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

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

SECTION I. FACILITY INFORMATION

Facility Type of Ownership: Corporation
Please check the applicable box

<u>POTW</u>	<u>Non-POTW</u>	<u>Federal</u>	
<input type="checkbox"/> 2A – Municipal Wastewater Discharge Application	<input type="checkbox"/> 2B – Concentrated Animal Feeding Operation and Aquatic Animal Production <input type="checkbox"/> 2C – Industrial Wastewater Discharge Application <input checked="" type="checkbox"/> 2D – New Sources & New Dischargers <input type="checkbox"/> 2F – Industrial Stormwater	2C – Industrial Wastewater Discharge Application 2D – New Sources & New Dischargers 2F – Industrial Stormwater	
	<input type="checkbox"/> 2E – Non-Process Wastewater <input type="checkbox"/> Sanitary Wastewater <input type="checkbox"/> Cooling Wastewater	2E – Non-Process Wastewater	Sanitary Wastewater Cooling Wastewater

Permittee Organization Formal Name: GRP Madison Renewable Energy Facility, LLC

Permittee Mailing Address: PO Box 909

Permittee City: Colbert Permittee State: GA Permittee Zip Code: 30628 Permittee County: Madison

Facility Site Name: GRP Madison, LLC

Facility Site Address: 268 Office Drive

Facility Site City: Colbert Facility Site State: GA Facility Site Zip Code: 30628 Facility Site County: Madison

Is the facility located on Indian Lands? No Facility Site tribal land indicator: :

Facility Site Latitude/Longitude (ex. 34.543, -84.804): (34.0406 , -83.193)

Program Facility Name : GRP MADISON RENEWABLE ENERGY FACILITY, LLC Program Facility ID : GA0050283

If there are any NPDES Permits that are associated with this facility provide the corresponding NPDES Permit No. and check the applicable box(s).

Associated NPDES ID Number: Associated NPDES ID Number Reason:

1. GAR050000 Switched To A General Permit (SGP)

EPA Major (check one): <input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> unknown	Primary Industry (check one): <input type="checkbox"/> yes or <input checked="" type="checkbox"/> no <input type="checkbox"/> unknown
SIC Code(s): 1. 4911	SIC Code Indicator: 4911
NAICS Code(s): 1. 221117	NAICS Code Indicator: 221117
Total Design Flow (MGD): 3.55	Annual Average Daily Flow (MGD): 0.273

SECTION II. CONTACT INFORMATION

1. Facility Contact Affiliation Type:

Owner Contact Contractor Permit Contact Engineer Facility/Project Contact Unknown

Facility Contact First Name Carey	Facility Contact Last Name: Davis	Facility Contact Title: Executive Vice President
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Facility Contact E-mail Address: cdavis@georgiarenewablepower.com	Facility Contact Phone: 205-403-5273
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Address Line1: PO Box 909	Address Line2:
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City: Colbert	State: GA	Zip: 30628
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1. Facility Contact Affiliation Type:

Owner Contact Contractor Permit Contact Engineer Facility/Project Contact Unknown

Facility Contact First Name David	Facility Contact Last Name: Groves	Facility Contact Title: Plant Manager
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Facility Contact E-mail Address: david.groves@veolia.com	Facility Contact Phone: 910-477-1198
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Address Line1: 125 HV Chandler Road	Address Line2:
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City: Colbert	State: GA	Zip: 30628
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SECTION III. OPERATOR INFORMATION

Facility Organization Formal Name: Veolia Energy Operating Services, LLC

Is operator also the owner?: yes or no

Status:

Federal State Private Public Other

Operator Contact E-mail Address: david.groves@veolia.com	Operator Contact Phone: 910-477-1198
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SECTION IV. OTHER ENVIRONMENTAL PERMITS

Section III. Table No. 1 - Provide the name and permit nos. for all permits issued to this facility

Name of Permit	Permit No.
Air Quality Permit	4911-195-0020-E-01
Industrial General Stormwater Permit	GAR050000
2. Does your facility require any additional permits not listed above? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2a. If yes, what are they and what is the timeframe to obtain them?

SECTION V. NATURE OF BUSINESS

The GRP-Madison facility is a 65 MegaWatt facility; the general location of the facility is indicated on Figure 1.

The plant consists of a spreader stoker vibrating water cooled grate boiler/steam generator, and one steam turbine generator (STG). The project includes a flue gas Air Quality Control System (AQCS) consisting of a Selective Catalytic Reducer (SCR) NOx/CO emissions control systems, Mechanical Dust Collector (Multi-Cyclone), and Electrostatic Precipitator. The facility burns wood biomass (wood debris).

The facility operates continuously 24 hours a day, 7 days a week.

SECTION VI. OUTFALL IDENTIFICATION AND WATER QUALITY

Permitted Feature Identifier	Permitted Feature Type	Permitted Feature Latitude/ Longitude	Receiving Waterbody for Permitted Feature	River Basin	Does Discharge enter 305 (b)/303(d) Listed Waters? (Yes or No)	Discharge listed in a TMDL? (Yes or No)	Name and Year of TMDL
002	External Outfall	34.040836/-83.190083	Unnamed tributary to Beaverdam Creek	Savannah	Yes	No	
001	External Outfall	34.038762/-83.192422	Unnamed tributary to Beaverdam Creek	Savannah	Yes	No	

(30 Day) Average Flow (MGD)	(30 Day) Maximum Flow (MGD)	If Receiving Water is Listed, Is the Receiving Water 1. Supporting designated use 2. Not supporting designated use 3. Assessment pending	If Receiving Water(s) is Not supporting the Designated Uses, What is it Listed For?
.205	.65	NotSupportingUse	The first named receiving stream (Beaverdam Creek) is impaired for Biota F.
0.068	2.9	NotSupportingUse	The first named receiving stream (Beaverdam Creek) is impaired for Biota F.

Note: Georgia's 305(b)/303(d) list can be found on EPD's website at <http://epd.georgia.gov/georgia-305b303d-list-documents>
Note: Georgia's list of TMDLs can be found on EPD's website at <http://epd.georgia.gov/total-maximum-daily-loading>

SECTION VII. EFFLUENT LIMITS AND CONDITIONS

1. Is there an effluent limit, standard, guideline, or categorical pretreatment standard established for this type of discharge in 40 CFR Part 400-471, as amended or elsewhere pursuant to 301, 306, 307, 316, 318, or 405 of the Clean Water Act?

Yes No

If you answered "yes", to question No. 1 above, please complete the following table below by providing the name of the discharge category and the specific citation to the regulation, if applicable, that establishes the limitation or condition.

If you answered "no" to question No. 1 above, please proceed to Section No. VIII.

Section VII, Table No. 1

Part	Part Name	Subpart Code	Subpart Name	Description
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2. Are any of the applicable effluent limitations applicable to the discharge(s) expressed in terms of production?

Yes No

If you answered “yes”, complete the following table below. For an existing discharge, list an actual measurement of your average or maximum level of daily production. For new discharges, list an average or maximum projected daily production. (indicate in the table whether the production figures given are average or maximum level.) Express the production in terms and units used in the applicable discharge limitation. If you answered "no" to question No.2 above, please proceed to Section VIII.

If you answered “no” to question No. 2 above, please proceed to Section VIII.

Section VII, Table No. 2 – Applicable Effluent Limit Guidelines

1. AVERAGE DAILY PRODUCTION			2. AFFECTED OUTFALLS
a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC.	

SECTION VIII. 40 CFR 122.21(R) COOLING WATER INTAKE STRUCTURES

Directions: Answer questions 1 through 4 below for your cooling water intake structure(s) (CWIS). If your answer to any one of these questions is “No”, then the requirements of 40 CFR 125.94 through 125.99 do not apply to your facility. However, the State reserves the right to establish BPJ requirements as allowed in 40 CFR 125.90(b) for facilities.

1. Do you own or operate a cooling water intake structure(s)?

Yes No

If you answered “yes” to question No. 1 above, please proceed to question No. 2 below.

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

Form Approved.
OMB No. 2040-0086.
Approval expires 3-31-98.

Please print or type in the unshared areas only

Form 2C NPDES		U.S. ENVIRONMENTAL PROTECTION AGENCY APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURE OPERATIONS Consolidated Permits Program
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I. OUTFALL LOCATION

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

A. OUTFALL NUMBER <i>(list)</i>	B. LATITUDE			C. LONGITUDE			D. RECEIVING WATER <i>(name)</i>
	1. DEG	2. MIN	3. SEC.	1. DEG.	2. MIN.	3. SEC.	
002	34	2	27.00	-83	-11	-24.29	Unnamed tributary to Beaverdam Creek
001	34	2	19.54	-83	-11	-32.71	Unnamed tributary to Beaverdam Creek

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

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

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

1. OUTFALL NO. <i>(list)</i>	2. OPERATION(S) CONTRIBUTING FLOW		3. TREATMENT	
	a. OPERATION <i>(list)</i>	b. AVERAGE FLOW <i>(MGD)</i>	a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1
002	Boiler Area	0.005	1	2-K
	Cooling Tower	0.165	1	2-K
	Reverse Osmosis Reject	0.025	1	2-K

OFFICIAL USE ONLY *(effluent guidelines sub-categories)*

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

YES (complete the following table) NO (go to Section III)

1. OUTFALL NUMBER <i>(list)</i>	2. OPERATION(s) CONTRIBUTING FLOW <i>(list)</i>	3. FREQUENCY		4. FLOW				
		a. DAYS PER WEEK <i>(specify average)</i>	b. MONTHS PER YEAR <i>(specify average)</i>	a. FLOW RATE (MGD)		B. TOTAL VOLUME <i>(specify with units)</i>		C. DURATION <i>(in days)</i>
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	

III. PRODUCTION

This section has been filled out on the Part I form.

IV. IMPROVEMENTS

A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operations of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

YES (complete the following table) NO (go to Item IV-B)

1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE	
	a. NO.	b. SOURCE OF DISCHARGE		a. REQUIRED	b. PROJECTED

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction.

MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.

NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9.

D. Is there any discharge of pollutants present that are listed in Table 2c-3?

YES NO

For every pollutant you list, describe the reasons you believe it to be present and report any analytical data in your possession :

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

Is any pollutant listed in Section V - Intake and Effluent Characteristics, Part C, a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

YES (list all such pollutants below) NO (go to Item VI-B)

VII. BIOLOGICAL TOXICITY TESTING DATA			
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 3 years?			
<input type="checkbox"/> YES (identify the test(s) and describe their purposes below) <input checked="" type="checkbox"/> NO (go to Section VIII)			
VIII. CONTRACT ANALYSIS INFORMATION			
Were any of the analyses reported in Item V. Intake and Effluent Characteristics performed by a contract laboratory or consulting firm?			
<input type="checkbox"/> YES (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below) <input checked="" type="checkbox"/> NO (go to Section IX)			
A. NAME	B. ADDRESS	C. TELEPHONE <i>(area code & no.)</i>	D. POLLUTANTS ANALYZED <i>(list)</i>
IX. CERTIFICATION			
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.			
A. NAME & OFFICIAL TITLE <i>(type or print)</i>			
/			
C. SIGNATURE		D. DATE SIGNED	

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages. SEE INSTRUCTIONS.

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

OUTFALL NO.

002

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

PART A –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.

1. POLLUTANT	2. EFFLUENT							3. INTAKE (optional)		
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS		(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand (BOD)	20	31.6	6.98	11			1			
b. Chemical Oxygen Demand (COD)	<10	0	<10	0			1			
c. Total Organic Carbon (TOC)	<10	0	<10	0			1			
d. Total Suspended Solids (TSS)	15	23	15	23			1			
e. Ammonia (as N)	<5	0	<5	0			1			
f. Flow (MGD)	VALUE 0.190		VALUE 0.190		VALUE		1	VALUE		
g. Temperature (winter)	VALUE 18		VALUE		VALUE		1	VALUE		
h. Temperature (summer)	VALUE 22		VALUE		VALUE		1	VALUE		
i. pH (s.u.)	MINIMUM 6	MAXIMUM 9	MINIMUM 6	MAXIMUM 9			1			

PART B – Mark “X” in column 2-a for each pollutant you know or have reason to believe is present. Mark “X” in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK “X”		3. EFFLUENT						4. INTAKE (optional)			
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS		(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)												
b. Chlorine, Total Residual			1					1				
c. Color												
d. Fecal Coliform												
e. Fluoride (16984-48-8)												
f. Nitrate-Nitrite(as N)												
g. Nitrogen, Total Organic (as N)												
h. Oil and Grease			1					1				

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT							4. INTAKE (optional)		
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS		(1) CONCENTRATION	(2) MASS	
i. Phosphorus (as P), Total (7723-14-0)			1				1					
j. Radioactivity												
(1) Alpha, Total												
(2) Beta, Total												
(3) Radium, Total												
(4) Radium 226, Total												
k. Sulfate (as SO4) (14808-79-8)			0.185				1.62					
l. Sulfide (as S)												
m. Sulfite (as SO3) (14265-45-3)												
n. Surfactants												
o. Aluminum, Total (7429-90-5)												
p. Barium, Total (7440-39-3)			0.031				0.026					
q. Boron, Total (7440-42-8)												
r. Cobalt, Total (7440-48-4)												
s. Iron, Total (7439-89-6)			0.064				0.045					
t. Magnesium, Total (7439-95-4)												
u. Molybdenum, Total (7439-98-7)												
v. Manganese, Total (7439-96-5)			0.011				0.008					
w. Tin, Total (7440-31-5)			0.044				0.022					
x. Titanium, Total (7440-32-6)												

EPA I.D. NUMBER (copy from Item 1 of Form 1)	OUTFALL NUMBER 002
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PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"			3. EFFLUENT							4. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION (mg/L)	(2) MASS (lbs/day)	(1) CONCENTRATION (mg/L)	(2) MASS (lbs/day)	(1) CONCENTRATION (mg/L)	(2) MASS (lbs/day)		(1) CONCENTRATION (mg/L)	(2) MASS (lbs/day)	
METALS, CYANIDE, AND TOTAL PHENOLS													
1M. Antimony, Total (7440-36-0)													
2M. Arsenic, Total (7440-38-2)													
3M. Beryllium, Total (7440-41-7)													
4M. Cadmium, Total (7440-43-9)													
5M. Chromium, Total (7440-47-3)													
6M. Copper, Total (7440-50-8)													
7M. Lead, Total (7439-92-1)													
8M. Mercury, Total (7439-97-6)													
9M. Nickel, Total (7440-02-0)													
10M. Selenium, Total (7782-49-2)													
11M. Silver, Total (7440-22-4)													
12M. Thallium, Total (7440-28-0)													
13M. Zinc, Total (7440-66-6)													
14M. Cyanide, Total (57-12-5)													
15M. Phenols, Total													
DIOXIN													
2,3,7,8-Tetrachlorodibenzo-Pdioxin (1764-01-6)													

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"			3. EFFLUENT							4. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION (mg/L)	(2) MASS (lbs/day)	(1) CONCENTRATION (mg/L)	(2) MASS (lbs/day)	(1) CONCENTRATION (mg/L)	(2) MASS (lbs/day)		(1) CONCENTRATION (mg/L)	(2) MASS (lbs/day)	
GC/MS FRACTION - VOLATILE COMPOUNDS													
1V. Accrolein (107-02-8)													
2V. Acrylonitrile (107-13-1)													
3V. Benzene (71-43-2)													
4V. Bis (Chloromethyl) Ether (542-88-1)													
5V. Bromoform (75-25-2)													
6V. Carbon Tetrachloride (56-23-5)													
7V. Chlorobenzene (108-90-7)													
8V. Chlorodibromomethane (124-48-1)													
9V. Chloroethane (75-00-3)													
10V. 2-Chloroethylvinyl Ether (110-75-8)													
11V. Chloroform (67-66-3)													
12V. Dichlorobromomethane (75-27-4)													
13V. Dichlorodifluoromethane (75-71-8)													
14V. 1,1-Dichloroethane (75-34-3)													
15V. 1,2-Dichloroethane (107-06-2)													
16V. 1,1-Dichloroethylene (75-35-4)													
17V. 1,2-Dichloropropane (78-87-5)													
18V. 1,3-Dichloropropylene (542-75-6)													
19V. Ethylbenzene (100-41-4)													
20V. Methyl Bromide (74-83-9)													
21V. Methyl Chloride (74-87-3)													

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"			3. EFFLUENT							4. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION (mg/L)	(2) MASS (lbs/day)	(1) CONCENTRATION (mg/L)	(2) MASS (lbs/day)	(1) CONCENTRATION (mg/L)	(2) MASS (lbs/day)		(1) CONCENTRATION (mg/L)	(2) MASS (lbs/day)	
GC/MS FRACTION - VOLATILE COMPOUNDS													
22V. Methylene Chloride (75-09-2)													
23V. 1,1,2,2-Tetrachloroethane (79-34-5)													
24V. Tetrachloroethylene (127-18-4)													
25V. Toluene (108-88-3)													
26V. 1,2-Trans-Dichloroethylene (156-60-5)													
27V. 1,1,1-Trichloroethane (71-55-6)													
28V. 1,1,2-Trichloroethane (79-00-5)													
29V. Trichloroethylene (79-01-6)													
30V. Trichlorofluoromethane (75-69-4)													
31V. Vinyl Chloride (75-01-4)													
GC/MS FRACTION - ACID COMPOUNDS													
1A. 2-Chlorophenol (95-57-8)													
2A. 2,4-Dichlorophenol (120-83-2)													
3A. 2,4-Dimethylphenol (105-67-9)													
4A. 4,6-Dinitro-OCresol (534-52-1)													
5A. 2,4-Dinitrophenol (51-28-5)													
6A. 2-Nitrophenol (88-75-5)													
7A. 4-Nitrophenol (100-02-7)													
8A. P-Chloro-MCresol (59-50-7)													
9A. Pentachlorophenol (87-86-5)													
10A. Phenol (108-95-2)													

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"			3. EFFLUENT							4. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION (mg/L)	(2) MASS (lbs/day)	(1) CONCENTRATION (mg/L)	(2) MASS (lbs/day)	(1) CONCENTRATION (mg/L)	(2) MASS (lbs/day)		(1) CONCENTRATION (mg/L)	(2) MASS (lbs/day)	
GC/MS FRACTION - ACID COMPOUNDS													
11A. 2,4,6-Trichlorophenol (88-05-2)													
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS													
1B. Acenaphthene (83-32-9)													
2B. Acenaphthylene (208-96-8)													
3B. Anthracene (120-12-7)													
4B. Benzidine (92-87-5)													
5B. Benzo (a) Anthracene (56-55-3)													
6B. Benzo (a) Pyrene (50-32-8)													
7B. 3,4-Benzofluoranthene (205-99-2)													
8B. Benzo (ghi) Perylene (191-24-2)													
9B. Benzo (k) Fluoranthene (207-08-9)													
10B. Bis (2-Chloroethoxy) Methane (111-91-1)													
11B. Bis (2-Chloroethyl) Ether (111-44-4)													
12B. Bis (2-Chloroisopropyl) Ether (102-80-1)													
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)													
14B. 4-Bromophenyl Phenyl Ether (101-55-3)													
15B. Butyl Benzyl Phthalate (85-68-7)													
16B. 2-Chloronaphthalene (91-58-7)													
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)													
18B. Chrysene (218-01-9)													
19B. Dibenzo (a,h) Anthracene (53-70-3)													

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"			3. EFFLUENT							4. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION (mg/L)	(2) MASS (lbs/day)	(1) CONCENTRATION (mg/L)	(2) MASS (lbs/day)	(1) CONCENTRATION (mg/L)	(2) MASS (lbs/day)		(1) CONCENTRATION (mg/L)	(2) MASS (lbs/day)	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS													
20B. 1,2-Dichlorobenzene (95-50-1)													
21B. 1,3-Dichlorobenzene (541-73-1)													
22B. 1,4-Dichlorobenzene (106-46-7)													
23B. 3,3-Dichlorobenzidine (91-94-1)													
24B. Diethyl Phthalate (84-66-2)													
25B. Dimethyl Phthalate (131-11-3)													
26B. Di-N-Butyl Phthalate (84-74-2)													
27B. 2,4-Dinitrotoluene (121-14-2)													
28B. 2,6-Dinitrotoluene (606-20-2)													
29B. Di-N-Octyl Phthalate (117-84-0)													
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)													
31B. Fluoranthene (206-44-0)													
32B. Fluorene (86-73-7)													
33B. Hexachlorobenzene (118-74-1)													
34B. Hexachlorobutadiene (87-68-3)													
35B. Hexachlorocyclopentadiene (77-47-4)													
36B Hexachloroethane (67-72-1)													
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)													
38B. Isophorone (78-59-1)													
39B. Naphthalene (91-20-3)													
40B. Nitrobenzene (98-95-3)													

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"			3. EFFLUENT							4. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION (mg/L)	(2) MASS (lbs/day)	(1) CONCENTRATION (mg/L)	(2) MASS (lbs/day)	(1) CONCENTRATION (mg/L)	(2) MASS (lbs/day)		(1) CONCENTRATION (mg/L)	(2) MASS (lbs/day)	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS													
41B. N-Nitrosodimethylamine (62-75-9)													
42B. N-Nitrosodi-N-Propylamine (621-64-7)													
43B. N-Nitrosodiphenylamine (86-30-6)													
44B. Phenanthrene (85-01-8)													
45B. Pyrene (129-00-0)													
46B. 1,2,4-Trichlorobenzene (120-82-1)													
GC/MS FRACTION - PESTICIDES													
1P. Aldrin (309-00-2)													
2P. a-BHC (319-84-6)													
3P. β-BHC (319-85-7)													
4P. γ-BHC (58-89-9)													
5P. d-BHC (319-86-8)													
6P. Chlordane (57-74-9)													
7P. 4,4'-DDT (50-29-3)													
8P. 4,4'-DDE (72-55-9)													
9P. 4,4'-DDD (72-54-8)													
10P. Dieldrin (60-57-1)													
11P. a-Endosulfan (115-29-7)													
12P. β-Endosulfan (115-29-7)													
13P. Endosulfan Sulfate (1031-07-8)													
14P. Endrin (72-20-8)													
15P. Endrin Aldehyde (7421-93-4)													
16P. Heptachlor (76-44-8)													

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"			3. EFFLUENT							4. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION (mg/L)	(2) MASS (lbs/day)	(1) CONCENTRATION (mg/L)	(2) MASS (lbs/day)	(1) CONCENTRATION (mg/L)	(2) MASS (lbs/day)		(1) CONCENTRATION (mg/L)	(2) MASS (lbs/day)	
GC/MS FRACTION - PESTICIDES													
17P. Heptachlor Epoxide (1024-57-3)													
18P. PCB-1242 (53469-21-9)													
19P. PCB-1254 (11097-69-1)													
20P. PCB-1221 (11104-28-2)													
21P. PCB-1232 (11141-16-5)													
22P. PCB-1248 (12672-29-6)													
23P. PCB-1260 (11096-82-5)													
24P. PCB-1016 (12674-11-2)													
25P. Toxaphene (8001-35-2)													

Please print or type in the unshared areas only	EPA I.D. NUMBER (copy from Item 1 of Form 1)	
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Form 2D NPDES		<h2 style="margin: 0;">New Sources and New Dischargers</h2> <h3 style="margin: 0;">Application for Permit to Discharge Process Wastewater</h3>
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I. Outfall Location

This section has been filled out in Part I.

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

07/31/2020
04/30/2020
04/30/2020
04/30/2020
04/30/2020
06/30/2020
07/31/2020

III. Flows, Sources of Pollution, and Treatment Technologies

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

Outfall Number	1. Operations Contributing Flow <i>(List)</i>	2. Average Flow <i>(MGD)</i>	3. Treatment <i>(Description or List codes from Table 2D-1)</i>
01	Stormwater	0.068	1-U
02	Boiler Area (Blowdown, Feedwater, Area Drains)	0.036	Oil/Water Separator, 2-K
02	RO Reject Water	0.036	2-K
02	STG Sump Area Drains	0.0025	Oil/Water Separator, 2-K
02	Cooling Tower Blowdown	0.1224	2-K
02	Stormwater	0.00825	N/A
02	Dust suppression of wood fiber conveyor transfer points utilizing water and potentially BT-205W dust suppressant.	0.0	N/A
01	Dust suppression of wood fiber conveyor transfer points and fiber piles.	0.015	1-U
01	Stormwater	0.068	1-U
02	Boiler Area (Blowdown, Feedwater, Area Drains)	0.0025	Oil/Water Separator, 2-K
02	RO Reject Water	0.025	2-K
02	STG Sump Area Drains	0.0025	Oil/Water Separator, 2-K
02	Cooling Tower Blowdown	0.245	2-K
02	Stormwater	0.00825	N/A
01	Dust suppression of wood fiber conveyor transfer points and fiber piles.	0.015	1-U
01	Stormwater	0.068	1-U
02	Boiler Area (Blowdown, Feedwater, Area Drains)	0.0025	Oil/Water Separator, 2-K
02	RO Reject Water	0.025	2-K
02	STG Sump Area Drains	0.0025	Oil/Water Separator, 2-K

02	Cooling Tower Blowdown	0.222	2-K
02	Stormwater	0.00825	N/A
01	Dust suppression of wood fiber conveyor transfer points and fiber piles utilizing water and potentially BT-205W dust suppressant.	0.015	1-U
01	Stormwater	0.068	1-U
02	Boiler Area (Blowdown, Feedwater, Area Drains)	0.0025	Oil/Water Separator, 2-K
02	RO Reject Water	0.025	2-K
02	STG Sump Area Drains	0.0025	Oil/Water Separator, 2-K
02	Cooling Tower Blowdown	0.222	2-K
02	Stormwater	0.00825	N/A
01	Stormwater	0.068	1-U
02	Boiler Area (Blowdown, Feedwater, Area Drains)	0.0025	Oil/Water Separator, 2-K
02	RO Reject Water	0.025	2-K
02	STG Sump Area Drains	0.0025	Oil/Water Separator, 2-K
02	Cooling Tower Blowdown	0.222	2-K
02	Stormwater	0.00825	N/A
02	Dust suppression of wood fiber conveyor transfer points utilizing water and potentially BT-205W dust suppressant.	0.0	N/A
01	Stormwater	0.068	1-U
02	Boiler Area (Blowdown, Feedwater, Area Drains)	0.036	Oil/Water Separator, 2-K
02	RO Reject Water	0.036	2-K
02	STG Sump Area Drains	0.0025	Oil/Water Separator, 2-K
02	Cooling Tower Blowdown	0.1224	2-K
02	Stormwater	0.00825	N/A
02	Dust suppression of wood fiber conveyor transfer points utilizing water and potentially BT-205W dust suppressant.	0.0	N/A

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

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

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

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

IV. Production

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

Outfall	Year	A. Quantity Per Day	B. Units Of measure	C. Operation, Product, Material, etc. (<i>specify</i>)

CONTINUED FROM THE FRONT	EPA I.D. NUMBER (copy from Item 1 of Form 1)	Outfall Number 01
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V. Effluent Characteristics

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

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

Part A

1. Pollutant	2. Maximum Daily Value		3. Average Daily Value		4. Source
	Conc. (mg/L)	Mass. (lbs/day)	Conc. (mg/L)	Mass. (lbs/day)	
a. Biochemical oxygen Demand (BOD)	6.56	158.8	6.41	3.638	Sample Data (SM 5210 B)
b. Chemical Oxygen Demand (COD)	40	968.1	40	22.70	Sample Data (SM 5220D)
c. Total Organic Carbon (TOC)	17.8	430.8	17.8	10.10	Sample Data (SM 5310B)
d. Total Suspended Solids (TSS)	22	532.4	14.68	8.33	Sample Data (SM2540D)
e. Ammonia (as N)	<0.8	<19.36	<0.8	<0.4540	Sample Data (Bremner)
f. Flow (MGD)	2.9		0.068		Flow estimates are based on average daily rainfall and maximum rainfall during a 25-year/24-hour rain event.
g. Temperature (winter) (C)	17.2		17.2		Based on data from the GRP Franklin facility.
h. Temperature (summer) (C)	19.4		19.4		Based on data from the GRP Franklin facility.
i. pH (s.u.)	7.18	7.3	7.18	7.3	Sample Data (SM 4500-H B)

Part B

Pollutant	2. Maximum Daily Value (include units)	3. Average Daily Value (include units)	4. Source
Total Aluminum	0.42 ppm	0.27 ppm	Sample Data
Total Boron	0.091 ppm	0.0575 ppm	Sample Data
Total Calcium	33.05 ppm	21.40 ppm	Sample Data
Total Iron	4.36 ppm	2.32 ppm	Sample Data
Total Potassium	28.5 ppm	24.2 ppm	Sample Data
Total Magnesium	5.7 ppm	3.50 ppm	Sample Data
Total Phosphorous	0.136 ppm	0.095 ppm	Sample Data
Total Zinc	0.05 ppm	0.0203 ppm	Sample Data
Total Manganese	0.40 ppm	0.213 ppm	Sample Data
Total Residual Chlorine	0.31 mg/L	0.195 mg/L	Sample Data
Total Reactive Phosphorous	0.058 mg/L	0.058 mg/L	Sample Data
Total Silicon	7.75 mg/L	5.25 mg/L	Sample Data

TKN	1.25 mg/L	1.25 mg/L	Sample Data
CONTINUED FROM THE FRONT		EPA I.D. NUMBER (copy from Item 1 of Form 1)	Outfall Number 01

V. Effluent Characteristics

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

General Instructions (See table 2D-2 for Pollutants)

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

Part A

1. Pollutant	2. Maximum Daily Value		3. Average Daily Value		4. Source
	Conc. (mg/L)	Mass. (lbs/day)	Conc. (mg/L)	Mass. (lbs/day)	
a. Biochemical oxygen Demand (BOD)	1	1	1	1	This data will provided with the additional sampling that was performed.
b. Chemical Oxygen Demand (COD)	40	4.81	40	4.81	Sample Data (SM 5220D)
c. Total Organic Carbon (TOC)	17.8	2.14	17.8	2.14	Sample Data (SM 5310B)
d. Total Suspended Solids (TSS)	22	2.64	22	2.64	Sample Data (SM2540D)
e. Ammonia (as N)	<0.8	0	<0.8	0	Sample Data (Bremmer)
f. Flow (MGD)	14,400		14,400		This is an estimate of the flow
g. Temperature (winter) (C)	7.4		7.4		Based on average air temperature
h. Temperature (summer) (C)	26.3		26.3		Based on average air temperature
i. pH (s.u.)	7.07	7.07	7.07	7.07	Sample Data (SM 4500-H B)

Part B

Pollutant	2. Maximum Dail Value (include units)	3. Average Daily Value (include units)	4. Source
Total Aluminum	0.42 ppm	0.27 ppm	Sample Data
Total Boron	0.091 ppm	0.0575 ppm	Sample Data
Total Calcium	33.05 ppm	21.40 ppm	Sample Data
Total Iron	4.36 ppm	2.32 ppm	Sample Data
Total Potassium	28.5 ppm	24.2 ppm	Sample Data
Total Magnesium	5.7 ppm	3.50 ppm	Sample Data
Total Phosphorous	0.136 ppm	0.095 ppm	Sample Data
Total Zinc	0.05 ppm	0.0203 ppm	Sample Data
Total Manganese	0.40 ppm	0.213 ppm	Sample Data
Total Residual Chlorine	0.31 mg/L	0.195 mg/L	Sample Data
Total Reactive Phosphorous	0.058 mg/L	0.058 mg/L	Sample Data
Total Silicon	7.75 mg/L	5.25 mg/L	Sample Data

TKN	1.25 mg/L	1.25 mg/L	Sample Data
CONTINUED FROM THE FRONT		EPA I.D. NUMBER (copy from Item 1 of Form 1)	Outfall Number 01

V. Effluent Characteristics

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

General Instructions (See table 2D-2 for Pollutants)

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

Part A

1. Pollutant	2. Maximum Daily Value		3. Average Daily Value		4. Source
	Conc. (mg/L)	Mass. (lbs/day)	Conc. (mg/L)	Mass. (lbs/day)	
a. Biochemical oxygen Demand (BOD)	6.56	0.788	6.56	0.788	Sample Data (SM 5210 B)
b. Chemical Oxygen Demand (COD)	40	4.81	40	4.81	Sample Data (SM 5220D)
c. Total Organic Carbon (TOC)	17.8	2.14	17.8	2.14	Sample Data (SM 5310B)
d. Total Suspended Solids (TSS)	22	2.64	22	2.64	Sample Data (SM2540D)
e. Ammonia (as N)	<0.8	0	<0.8	0	Sample Data (Bremmer)
f. Flow (MGD)	14,400		14,400		This is an estimate of the flow
g. Temperature (winter) (C)	17.2		17.2		Based on average air temperature
h. Temperature (summer) (C)	19.4		19.4		Based on average air temperature
i. pH (s.u.)	7.07	7.07	7.07	7.07	Sample Data (SM 4500-H B)

Part B

Pollutant	2. Maximum Daily Value (include units)	3. Average Daily Value (include units)	4. Source
Total Aluminum	0.42 ppm	0.27 ppm	Sample Data
Total Boron	0.091 ppm	0.0575 ppm	Sample Data
Total Calcium	33.05 ppm	21.40 ppm	Sample Data
Total Iron	4.36 ppm	2.32 ppm	Sample Data
Total Potassium	28.5 ppm	24.2 ppm	Sample Data
Total Magnesium	5.7 ppm	3.50 ppm	Sample Data
Total Phosphorous	0.136 ppm	0.095 ppm	Sample Data
Total Zinc	0.05 ppm	0.0203 ppm	Sample Data
Total Manganese	0.40 ppm	0.213 ppm	Sample Data
Total Residual Chlorine	0.31 mg/L	0.195 mg/L	Sample Data
Total Reactive Phosphorous	0.058 mg/L	0.058 mg/L	Sample Data
Total Silicon	7.75 mg/L	5.25 mg/L	Sample Data
TKN	1.25 mg/L	1.25 mg/L	Sample Data

CONTINUED FROM THE FRONT	EPA I.D. NUMBER (copy from Item 1 of Form 1)	Outfall Number 01
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V. Effluent Characteristics

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

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

Part A

1. Pollutant	2. Maximum Daily Value		3. Average Daily Value		4. Source
	Conc. (mg/L)	Mass. (lbs/day)	Conc. (mg/L)	Mass. (lbs/day)	
a. Biochemical oxygen Demand (BOD)	6.56	164	6.56	4.54	Sample Data (SM 5210 B)
b. Chemical Oxygen Demand (COD)	40	1,001	40	27.7	Sample Data (SM 5220D)
c. Total Organic Carbon (TOC)	17.8	446	17.8	12.3	Sample Data (SM 5310B)
d. Total Suspended Solids (TSS)	22	551	22	15.2	Sample Data (SM2540D)
e. Ammonia (as N)	<0.8	<20.0	<0.8	<0.554	Sample Data (Bremmer)
f. Flow (MGD)	3		0.083		Flow estimates are based on average daily rainfall and maximum rainfall during a 25-year/24-hour rain event
g. Temperature (winter) (C)	17.2		17.2		Based on data from the GRP Franklin facility.
h. Temperature (summer) (C)	19.4		19.4		Based on data from the GRP Franklin facility.
i. pH (s.u.)	7.07	7.07	7.07	7.07	Sample Data (SM 4500-H B)

Part B

Pollutant	2. Maximum Daily Value (include units)	3. Average Daily Value (include units)	4. Source
Total Aluminum	0.42 ppm	0.27 ppm	Sample Data
Total Boron	0.091 ppm	0.0575 ppm	Sample Data
Total Calcium	33.05 ppm	21.40 ppm	Sample Data
Total Iron	4.36 ppm	2.32 ppm	Sample Data
Total Potassium	28.5 ppm	24.2 ppm	Sample Data
Total Magnesium	5.7 ppm	3.50 ppm	Sample Data
Total Phosphorous	0.136 ppm	0.095 ppm	Sample Data
Total Zinc	0.05 ppm	0.0203 ppm	Sample Data
Total Manganese	0.40 ppm	0.213 ppm	Sample Data
Total Residual Chlorine	0.31 mg/L	0.195 mg/L	Sample Data
Total Reactive Phosphorous	0.058 mg/L	0.058 mg/L	Sample Data
Total Silicon	7.75 mg/L	5.25 mg/L	Sample Data

TKN	1.25 mg/L	1.25 mg/L	Sample Data
CONTINUED FROM THE FRONT		EPA I.D. NUMBER (copy from Item 1 of Form 1)	Outfall Number 01

V. Effluent Characteristics

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

General Instructions (See table 2D-2 for Pollutants)

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

Part A

1. Pollutant	2. Maximum Daily Value		3. Average Daily Value		4. Source
	Conc. (mg/L)	Mass. (lbs/day)	Conc. (mg/L)	Mass. (lbs/day)	
a. Biochemical oxygen Demand (BOD)	6.56	158.8	6.41	3.64	Sample Data (SM 5210 B)
b. Chemical Oxygen Demand (COD)	40	968.1	40	22.70	Sample Data (SM 5220D)
c. Total Organic Carbon (TOC)	17.8	430.8	17.8	10.10	Sample Data (SM 5310B)
d. Total Suspended Solids (TSS)	22	532.4	14.68	8.33	Sample Data (SM2540D)
e. Ammonia (as N)	<0.8	<19.36	<0.8	<0.4540	Sample Data (Bremner)
f. Flow (MGD)	2.9		0.068		Flow estimates are based on average daily rainfall and maximum rainfall during a 25-year/24-hour rain event.
g. Temperature (winter) (C)	17.2		17.2		Based on data from the GRP Franklin facility.
h. Temperature (summer) (C)	19.4		19.4		Based on data from the GRP Franklin facility.
i. pH (s.u.)	7.18	7.3	7.18	7.3	Sample Data (SM 4500-H B)

Part B

Pollutant	2. Maximum Daily Value (include units)	3. Average Daily Value (include units)	4. Source
Total Aluminum	0.42 ppm	0.27 ppm	Sample Data
Total Boron	0.091 ppm	0.0575 ppm	Sample Data
Total Calcium	33.05 ppm	21.40 ppm	Sample Data
Total Iron	4.36 ppm	2.32 ppm	Sample Data
Total Potassium	28.5 ppm	24.2 ppm	Sample Data
Total Magnesium	5.7 ppm	3.50 ppm	Sample Data
Total Phosphorous	0.136 ppm	0.095 ppm	Sample Data
Total Zinc	0.05 ppm	0.0203 ppm	Sample Data
Total Manganese	0.40 ppm	0.213 ppm	Sample Data
Total Residual Chlorine	0.31 mg/L	0.195 mg/L	Sample Data
Total Reactive Phosphorous	0.058 mg/L	0.058 mg/L	Sample Data

Total Silicon	7.75 mg/L	5.25 mg/L	Sample Data
TKN	1.25 mg/L	1.25 mg/L	Sample Data
CONTINUED FROM THE FRONT	EPA I.D. NUMBER (copy from Item 1 of Form 1)		Outfall Number 01

V. Effluent Characteristics

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

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

Part A

1. Pollutant	2. Maximum Daily Value		3. Average Daily Value		4. Source
	Conc. (mg/L)	Mass. (lbs/day)	Conc. (mg/L)	Mass. (lbs/day)	
a. Biochemical oxygen Demand (BOD)	6.56	158.8	6.41	3.638	Sample Data (SM 5210 B)
b. Chemical Oxygen Demand (COD)	40	968.1	40	22.70	Sample Data (SM 5220D)
c. Total Organic Carbon (TOC)	17.8	430.8	17.8	10.10	Sample Data (SM 5310B)
d. Total Suspended Solids (TSS)	22	532.4	14.68	8.33	Sample Data (SM2540D)
e. Ammonia (as N)	<0.8	<19.36	<0.8	<0.4540	Sample Data (Bremner)
f. Flow (MGD)	2.9		0.068		Flow estimates are based on average daily rainfall and maximum rainfall during a 25-year/24-hour rain event.
g. Temperature (winter) (C)	17.2		17.2		Based on data from the GRP Franklin facility.
h. Temperature (summer) (C)	19.4		19.4		Based on data from the GRP Franklin facility.
i. pH (s.u.)	7.18	7.3	7.18	7.3	Sample Data (SM 4500-H B)

Part B

Pollutant	2. Maximum Daily Value (include units)	3. Average Daily Value (include units)	4. Source
Total Aluminum	0.42 ppm	0.27 ppm	Sample Data
Total Boron	0.091 ppm	0.0575 ppm	Sample Data
Total Calcium	33.05 ppm	21.40 ppm	Sample Data
Total Iron	4.36 ppm	2.32 ppm	Sample Data
Total Potassium	28.5 ppm	24.2 ppm	Sample Data
Total Magnesium	5.7 ppm	3.50 ppm	Sample Data
Total Phosphorous	0.136 ppm	0.095 ppm	Sample Data
Total Zinc	0.05 ppm	0.0203 ppm	Sample Data
Total Manganese	0.40 ppm	0.213 ppm	Sample Data
Total Residual Chlorine	0.31 mg/L	0.195 mg/L	Sample Data

Total Reactive Phosphorous	0.058 mg/L	0.058 mg/L	Sample Data
Total Silicon	7.75 mg/L	5.25 mg/L	Sample Data
TKN	1.25 mg/L	1.25 mg/L	Sample Data

CONTINUED FROM THE FRONT	EPA I.D. NUMBER (copy from Item 1 of Form 1)	Outfall Number 02
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V. Effluent Characteristics

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

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

Part A

1. Pollutant	2. Maximum Daily Value		3. Average Daily Value		4. Source
	Conc. (mg/L)	Mass. (lbs/day)	Conc. (mg/L)	Mass. (lbs/day)	
a. Biochemical oxygen Demand (BOD)	60.57	328.6	26.39	45.15	Sample date from fire water pond (SM 2510B)
b. Chemical Oxygen Demand (COD)	49	265.8	49	83.83	Sample data from fire water pond (SM 5220D)
c. Total Organic Carbon (TOC)	24.5	132.9	24.5	41.91	Sample data from fire water pond (Bremmer)
d. Total Suspended Solids (TSS)	82.3	446.4	33.37	57.08	Sample data from fire water pond (SM 2540D)
e. Ammonia (as N)	4.44	24.08	1.218	2.084	Sample data from fire water pond (Bremner/EPA 350.1 Rev 2.0 1993)
f. Flow (MGD)	0.65		0.205		Estimated
g. Temperature (winter) (C)	20.4		20.4		Based on data from the Lumberton, NC facility.
h. Temperature (summer) (C)	20.4		20.4		Based on data from the Lumberton, NC facility.
i. pH (s.u.)	7.8	9.55	7.8	9.55	SM 4500-H+B

Part B

Pollutant	2. Maximum Daily Value (include units)	3. Average Daily Value (include units)	4. Source
Total Phosphorous	6.066 mg/L	3.658 mg/L	Sample Data
Total Reactive Phosphorous	3.085 mg/L	2.411 mg/L	Sample Data
Total Kjeldahl Nitrogen	10.42 mg/L	5.595 mg/L	Sample Data
Total Zinc	0.7400 mg/L	0.1593 mg/L	Sample Data
Total Aluminum	0.1700 mg/L	0.1100 mg/L	Sample Data
Total Boron	0.4700 mg/L	0.1520 mg/L	Sample Data
Total Iron	0.5400 mg/L	0.4025 mg/L	Sample Data
Total Magnesium	12.6000 mg/L	9.6375 mg/L	Sample Data
Total Manganese	0.0560 mg/L	0.03280 mg/L	Sample Data
Calcium	54.60 mg/L	52.95 mg/L	Sample Data
Potassium	34.20 mg/L	32.80 mg/L	Sample Data

Sodium	136.4 mg/L	131.3 mg/L	Sample Data
Silicon	37.34 mg/L	36.12 mg/L	Sample Data
CONTINUED FROM THE FRONT		EPA I.D. NUMBER (copy from Item 1 of Form 1)	Outfall Number 02

V. Effluent Characteristics

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

General Instructions (See table 2D-2 for Pollutants)

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

Part A

1. Pollutant	2. Maximum Daily Value		3. Average Daily Value		4. Source
	Conc. (mg/L)	Mass. (lbs/day)	Conc. (mg/L)	Mass. (lbs/day)	
a. Biochemical oxygen Demand (BOD)	7.03	14.78	7.03	14.78	Sample data from fire water pond (SM 2510B)
b. Chemical Oxygen Demand (COD)	49	103.1	49	103.1	Sample data from fire water pond (SM 5220D)
c. Total Organic Carbon (TOC)	1	1	1	1	This data will provided with the additional sampling that was performed.
d. Total Suspended Solids (TSS)	<3	0	<3	0	Sample data from fire water pond (SM 2540D)
e. Ammonia (as N)	0	0	0	0	This data will provided with the additional sampling that was performed.
f. Flow (MGD)	0.252		0.252		Estimate based on average flow
g. Temperature (winter) (C)	25		25		Estimate of cooling tower blowdown temperature
h. Temperature (summer) (C)	36.3		36.3		Based on average air temperature.
i. pH (s.u.)	8.06	8.06	8.06	8.06	Sample data from fire water pond (SM 4500-H B))

Part B

Pollutant	2. Maximum Daily Value (include units)	3. Average Daily Value (include units)	4. Source
Total Phosphorous	6.066 mg/L	3.658 mg/L	Sample Data
Total Reactive Phosphorous	3.085 mg/L	2.411 mg/L	Sample Data
Total Kjeldahl Nitrogen	10.42 mg/L	5.595 mg/L	Sample Data
Total Zinc	0.7400 mg/L	0.1593 mg/L	Sample Data
Total Aluminum	0.1700 mg/L	0.1100 mg/L	Sample Data
Total Boron	0.4700 mg/L	0.1520 mg/L	Sample Data
Total Iron	0.5400 mg/L	0.4025 mg/L	Sample Data
Total Magnesium	12.6000 mg/L	9.6375 mg/L	Sample Data

Total Manganese	0.0560 mg/L	0.03280 mg/L	Sample Data
Calcium	54.60 mg/L	52.95 mg/L	Sample Data
Potassium	34.20 mg/L	32.80 mg/L	Sample Data
Sodium	136.4 mg/L	131.3 mg/L	Sample Data
Silicon	37.34 mg/L	36.12 mg/L	Sample Data

CONTINUED FROM THE FRONT	EPA I.D. NUMBER (copy from Item 1 of Form 1)	Outfall Number
		02

V. Effluent Characteristics

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

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

Part A

1. Pollutant	2. Maximum Daily Value		3. Average Daily Value		4. Source
	Conc. (mg/L)	Mass. (lbs/day)	Conc. (mg/L)	Mass. (lbs/day)	
a. Biochemical oxygen Demand (BOD)	7.03	14.74	7.03	14.74	Sample data from fire water pond (SM 2510B)
b. Chemical Oxygen Demand (COD)	49	103.1	49	103.1	Sample data from fire water pond (SM 5220D)
c. Total Organic Carbon (TOC)	24.5	51.5	24.5	51.5	Sample data from fire water pond (Bremmer)
d. Total Suspended Solids (TSS)	< 3	0	< 3	0	Sample data from fire water pond (SM 2540D)
e. Ammonia (as N)	< 0.8	0	< 0.8	0	Sample data from fire water pond (Bremmer)
f. Flow (MGD)	0.252		0.252		Estimate based on average flow
g. Temperature (winter) (C)	20.4		20.4		Based on data from the Lumberton, NC facility.
h. Temperature (summer) (C)	20.4		20.4		Based on average air temperature.
i. pH (s.u.)	8.06	8.06	8.06	8.06	Sample data from fire water pond (SM 4500-H B)

Part B

Pollutant	2. Maximum Daily Value (include units)	3. Average Daily Value (include units)	4. Source
Total Phosphorous	6.066 mg/L	3.658 mg/L	Sample Data
Total Reactive Phosphorous	3.085 mg/L	2.411 mg/L	Sample Data
Total Kjeldahl Nitrogen	10.42 mg/L	5.595 mg/L	Sample Data
Total Zinc	0.7400 mg/L	0.1593 mg/L	Sample Data
Total Aluminum	0.1700 mg/L	0.1100 mg/L	Sample Data
Total Boron	0.4700 mg/L	0.1520 mg/L	Sample Data

Total Iron	0.5400 mg/L	0.4025 mg/L	Sample Data
Total Magnesium	12.6000 mg/L	9.6375 mg/L	Sample Data
Total Manganese	0.0560 mg/L	0.03280 mg/L	Sample Data
Calcium	54.60 mg/L	52.95 mg/L	Sample Data
Potassium	34.20 mg/L	32.80 mg/L	Sample Data
Sodium	136.4 mg/L	131.3 mg/L	Sample Data
Silicon	37.34 mg/L	36.12 mg/L	Sample Data

CONTINUED FROM THE FRONT	EPA I.D. NUMBER (copy from Item 1 of Form 1)	Outfall Number
		02

V. Effluent Characteristics

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

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

Part A

1. Pollutant	2. Maximum Daily Value		3. Average Daily Value		4. Source
	Conc. (mg/L)	Mass. (lbs/day)	Conc. (mg/L)	Mass. (lbs/day)	
a. Biochemical oxygen Demand (BOD)	7.03	46.3	7.03	15.3	Sample data from fire water pond (SM 2510B)
b. Chemical Oxygen Demand (COD)	49	323	49	106	Sample data from fire water pond (SM 5220D)
c. Total Organic Carbon (TOC)	24.5	162	24.5	53.2	Sample data from fire water pond (Bremmer)
d. Total Suspended Solids (TSS)	< 3	<19.8	< 3	<6.51	Sample data from fire water pond (SM 2540D)
e. Ammonia (as N)	< 0.8	<5.27	< 0.8	<1.74	Sample data from fire water pond (Bremmer)
f. Flow (MGD)	0.26		0.79		Estimate based on average flow
g. Temperature (winter) (C)	20.4		20.4		Based on data from the Lumberton, NC facility.
h. Temperature (summer) (C)	20.4		20.4		Based on data from the Lumberton, NC facility.
i. pH (s.u.)	8.06	8.06	8.06	8.06	Sample data from fire water pond (SM 4500-H B))

Part B

Pollutant	2. Maximum Daily Value (include units)	3. Average Daily Value (include units)	4. Source
Total Phosphorous	6.066 mg/L	3.658 mg/L	Sample Data
Total Reactive Phosphorous	3.085 mg/L	2.411 mg/L	Sample Data
Total Kjeldahl Nitrogen	10.42 mg/L	5.595 mg/L	Sample Data
Total Zinc	0.7400 mg/L	0.1593 mg/L	Sample Data

Total Aluminum	0.1700 mg/L	0.1100 mg/L	Sample Data
Total Boron	0.4700 mg/L	0.1520 mg/L	Sample Data
Total Iron	0.5400 mg/L	0.4025 mg/L	Sample Data
Total Magnesium	12.6000 mg/L	9.6375 mg/L	Sample Data
Total Manganese	0.0560 mg/L	0.03280 mg/L	Sample Data
Calcium	54.60 mg/L	52.95 mg/L	Sample Data
Potassium	34.20 mg/L	32.80 mg/L	Sample Data
Sodium	136.4 mg/L	131.3 mg/L	Sample Data
Silicon	37.34 mg/L	36.12 mg/L	Sample Data

CONTINUED FROM THE FRONT	EPA I.D. NUMBER (copy from Item 1 of Form 1)	Outfall Number 02
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V. Effluent Characteristics

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

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

Part A

1. Pollutant	2. Maximum Daily Value		3. Average Daily Value		4. Source
	Conc. (mg/L)	Mass. (lbs/day)	Conc. (mg/L)	Mass. (lbs/day)	
a. Biochemical oxygen Demand (BOD)	60.57	399.3	26.39	57.26	Sample date from fire water pond (SM 2510B)
b. Chemical Oxygen Demand (COD)	49	323.1	49	106.3	Sample data from fire water pond (SM 5220D)
c. Total Organic Carbon (TOC)	24.5	161.5	24.5	53.16	Sample data from fire water pond (Bremmer)
d. Total Suspended Solids (TSS)	82.3	542.6	33.37	72.40	Sample data from fire water pond (SM 2540D)
e. Ammonia (as N)	4.44	29.27	1.198	2.599	Sample data from fire water pond (Bremner/EPA 350.1 Rev 2.0 1993)
f. Flow (MGD)	0.79		0.26		Estimated
g. Temperature (winter) (C)	20.4		20.4		Based on data from the Lumberton, NC facility.
h. Temperature (summer) (C)	20.4		20.4		Based on data from the Lumberton, NC facility.
i. pH (s.u.)	7.8	9.55	7.8	9.55	SM 4500-H+B

Part B

Pollutant	2. Maximum Daily Value (include units)	3. Average Daily Value (include units)	4. Source
Total Phosphorous	6.066 mg/L	3.658 mg/L	Sample Data
Total Reactive Phosphorous	3.085 mg/L	2.411 mg/L	Sample Data

Total Kjeldahl Nitrogen	10.42 mg/L	5.595 mg/L	Sample Data
Total Zinc	0.7400 mg/L	0.1593 mg/L	Sample Data
Total Aluminum	0.1700 mg/L	0.1100 mg/L	Sample Data
Total Boron	0.4700 mg/L	0.1520 mg/L	Sample Data
Total Iron	0.5400 mg/L	0.4025 mg/L	Sample Data
Total Magnesium	12.6000 mg/L	9.6375 mg/L	Sample Data
Total Manganese	0.0560 mg/L	0.03280 mg/L	Sample Data
Calcium	54.60 mg/L	52.95 mg/L	Sample Data
Potassium	34.20 mg/L	32.80 mg/L	Sample Data
Sodium	136.4 mg/L	131.3 mg/L	Sample Data
Silicon	37.34 mg/L	36.12 mg/L	Sample Data

CONTINUED FROM THE FRONT	EPA I.D. NUMBER (copy from Item 1 of Form 1)	Outfall Number
		02

V. Effluent Characteristics

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

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

Part A

1. Pollutant	2. Maximum Daily Value		3. Average Daily Value		4. Source
	Conc. (mg/L)	Mass. (lbs/day)	Conc. (mg/L)	Mass. (lbs/day)	
a. Biochemical oxygen Demand (BOD)	60.57	328.6	26.39	45.15	Sample data from fire water pond (SM 2510B)
b. Chemical Oxygen Demand (COD)	49	265.8	49	83.83	Sample data from fire water pond (SM 5220D)
c. Total Organic Carbon (TOC)	24.5	132.9	24.5	41.91	Sample data from fire water pond (Bremmer)
d. Total Suspended Solids (TSS)	82.3	446.4	33.37	57.08	Sample data from fire water pond (SM 2540D)
e. Ammonia (as N)	4.44	24.08	1.218	2.084	Sample data from fire water pond (Bremner/EPA 350.1 Rev 2.0 1993)
f. Flow (MGD)	0.65		0.205		Estimated
g. Temperature (winter) (C)	20.4		20.4		Based on data from the Lumberton, NC facility.
h. Temperature (summer) (C)	20.4		20.4		Based on data from the Lumberton, NC facility.
i. pH (s.u.)	7.8	9.55	7.8	9.55	SM 4500-H+B

Part B

Pollutant	2. Maximum Dail Value (include units)	3. Average Daily Value (include units)	4. Source
Total Phosphorous	6.066 mg/L	3.658 mg/L	Sample Data
Total Reactive Phosphorous	3.085 mg/L	2.411 mg/L	Sample Data
Total Kjeldahl Nitrogen	10.42 mg/L	5.595 mg/L	Sample Data
Total Zinc	0.7400 mg/L	0.1593 mg/L	Sample Data
Total Aluminum	0.1700 mg/L	0.1100 mg/L	Sample Data
Total Boron	0.4700 mg/L	0.1520 mg/L	Sample Data
Total Iron	0.5400 mg/L	0.4025 mg/L	Sample Data
Total Magnesium	12.6000 mg/L	9.6375 mg/L	Sample Data
Total Manganese	0.0560 mg/L	0.03280 mg/L	Sample Data
Calcium	54.60 mg/L	52.95 mg/L	Sample Data
Potassium	34.20 mg/L	32.80 mg/L	Sample Data
Sodium	136.4 mg/L	131.3 mg/L	Sample Data
Silicon	37.34 mg/L	36.12 mg/L	Sample Data

CONTINUED FROM THE FRONT	EPA I.D. NUMBER (copy from Item 1 of Form 1)	
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C. Use the space below to list any of the pollutants listed in Table 2D-3 of the instructions which you know or have reason to believe will be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it will be present.

1. Pollutant	2. Reason for Discharge

VI. Engineering Report on Wastewater Treatment

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

Report Available No Report

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

Name	Location

VII. Other Information (Optional)

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

GRP has agreed to a settlement with the adjacent landowner to discharge both process water and stormwater to Beaverdam Creek via the adjacent landowner's property.

Finally, the site address should be updated to 125 HV Chandler Road, Colbert, GA 306228

GRP has agreed to a settlement with the adjacent landowner to discharge both process water and stormwater to Beaverdam Creek via the adjacent landowner's property. GRP's attorney is currently waiting on the public version of the settlement to provide to GA EPD, as the settlement is secret.

Additionally, the facility has collected additional samples necessary for Part A of Section V. These will be submitted once they are received from the lab.

Finally, the site address should be updated to 125 HV Chandler Road, Colbert, GA 306228

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Finally, the site address should be updated to 125 HV Chandler Road, Colbert, GA 306228

GRP has agreed to a settlement with the adjacent landowner to discharge both process water and stormwater to Beaverdam Creek via the adjacent landowner's property.

Additionally, the facility is considering using a dust suppressant chemical (Benetech CleanPak BT-205W) to better suppress dust and possibly reduce water needed for dust suppression. Information on the chemical is included in the attachments.

Finally, the site address should be updated to 125 HV Chandler Road, Colbert, GA 306228

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Finally, the site address should be updated to 125 HV Chandler Road, Colbert, GA 306228

GRP has agreed to a settlement with the adjacent landowner to discharge both process water and stormwater to Beaverdam Creek via the adjacent landowner's property.

Additionally, the facility is considering using a dust suppressant chemical (Benetech CleanPak BT-205W) to better suppress dust at conveyor transfer points (after the biomass dryer) and possibly reduce water needed for dust suppression. The dust suppressant chemical and water will only be utilized in areas that discharge to Outfall 02. Information on the chemical is included in the attachments.

As part of GRP Madison's Consent Order Agreement with GA EPD, the facility would like to reiterate the following:

- As described in the dust suppression letter included in the attachment, the dust suppressant chemical will only be applied to the fuel after leaving the biomass dryer and at further downstream transfer points. The conveyors are covered to prevent material contact with rainwater and the chemical application rate will be calibrated to ensure there is not a discharge of the chemical. During initial trials, the facility will monitor chemical application to ensure there is no discharge. If any potential discharge were to occur, the facility will be prepared to contain, collect, and dispose of the discharge prior to reaching Outfall 02.
- Any process wastewater generated by the air compressors discharges to the facility's oil/water separator, which discharges to the facility's fire water pond. The process wastewater associated with the air compressors will not be discharged until a wastewater discharge permit is issued by GA EPD.

Finally, the site address should be updated to 125 HV Chandler Road, Colbert, GA 306228

VIII. CERTIFICATION

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

A. Name and Official Title (*type or print*)

David Groves / Plant Manager

B. Signature

David Groves

C. Date Signed

11/25/2020

State of Georgia
Department of Natural Resources
Environmental Protection Division
Watershed Protection Branch

National Pollutant Discharge Elimination System (NPDES)
Industrial Antidegradation Analysis

SECTION 1. PROJECT INFORMATION

SECTION 2. ALTERNATIVES ANALYSIS

- 2.1 Provide the alternatives considered that could result in no degradation of surface waters. If the applicant selects an alternative that results in no degradation, the following sections are not required.
- 2.2 Provide the alternatives considered that could lessen degradation to surface waters. Identify which alternative(s) is/are technologically possible, able to be put into practice, and economically viable.

SECTION 3 SOCIAL OR ECONOMIC DEMONSTRATION - For each factor provide a discussion of expected positive and negative impacts. Include appropriate support documentation.



SECTION 4. PRACTICABLE ALTERNATIVE CHOSEN

SECTION 5. CERTIFICATION

Name and Title: Indicate the name and title of the person signing the form.
Telephone No.: Provide the telephone number of the person signing the form.
Date: Indicate the date that the form was signed.

This form is an attached part of the NPDES permit application and must be signed in accordance with Georgia Rule 391-3-6-.06(5). Please refer to Georgia EPD's Antidegradation Analysis Guidelines for additional guidance in completing this form.

Please attach additional pages and/or documentation as needed.

	National Pollutant Discharge Elimination System (NPDES)	
Industrial Antidegradation Analysis		

Section 1. Project Information

Facility Name: GRP Energy Facility	NPDES Permit Number:
Location: 125 HV Chandler Rd., Colbert, GA 30628	County: Madison
Receiving Waters Impacted: Unnamed Tributary to Beaverdam Creek	Stream Classification: Drinking Water

Section 2.1 Alternatives Analysis - Provide the alternatives considered that could prevent degradation of surface waters

A. Discharge to other treatment systems:
 Discuss the availability of either public or private treatments systems with sufficient capacity and sophistication to treat the wastewaters generated by this project. Compare the feasibility and costs of such options with the feasibility and costs of the proposed treatment system.

See Attachment A.

B. 100% Reuse & 100% Recycle:
 Discuss the potential of 100% year round urban water reuse and use of a 100% recycle system. Outline potential reuse customers &/or ways to recycle all of the generated wastewater. Provide feasibility and costs.

The plant is designed as a closed loop system which allows the utilized potable water to be cycled through the system at least 7 times before solid build up occurs. Thus, requiring discharge or disposal of the wastewater.

Option 1 Wastewater Reuse for Agricultural Irrigation--The facility does not have sufficient property for a land application of sufficient capacity to absorb the volume of process water generated and anticipated rain volumes. Therefore, this is not viable.

Option 2 Wastewater Resuse as Potable Drinking Water--use of reclaimed water straight from the wastewater treatment plant through a pipe-to-pipe system that connects the wastewater line directly to an established potable water supply system without intervening discharge to a natural water body.

Option 3 UIC--Replenishment of ground water by the controlled addition of reclaimed water to the ground water basin. Not thought to pose any health risk since it relies on natural treatment in surface water and aquifers. With either of these options, infrastructure and/or transportation costs, as well as, potential increased treatment requirements make these options financially difficult.

Additional infrastructure, such as connecting to Madison County could cost upwards of \$100K as well as any additional treatment of the wastewater to meet Madison County requirements; and installation/permitting of a UIC well (\$100-\$150K, depending on depth) then \$10K/month for O&M/utilities/testing. Transportation and/or infrastructure to use the wastewater in the surrounding agricultural area are likely to range between \$50K and \$100K. Additionally, the facility does not have sufficient property for a land application system of sufficient capacity to absorb the volume of process water generated and anticipated rain volumes. Therefore, the preferred option would be to discharge via an NPDES permit.

C. Land Disposal Treatment System:

Land treatment includes subsurface, drip irrigation, reuse and spray irrigation systems. Consideration should be given to the wastewater characteristics and whether the constituents are conducive to land application. Provide the following:

- 1) An estimate of the best case hydraulic loading rate based on County Soil Surveys or from a soil evaluation performed by a soil scientist should be provided. Acreage requirements may be driven by either hydraulics or agronomics.
- 2) Calculations showing hydraulic loading rate and total area of land needed for the land disposal system, including buffers.
- 3) The availability and cost of land and the cost of transporting the wastewater to a suitable, available site.
- 4) Overall feasibility and cost of use of land treatment.

See Attachment B.

D. No Increase In Pollutant Loading:

Expanding systems only - Evaluate the installation of a wastewater treatment system resulting in no increase in pollutant loading to the surface waters.

Not applicable.

Section 2.2 Alternatives Analysis - Provide the alternatives considered that could lessen degradation to surface waters

E. Treatment system design and selected technology:

Provide the preliminary treatment system design and selected technology/technologies to meet the wasteload allocation (WLA). Describe each candidate technology including the efficiency and reliability in pollutant removal and the capital and operational costs to implement those candidate technologies. Justify the selection of the proposed treatment technology. Provide feasibility and costs.

The facility will utilize potable water from Madison County for steam production. As the water evaporates there is a buildup of minerals in the remaining water. The only treatment required prior to discharge to Outfall 002 is pH adjustment. During the boiler operations the pH is lowered to prevent scale buildup in the equipment and then the pH is adjusted prior to discharge.

The wastewater treatment via pH adjustment is an industry standard acceptable treatment method and based on an anticipated 205,000 gallon per day discharge, it is estimated to cost \$132/day for pH treatment, daily inspections and routine O&M.

For Outfall 01, the existing pond may allow for settling of any solids.

F. Flow minimization

Evaluate potential water conservation opportunities (partial recycling and/or reuse opportunities of wastewater) including the feasibility of implementation and the costs. Indicate which of these may be implemented.

The facility is a closed loop system that utilizes potable water in at least 7 cycles without risking damage to the boiler and associated equipment. No additional potential water conservation opportunities exist.

G. Pollution reduction measures:

Discuss the pollution prevention measures evaluated including the feasibility of those measures and the cost. Measures to be addressed include but are not limited to changes in processes, source reductions or substitution with less toxic substances. Indicate which measures are to be implemented.

See Attachment A.

H. The use of best management practices (BMPs) to minimize impacts:

Discuss the consideration and use of best management practices that will assist in minimizing impacts to water quality from the proposed permitted activity.

Outfall 02:

- (1) Installation of a conductivity controller to control blowdown and measure the conductivity of the cooling tower blowdown and discharge water when the conductivity set point is exceeded. Conductivity meter to determine the relative mineral concentration of the recirculating and make-up water.
- (2) Keep a log of make-up and blowdown quantities, conductivity, and cycle concentrations to monitor trends to spot deterioration in performance.
- (3) Inspect the cooling tower on a regular basis for leaks or other unauthorized draw-off.
- (4) Inspect system components including boiler and area sumps, conductivity controller, make-up water valve, and blowdown valve on a regular basis.
- (5) Contracted with US Waters to provide boiler and cooling tower blowdown water treatment chemicals (industry standard) which include: Dechlor 104; RO 504 (scale inhibitor); Biotrol 12.5 (chlorine based biocide); CWT 3230; Power MP 1750 (boiler internal treatment); Towerasure A530; and Powerline N134.
- (6) Monitor fire pond/wastewater holding area prior to discharge and provide for pH adjustment, as necessary, of wastewater prior to discharge to Outfall 002.

Outfall 01:

The facility will implement quarterly inspections of the discharge area similar to the requirements of the General Industrial Stormwater Permit to ensure BMPs such as good housekeeping and spill prevention are properly implemented. These documented inspections will be supplemented by undocumented weekly walk-through of the facility to identify any potential deficiencies.

I. The use of best management practices (BMPs) to minimize impacts:

Discuss the consideration and use of best management practices that will assist in minimizing impacts to water quality from the proposed permitted activity.

See item H above.

Section 3. Social or Economic Demonstration

A. Define the boundary of the affected community:

Specify the geographic region the proposed project is expected to affect. Include the name of all cities, towns, and counties. This geographic region must include the proposed receiving water.

The GRP-Madison, LLC site is located at 125 HV Chandler Drive, Colbert, Madison County, Georgia. The latitude/longitude coordinates are: 34.042862, -83.191151. Wastewater from the facility operations and stormwater is expected to discharge from Outfall 02, which will discharge to an unnamed tributary to Beaverdam Creek. Additionally, only stormwater will discharge from Outfall 01, which will discharge to an unnamed tributary to Beaverdam Creek.

See Figure 1.

B. The effect on employment in the affected community:

Compare current unemployment rates in the affected community to current state and national unemployment rates. Discuss how the proposed project will positively or negatively impact those rates, including quantifying the number of jobs created and/or continued and the quality of those jobs.

Madison County's population is estimated at 29,650 people, with a median household income of \$51,700, and employment rate of 59.9% based on US Census estimates from July 2019. -

The GRP Madison Renewable Energy facility delivers the following economic impacts:

- Payment of over \$1,600,000 per year in tax revenue to the county.
- Over 36 direct well paying jobs and 400 downstream jobs created
- Over \$3,000,000 in direct payroll and benefits
- GRP has paid for a \$3,500,000 water system upgrade for Madison County, vastly improving the water system.
- Provides electricity to over 60,000 homes per year.

C. The effect on median household income levels in the affected community:

Compare current median household income levels with projected median household income levels. Discuss how the proposed project will positively or negatively impact the median household income in the affected community including the number of households expected to be impacted within the affected community.

Local average income of Madison County is estimated at \$51,700. Permanent staff at GRP-Madison, LLC will benefit from average salary of \$60,000 per year plus bonuses and healthcare. It is estimated that there will be 36 permanent staff. Seasonal and temporary staff will earn approximately \$25 per hour and higher.

D. The effect on tax revenues of the affected community:

Compare current tax revenues of the affected community with the projected increase in tax revenues generated by the proposed project. Discuss the positive and negative social and economic impacts on the affected community by the projected increase.

The GRP Madison Renewable Energy facility project is estimated to have a \$165M investment, and is contracted to supply Georgia Power for 30 years, with renewable energy supplied power. The plant will strengthen the power supply on the local grid. Additionally, GRP-Madison, LLC is contracted with Madison County for supply of potable water (contract worth approximately \$24M annually), and has paid approximately \$3.5M for upgrades to the Madison County water system

In addition to these direct impacts, the facility will pay approximately \$1.6M in taxes annually to Madison County providing significant funding to the county. While there are some community concerns about the facility, this due primarily to issues during commissioning of the boiler.

E. The effect on existing environmental issues in the affected community:

Discuss how the proposed project will have a positive or negative impact on existing environmental issues.

The discharge from the facility is to an unnamed tributary, which discharges to Beaverdam Creek, an impaired stream. The discharge water from the facility will have a positive environmental impact on Beaverdam Creek by introducing cleaner water into the impaired stream.

The GRP-Madison project is not expected to have an affect on public health. Best available technology has been installed in the plant with strict control measures in accordance with the EPD issued Air Permit (Permit No. 4911-195-0020-E-01-0). The following abatement systems have been installed to minimize NOX and CO emissions: (1) electrostatic precipitator; (2) cyclone; (3) selective catalytic reduction system; and (4) oxidation catalyst.

F. Discuss any other economic or social benefit to the affected community:

Discuss any positive or negative impact on the economy of the affected community including direct and or indirect benefits that could occur as a result of the project. Discuss any positive or negative impact on the social benefits to the community including direct and indirect benefits that could occur as a result of the project.

GRP-Madison, LLC continually evaluates opportunities to provide additional funding for investments in local projects, such as park and playground refurbishments and providing educational opportunities for the local school district concerning electricity, power generation, and engineering. Additionally, it is intended that the furnace ash generated from the plant operations can be used as a soil amendment. This will be supplied to local farmers as a low cost option and to landfills as a soil cover.

G. Economic Analysis

Provide valid cost comparisons of the alternatives analysis as compared to the practicable alternative chosen for implementation. The analysis should include all monetary costs associated with construction, startup, and annual operation and maintenance of a facility.

Alternative 1--Wastewater Treatment (pH adjustment) and discharge via Individual Industrial Wastewater NPDES Permit. Estimated Cost--\$36/day

Alternative 2--Land Application-- Initial startup cost of \$500,000 - \$800,000. Daily treatment (if necessary) and trucking to sprayfield based on 267,000 gallons per day is approximately \$9,000/day.

Alternative 3--Discharge to City/County sewer--Lines are not available at this time. To connect to sanitary sewer is in excess of \$100,000. Daily treatment and discharge at \$6,150.

Alternative 4--UIC-- Initial fees of \$100-\$150K for well installation and permitting. O&M, testing, reporting, utilities for operation of UIC well, estimated at \$14.3K/month.

H. Return Flow Considerations (Optional):

Demonstrate that water quantity in the receiving water is limited and there are potential water quantity gaps under low flow conditions, then the water quantity benefits of allowing a surface water discharge outweigh the effects of lower water quality resulting from the discharge provided the water quality to protect the existing uses will be maintained. This demonstration might include, but is not limited to, references to surface water flow needs identified in an applicable Regional Water Plan, TMDL, applicable recommendations for water management or the need to support aquatic life and drinking water supplies.

Section 4. Practicable Alternative Chosen – include rationale

Alternative 1 - Discharge via Individual Industrial NPDES Wastewater Permit. This is based on the cost comparison of the other alternatives. Additionally, this alternative is standard industry practice for similar plants.

Section 4. Certification

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

Name:	Date:
Title:	Telephone:
Signature:	

Option 1 Offsite treatment-- The city of Colbert and the surrounding unincorporated area does not provide sanitary sewer service to the facility. Additionally, there is not a public or private treatment system within a 25-mile radius with sufficient capacity and to treat the entire volume of combined wastewater and stormwater generated by this project. The Madison County IDBA WPCP currently has a capacity to treat and discharge up to 50,000 gallons per day (GPD) via its LAS and treats an average of 10,000 GPD from its commercial and residential customers. The IDBA is currently evaluating the possibility of updating the permit to allow for up to 70,000 GPD of water to be discharged to the LAS. In either case, the publicly available option does not have the capacity to land apply the entire volume of wastewater that is anticipated to be generated by the facility and may not have the ability to treat the wastewater in the treatment plant prior to discharging the water to the LAS due to the low organic content of the water from the facility.

Option 2 Off-site Land Application System (LAS)--Based on a review of EPD's Wastewater_Permits_01-31-2020 Microsoft Excel® spreadsheet, there are two Municipal LAS permitted facilities and no industrial LAS permitted facilities within a 20 mile radius of GRP. These include the Madison County IDBA WPCP and University of Georgia (Composting Facility); however, the Madison County IDBA WPCP is the only permitted LAS facility within a 10 mile radius of the facility, and does not have the capacity to treat and dispose of the entire volume of process wastewater from Outfall 02. Even if the Madison County IDBA WPCP had the capacity to treat all process waters from GRP, the cost would be infeasible compared to the pH adjustment system that may be required as a treatment system for the facility's process waters. It is estimated to cost \$225 per truckload to transport the water to the Madison County IDBA WPCP facility; therefore, the cost to transport the average volume of water generated by GRP (0.205 MGD) to the Madison County IDBA WPCP in a 5,000 gallon tanker truck is estimated at \$9,000/day, \$3,280,000/year, and when including the Madison County IDBA disposal costs (\$25/1,000 gallons), the daily and annual costs are \$14,000 and \$5,110,000, respectively. This far exceeds the potential cost to install and operate a pH neutralization treatment system (if required) at GRP Madison, which would cost approximately \$36/day, \$13,167/year over 10 years, if needed to meet permit limitations. However, GRP Madison did submit a pretreatment application to EPD to haul wastewater from the facility to Madison County IDBA WPCP, to be utilized only in an emergencies, when water can not be discharged as regulated by the NPDES Permit.

Option 3 Underground Injection Control (UIC)--There are no known public/private injection wells in Madison County. The facility is expected to discharge an average of 205,000 gallons of process water from Outfall 02 per day. If an offsite public/private treatment system (wastewater treatment system, LAS, UIC) would be available, the facility would have to store the wastewater and transport the wastewater on a daily basis for treatment. The best case scenario would be a distance approximate to the Madison County IDBA WPCP facility, therefore the cost to transport the water to a currently unknown UIC would be approximately \$9,000/day and \$3,280,000/year. Similar to Option 2, this option far exceeds the cost to operate under an NPDES permit.

The preferred option would be to discharge via an NPDES permit at an estimated cost of \$36/day for pH adjustment and daily inspections. Trucking of water to the Madison County IDBA would be considered for use as an emergency back-up plan due to the high costs associated with this disposal method as documented above. GRP Madison would consider the use of the Madison County IDBA as a back-up in the event of a spill or other emergency that would prevent discharge of the water via the NPDES permit.

Attachment B: Section 2.1.C

- (1) Based on the Soil Survey of Elbert, Franklin, and Madison Counties, Georgia, the dominant soils of Madison County in upgradient areas consist of well drained loamy surface soils with clayey subsoils. This is consistent with the Madison County IDBA WPCP, therefore a maximum estimated hydraulic loading rate of 2.13 in/week.
- (2) Conservatively the area necessary to treat the Average Flow from Outfall 02 (0.205 MGD) is determined as:

Equation 1: Conservative Calculation of Area Required for Outfall 02 Average Flow

$$\text{Area (Acres)} = (\text{Total Design Flow (Gal/week)}) / [\text{Hydraulic Loading Rate (in/week)} \div 12(\text{in/ft}) \times 43,560(\text{ft}^2/\text{acre}) \times 7.48(\text{gal/ft}^3)]$$

$$\text{Area (Acres)} = (1,435,000 \text{ (Gal/week)}) / [2.13 \text{ (in/week)} \div 12(\text{in/ft}) \times 43,560(\text{ft}^2/\text{acre}) \times 7.48(\text{gal/ft}^3)]$$

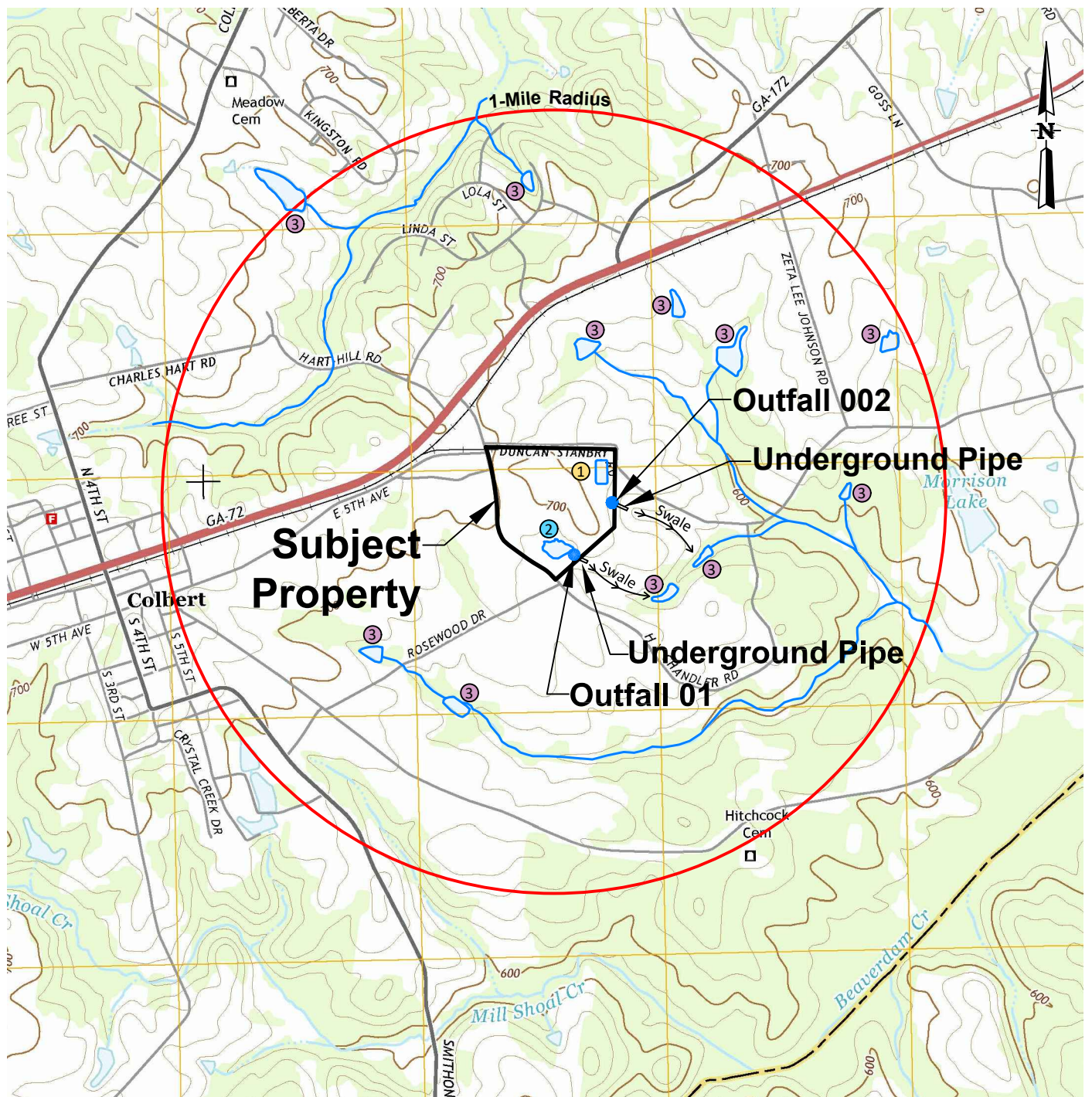
$$\text{Area (Acres)} = 24.81$$

Additional land area for a buffer area consisting of 25 feet from all property lines would add an additional 2.5 acres, assuming a square property, for a total area of 27.31 acres.

- (3) Most properties of sufficient size that are for sale in the area have a cost of approximately \$8,000/acre; however, most if not all of the currently listed properties include one or multiple streams or other water features on the property, which would limit the available land area to construct an LAS system, and require significant modifications to the properties to prepare them for an LAS system. If a suitable property were found, it is estimated to cost approximately \$220,000, which does include the necessary improvements and trucking of the water to the holding pond. These costs are estimated in the range of \$200,000 - \$500,000 to prepare the property and install the LAS system, and \$9,000/day to transport the water to the LAS site.

Therefore, the total initial cost is expected to be approximately \$720,000, and annual operating costs are expected to be \$3,600,000 including trucking and operating/maintenance.

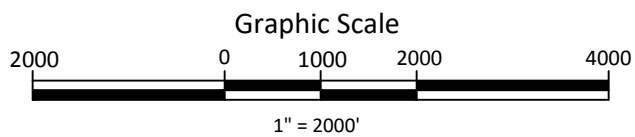
- (4) While land application may be feasible, it will be difficult to find a suitable property within a close enough range of GRP Madison to make trucking of 0.205 MGD to the LAS site feasible. Even in a best-case scenario it is estimated to cost GRP approximately \$3,600,000/year over 10 years, which far exceeds the cost of operating under an NPDES permit, \$13,167/year or less.



Source: U.S.G.S. Danielsville South, GA, (2014)

LEGEND

- ① - Fire Pond
- ② - On-Site Retention Pond
- ③ - Pond
- ~ - Unnamed Tributary



<p>GRP Madison Renewable Energy Facility, LLC</p> <p>Colbert, Georgia</p>	
<p>Figure 1 Subject Property Location, Topographic and Water Body Location Map</p>	
	<p>201101.0059 February 2020</p>

After Recording Return to:
Stack & Associates, P.C.
260 Peachtree Street, Suite 1200
Atlanta, GA 30303

Cross Referenced Instruments:

Deed	Deed Book:	1309	Pages:	154–158
Deed	Deed Book:	1567	Pages:	13–22
Plat	Plat Book:	21	Pages:	21
Plat	Plat Book:	26	Pages:	57

WASTEWATER DISCHARGE LICENSE

William Russell, *Individually and as Trustee of the William T. Russell Inter Vivos Trust*, a resident of the State of Georgia, or his successors in title and interest (“Licensor”), effective as of January 31, 2020 (“Effective Date”), hereby enters into this License and grants GRP Madison, LLC, a Delaware limited liability company, its successors in title and interest (“Licensee”), a License to discharge wastewater to the Licensor’s property from a biomass power plant operated by Licensee located at 268 Office Drive, Colbert Georgia 30618 (“Facility”), the terms of which License are defined herein. The Licensor and Licensee herein may be referred to individually as “Party” or collectively as “Parties”.

1. LICENSE GRANTED: In consideration of the License Fee, and other good and valuable consideration, the receipt and sufficiency of which the Parties hereby acknowledge, Licensor grants to Licensee a License to: (a) discharge process wastewater from the Facility through an underground pipe connected to “Outfall #2” located on the property of Licensee to a point located approximately ten (10) feet beyond the terminus of the pipe or such additional distance as qualified professionals from both parties agree is necessary for installation and maintenance of erosion and sedimentation control and energy dissipation/bank stabilization measures required by the Wastewater Discharge License Agreement between the Parties and executed contemporaneously herewith, as such area is more particularly depicted on Exhibit “A” attached hereto (the “Licensed Premises”); and (b) subject to the terms and conditions herein, access the Licensed Premises for the purpose of maintaining the discharge pipe and preventing erosion, sedimentation, and bank instability at the discharge location. Further, Licensor grants to Licensee the ability to take any such actions as may be necessary to comply with the wastewater discharge permit issued to Licensee by the Georgia Department of Natural Resources Environmental Protection Division (“EPD”) including installation, modification, replacement or repair of any structures placed in or near the Licensed Premises.
2. LICENSE FEES AND CONDITIONS: Use of this License by Licensee is expressly conditioned upon the Licensee’s compliance with all of the terms and conditions set forth in the Wastewater Discharge License Agreement between the Parties and executed contemporaneously herewith and hereby incorporated by reference
3. TERM: This License shall commence on the Effective Date and is non-terminable before year 30, subject to the terms and conditions set forth in the Wastewater Discharge

License Agreement.

4. GOVERNING LAW/VENUE: The laws of the State of Georgia, including statutes of limitations, shall govern the validity, construction and effect of this License, and shall apply in all respects to any disputes or controversies arising out of or pertaining thereto. Time is of the essence regarding each Party's obligations and duties set forth in this License. The Parties hereto agree that any suit at law or in equity that either Party may wish to commence with respect to any dispute that might arise under this License must be filed and prosecuted in the state or federal courts located in or having jurisdiction over Madison County, Georgia.
5. ASSIGNMENT: Licensee may freely assign to any successors and/or assigns all or any of its rights and/or obligations under this License at any time and from time to time. Licensee shall be released from all rights and/or obligations under this License from and after such assignment which shall become the obligations of the successors and/or assigns as new Licensee. Licensee shall provide proper notification under Section 13 herein to the Licensor and EPD in the event of such assignment.
6. WAIVER OF CLAIMS: All structures, appurtenances, fixtures, materials, equipment, inventory or other personal property situated on the Licensed Premises and belonging to Licensee, its agents, contractors, employees, or invitees or any occupant of the Licensed Premises, shall be situated there at the risk of Licensee or such other person only, and Licensor shall not be liable for damage, theft, misappropriation, or loss of such structures, materials, equipment, inventory or other personal property. Licensee and Licensor each waive, release and discharge the other from all claims for damage to such personal property.
7. WAIVER OF BREACH: No failure by either Party to insist upon the strict performance of any term or condition of this License or to exercise any right or remedy available on a breach thereof, and no acceptance of full or partial payment during the continuance of any such breach shall constitute a waiver of any such breach or any such term or condition.
8. REPRESENTATIONS AND WARRANTIES. Licensee understands and agrees that Licensor makes no representations and warranties regarding the condition, fitness, or suitability of any of the areas, property or facilities described herein for Licensee's business or any other purpose described herein.
9. PROPERTY RIGHTS. Licensee understands and agrees that nothing herein is intended to or shall be construed to convey to Licensee any real property right, title or interest in or to the Licensed Premises, but merely grants a limited license to Licensee all as set forth herein.
10. NO PARTNERSHIP CREATED. No partnership or joint venture or comparable arrangement is intended hereby by either Party.
11. GENERAL: This License shall not be modified, changed or altered in any respect

except in writing executed by the Parties hereto. If any term, provision, covenant or condition of this License should be held by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of this License shall continue in full force and effect and shall in no way be affected, impaired or invalidated thereby. This License may be executed in one or more counter-part copies and each such copy shall be evidence of this License.

12. ACCESS: Licensor understands and agrees that EPD is considered an allowed invitee of the Licensor and Licensee and in such capacity is granted the right to enter the Licensed Premises at any time for the purposes of conducting inspections necessary to ensure compliance with the Wastewater Discharge Permit issued by EPD to the Licensee.
13. NOTICES: The Parties hereby designate the following addresses and contact information for notices, which either Party may change at any time and from time to time, by the other Party written notice hereunder, as follows:

To Licensor:

Address for the owner of Parcel No. 0071074 on file with the Madison County Tax Assessor office, which is currently:

William T. Russell
P.O. Box 245
Colbert, GA 30628

And

Donald D.J. Stack
Stack & Associates, P.C.
260 Peachtree Street, Suite 1200
Atlanta, GA 30303

To Licensee:

Georgia Renewable Power - Madison, LLC
2700 Southbridge Parkway
Suite 540
Birmingham, AL 35209

To Agency:

Georgia Environmental Protection Division
Industrial Permitting Unit
2 Martin Luther King Jr. Drive Suite 1152E
Atlanta, GA 30334
Attn: Whitney Fenwick, Acting Manager

Such notices shall be deemed to be duly given only if delivered personally or mailed by certified mail, return receipt requested, in a postage-paid envelope, addressed to the other Party at the relevant addresses given above. If such mail is properly addressed and mailed, as above, it shall be deemed notice for all purposes herein even if undelivered.

IN WITNESS WHEREOF, the Parties hereto have caused this License to be executed and delivered by and through their respective duly authorized representative or officer as of the day and year first above written.

LICENSOR:

William T. Russell,

On behalf of himself and the William T. Russell Inter Vivos Trust

Signature: William T Russell

Print Name: William T. Russell

LICENSEE:

GRP Madison, LLC

a Delaware limited liability company

Signature: [Handwritten Signature]

Print Name: DANIEL H SHERMAN IV

Title: CHIEF LEGAL OFFICER

EXHIBIT "A"

Depiction of Licensed Premises – Survey and Legal Description

After Recording Return to:
Stack & Associates, P.C.
260 Peachtree Street, Suite 1200
Atlanta, GA 30303

Cross Referenced Instruments:

Deed	Deed Book:	1309	Pages:	154-158
Deed	Deed Book:	1567	Pages:	13-22
Plat	Plat Book:	21	Pages:	21
Plat	Plat Book:	26	Pages:	57

STATE OF GEORGIA)
)
COUNTY OF MADISON)

STORMWATER EASEMENT AND AGREEMENT

William Russell, *Individually and as Trustee of the William T. Russell Inter Vivos Trust*, a resident of the State of Georgia, and his successors in title and interest (“Grantor”), effective as of January 31, 2020 (“Effective Date”), hereby enters into this Stormwater Easement and Agreement and grants GRP Madison, LLC, a Delaware limited liability company, its successors in title and interest (“Grantee”), an easement to discharge stormwater to the Grantor’s property from a biomass power plant operated by Grantee located at 268 Office Drive, Colbert Georgia 30618 (“Facility”), the terms and conditions of which Easement are defined herein. The Grantor and Grantee herein may be referred to individually as “Party” or collectively as “Parties.”

WITNESSETH

1. GRANTOR, for and in consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration, in hand paid, the receipt, adequacy, and sufficiency of which is hereby acknowledged by Grantor, has granted, bargained, sold, aliened, conveyed and confirmed and does hereby grant, bargain, sell, alien, convey and confirm unto Grantee, its successors and assigns, a perpetual, non-exclusive easement (“Easement”) to:
 - 1.1. Discharge stormwater from the Facility (the “Benefited Property”) through an underground pipe connected to “Outfall 2” located on the property of Grantor, at substantially the same rates and volumes for Basin 2 and Outfall 2 shown in the revised hydrology study of Grantee dated August 30, 2019 and prepared by AEM, which is hereby incorporated by reference, to a point located approximately ten (10) feet beyond the terminus of the pipe or such additional distance as qualified professionals from both parties agree is necessary for installation and maintenance of erosion and sedimentation control and energy dissipation/bank stabilization measures required by Section 2.5, as such area is more particularly depicted on Exhibit “A” attached hereto (the “Burdened Property”), and
 - 1.2. Subject to the terms and conditions herein, access the Burdened Property for the purpose of maintaining the discharge pipe and preventing erosion, sedimentation, and bank instability at the discharge location.

2. EASEMENT TERMS AND CONDITIONS

- 2.1. The Grantee shall keep the Burdened Property open in its current state so that Grantor may continually access and carry out normal farming practices including plowing, planting, and grazing/running cattle on the Burdened Property.
 - 2.2. Grantor has the right to maintain the existing fence on the Burdened Property.
 - 2.3. Grantee shall notify Grantor at least 48 hours before accessing the easement area for inspection and maintenance purposes except in the case of a bona fide emergency.
 - 2.4. The Grantee shall indemnify and hold harmless the Grantor for any damages and liabilities to Grantor, the Burdened Property, and/or third parties from use of the Easement.
 - 2.5. Grantee shall pay for a qualified professional to design, engineer, and implement erosion and sedimentation control, energy dissipation/bank stabilization and maintenance measures that the professional determines are appropriate to prevent future erosion, sedimentation, and bank instability at the discharge location (“Measures”) at the Burdened Property. Grantee shall implement the Measures within six months of execution of this indenture and shall provide Grantor with one week notice before implementing the Measures. With 48 hours of prior notice to Grantor, Grantee may access the Burdened Property during the six-month deferment period to inspect this area and determine the extent of the work necessary to complete the Measures.
3. NO INTERFERENCE. Grantor shall not interfere with the Grantee’s permitted activities within the Easement.
 4. AMENDMENT. This Easement shall be amended only by a written and recorded instrument signed by the parties or the then current owners of the Benefited Property and Burdened Property and the Easement.
 5. BINDING EFFECT. This Easement shall be binding upon and inure to the benefit of the Parties’ successors and assigns, heirs, beneficiaries and personal representatives.
 6. GOVERNING LAW. This Easement shall be governed by and construed and enforced in accordance with the laws of the State of Georgia.

-
7. NOTICES: The Parties hereby designate the following addresses and contact information for notices, which either Party may change at any time and from time to time, by the other Party written notice hereunder, as follows:

To Grantor:

Address for the owner of Parcel No. 0071074 on file with the Madison County Tax Assessor office, which is currently:

William T. Russell
P.O. Box 245
Colbert, GA 30628

And

Donald D.J. Stack
Stack & Associates, P.C.
260 Peachtree Street, Suite 1200
Atlanta, GA 30303

To Grantee:

Georgia Renewable Power - Madison, LLC
2700 Southbridge Parkway
Suite 540
Birmingham, AL 35209

Such notices shall be deemed to be duly given only if delivered personally or mailed by certified mail, return receipt requested, in a postage-paid envelope, addressed to the other Party at the relevant addresses given above. If such mail is properly addressed and mailed, as above, it shall be deemed notice for all purposes herein even if undelivered.

[Signatures appear on the following page]

IN WITNESS WHEREOF, the Parties hereto have caused this Easement to be executed and delivered by and through their respective duly authorized representative or officer as of the day and year first above written.

GRANTOR:

William T. Russell,
On behalf of himself and the William T. Russell Inter Vivos Trust

Signature: William T Russell

Print Name: William T. Russell

GRANTEE:

GRP Madison, LLC
a Delaware limited liability company

Signature: [Signature]

Print Name: DANIEL H SHERMAN IV

Title: CHIEF LEGAL COUNSEL

EXHIBIT "A"

Depiction of Easement Area/Burdened Property

November 25, 2020

David Groves
Plant Manager
Veolia Energy – Madison
125 HV Chandler Rd
Colbert, GA 30628

David,

We have recently learned that your permit at the Madison plant allows a maximum free chlorine level of 0.2 ppm at the cooling tower blowdown outfall.

As you know we are feeding 12.5% sodium hypochlorite to maintain a low-level free chlorine residual between 0.5-1.0 ppm. Based on the system volume of the tower and the amount of contact time needed for an effective biological kill, it is our opinion that this range will be effective against, algae, fungi, Legionella and other waterborne pathogens. Continuous levels below this range could increase the risk of biological development.

In addition, we have found very high free chlorine levels in the incoming city water (aka cooling tower makeup) to the plant. Some tests have shown chlorine levels as high as 2.0 ppm. Continuous high levels from the incoming line can also have an impact on discharge limits.

Please let me know if you have any additional questions.

Regards,

John D. Dace, Sr

A handwritten signature in black ink, appearing to read "John D. Dace, Sr.", written over a horizontal line.

The Carolinas & Georgia
Regional Manager
Kurita Water

October 23, 2020

Jacki Scarbary
Veolia Water North America
3465 Highway 198
Carnesville, GA 30521

RE: Project: Madison Plant
Pace Project No.: 92501063

Dear Jacki Scarbary:

Enclosed are the analytical results for sample(s) received by the laboratory on October 19, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Ryan Brumfield
ryan.brumfield@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Accounts Payable, Veolia Water



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Madison Plant

Pace Project No.: 92501063

Pace Analytical Services Charlotte

9800 Kinsey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12

South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners

110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381
South Carolina Certification #: 98011001
Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Madison Plant

Pace Project No.: 92501063

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92501063001	Madison County Potable Water	Water	10/19/20 12:20	10/19/20 16:10
92501063002	Trip Blank	Water	10/19/20 00:00	10/19/20 16:10

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Madison Plant

Pace Project No.: 92501063

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92501063001	Madison County Potable Water	EPA 1664B	HH	1
		EPA 200.7	KH	3
		EPA 200.8	KH	13
		SM 2540D-2011	JRS	1
		SM 4500-CI G	KN	1
		SM 4500-H+B-2011	AW1	1
		EPA 624.1	SAS	4
		EPA 351.2 Rev 2.0 1993	MFO	1
		SM 4500-CN-E-2011	CJL	1
		SM 5220D-2011	NAL	1
92501063002	Trip Blank	EPA 624.1	SAS	4

PASI-A = Pace Analytical Services - Asheville

PASI-C = Pace Analytical Services - Charlotte

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Madison Plant
Pace Project No.: 92501063

Sample: Madison County Potable Water **Lab ID: 92501063001** Collected: 10/19/20 12:20 Received: 10/19/20 16:10 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
HEM, Oil and Grease								
Analytical Method: EPA 1664B Pace Analytical Services - Charlotte								
Oil and Grease	ND	mg/L	5.0	1		10/21/20 09:25		
200.7 MET ICP								
Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Peachtree Corners, GA								
Phosphorus	ND	mg/L	0.050	1	10/20/20 13:24	10/21/20 10:05	7723-14-0	
Silica	16.6	mg/L	0.090	1	10/20/20 13:24	10/21/20 10:05	7631-86-9	
Sodium	14.4	mg/L	1.0	1	10/20/20 13:24	10/21/20 10:05	7440-23-5	M1
200.8 ATL ICPMS								
Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Peachtree Corners, GA								
Aluminum	ND	mg/L	0.10	1	10/20/20 13:28	10/21/20 15:45	7429-90-5	
Boron	ND	mg/L	0.040	1	10/20/20 13:28	10/21/20 15:45	7440-42-8	
Cadmium	ND	mg/L	0.00050	1	10/20/20 13:28	10/21/20 15:45	7440-43-9	
Chromium	ND	mg/L	0.0050	1	10/20/20 13:28	10/21/20 15:45	7440-47-3	
Copper	ND	mg/L	0.0050	1	10/20/20 13:28	10/21/20 15:45	7440-50-8	
Iron	0.18	mg/L	0.040	1	10/20/20 13:28	10/21/20 15:45	7439-89-6	
Magnesium	1.6	mg/L	0.050	1	10/20/20 13:28	10/21/20 15:45	7439-95-4	
Manganese	ND	mg/L	0.010	1	10/20/20 13:28	10/21/20 15:45	7439-96-5	
Molybdenum	ND	mg/L	0.010	1	10/20/20 13:28	10/21/20 15:45	7439-98-7	
Nickel	ND	mg/L	0.0050	1	10/20/20 13:28	10/21/20 15:45	7440-02-0	
Potassium	2.3	mg/L	0.10	1	10/20/20 13:28	10/21/20 15:45	7440-09-7	
Silver	ND	mg/L	0.0050	1	10/20/20 13:28	10/21/20 15:45	7440-22-4	
Zinc	ND	mg/L	0.010	1	10/20/20 13:28	10/21/20 15:45	7440-66-6	
2540D Total Suspended Solids								
Analytical Method: SM 2540D-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Suspended Solids	ND	mg/L	5.0	1		10/20/20 18:00		
4500CLG Chlorine, Residual ATL								
Analytical Method: SM 4500-Cl G Pace Analytical Services - Peachtree Corners, GA								
Chlorine, Total Residual	0.86	mg/L	0.10	1		10/20/20 16:18	7782-50-5	H3
4500H+ pH, Electrometric ATL								
Analytical Method: SM 4500-H+B-2011 Pace Analytical Services - Peachtree Corners, GA								
pH at 25 Degrees C	7.7	Std. Units	0.10	1		10/20/20 14:00		H3
624 Volatile Organics								
Analytical Method: EPA 624.1 Pace Analytical Services - Charlotte								
Chloroform	11.9	ug/L	2.0	1		10/20/20 16:22	67-66-3	
Surrogates								
4-Bromofluorobenzene (S)	101	%	70-130	1		10/20/20 16:22	460-00-4	
Toluene-d8 (S)	105	%	70-130	1		10/20/20 16:22	2037-26-5	
1,2-Dichloroethane-d4 (S)	96	%	70-130	1		10/20/20 16:22	17060-07-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Madison Plant

Pace Project No.: 92501063

Sample: Madison County Potable Water **Lab ID: 92501063001** Collected: 10/19/20 12:20 Received: 10/19/20 16:10 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
351.2 Total Kjeldahl Nitrogen								
Analytical Method: EPA 351.2 Rev 2.0 1993 Preparation Method: EPA 351.2 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, Kjeldahl, Total	ND	mg/L	0.50	1	10/22/20 22:47	10/23/20 04:35	7727-37-9	
4500CNE Cyanide, Total								
Analytical Method: SM 4500-CN-E-2011 Preparation Method: SM 4500-CN-E-2011 Pace Analytical Services - Asheville								
Cyanide	ND	mg/L	0.0080	1	10/22/20 21:23	10/23/20 01:52	57-12-5	
5220D COD								
Analytical Method: SM 5220D-2011 Preparation Method: SM 5220D-2011 Pace Analytical Services - Asheville								
Chemical Oxygen Demand	ND	mg/L	25.0	1	10/20/20 15:52	10/21/20 14:40		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Madison Plant

Pace Project No.: 92501063

Sample: Trip Blank		Lab ID: 92501063002		Collected: 10/19/20 00:00	Received: 10/19/20 16:10	Matrix: Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 Volatile Organics		Analytical Method: EPA 624.1 Pace Analytical Services - Charlotte						
Chloroform	ND	ug/L	2.0	1		10/20/20 15:30	67-66-3	
Surrogates								
4-Bromofluorobenzene (S)	100	%	70-130	1		10/20/20 15:30	460-00-4	
Toluene-d8 (S)	103	%	70-130	1		10/20/20 15:30	2037-26-5	
1,2-Dichloroethane-d4 (S)	98	%	70-130	1		10/20/20 15:30	17060-07-0	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Madison Plant

Pace Project No.: 92501063

QC Batch: 574624

Analysis Method: EPA 1664B

QC Batch Method: EPA 1664B

Analysis Description: 1664 HEM, Oil and Grease

Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92501063001

METHOD BLANK: 3041916

Matrix: Water

Associated Lab Samples: 92501063001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Oil and Grease	mg/L	ND	5.0	10/21/20 09:25	

LABORATORY CONTROL SAMPLE: 3041917

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Oil and Grease	mg/L	40	35.5	89	78-114	

MATRIX SPIKE SAMPLE: 3041918

Parameter	Units	92499900002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Oil and Grease	mg/L	ND	40	8.8	20	78-114	M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Madison Plant
Pace Project No.: 92501063

QC Batch: 574220 Analysis Method: EPA 200.7
QC Batch Method: EPA 200.7 Analysis Description: 200.7 Metals Total
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92501063001

METHOD BLANK: 3040213 Matrix: Water
Associated Lab Samples: 92501063001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phosphorus	mg/L	ND	0.050	10/20/20 18:19	
Silica	mg/L	ND	0.090	10/20/20 18:19	
Sodium	mg/L	ND	1.0	10/20/20 18:19	

LABORATORY CONTROL SAMPLE: 3040214

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phosphorus	mg/L	1	1.0	103	85-115	
Silica	mg/L		2.1			
Sodium	mg/L	1	.98J	98	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3040215 3040216

Parameter	Units	92500872001		3040215		3040216		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec						
Phosphorus	mg/L	0.89	1	1	1.9	2.0	104	106	70-130	1	20		
Silica	mg/L	14900			16.9	17.0				0	20		
Sodium	mg/L	465000	1	1	459	446	-611	-1870	70-130	3	20	M1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3040217 3040218

Parameter	Units	92501063001		3040217		3040218		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec						
Phosphorus	mg/L	ND	1	1	1.0	0.99	101	96	70-130	5	20		
Silica	mg/L	16.6			18.1	18.8				4	20		
Sodium	mg/L	14.4	1	1	13.3	13.9	-102	-49	70-130	4	20	M1	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Madison Plant
Pace Project No.: 92501063

QC Batch: 574226 Analysis Method: EPA 200.8
QC Batch Method: EPA 200.8 Analysis Description: 200.8 ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92501063001

METHOD BLANK: 3040219 Matrix: Water
Associated Lab Samples: 92501063001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	mg/L	ND	0.10	10/21/20 13:15	
Boron	mg/L	ND	0.040	10/21/20 13:15	
Cadmium	mg/L	ND	0.00050	10/21/20 13:15	
Chromium	mg/L	ND	0.0050	10/21/20 13:15	
Copper	mg/L	ND	0.0050	10/21/20 13:15	
Iron	mg/L	ND	0.040	10/21/20 13:15	
Magnesium	mg/L	ND	0.050	10/21/20 13:15	
Manganese	mg/L	ND	0.010	10/21/20 13:15	
Molybdenum	mg/L	ND	0.010	10/21/20 13:15	
Nickel	mg/L	ND	0.0050	10/21/20 13:15	
Potassium	mg/L	ND	0.10	10/21/20 13:15	
Silver	mg/L	ND	0.0050	10/21/20 13:15	
Zinc	mg/L	ND	0.010	10/21/20 13:15	

LABORATORY CONTROL SAMPLE: 3040220

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	mg/L	1	1.1	107	85-115	
Boron	mg/L	1	1.0	100	85-115	
Cadmium	mg/L	0.1	0.099	99	85-115	
Chromium	mg/L	0.1	0.10	103	85-115	
Copper	mg/L	0.1	0.099	99	85-115	
Iron	mg/L	1	1.0	100	85-115	
Magnesium	mg/L	1	0.96	96	85-115	
Manganese	mg/L	0.1	0.10	101	85-115	
Molybdenum	mg/L	0.1	0.10	101	85-115	
Nickel	mg/L	0.1	0.099	99	85-115	
Potassium	mg/L	1	0.98	98	85-115	
Silver	mg/L	0.1	0.099	99	85-115	
Zinc	mg/L	0.1	0.099	99	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3040221 3040222

Parameter	Units	92500857001 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	Spike Conc.	MSD Result						
Aluminum	mg/L	ND	1	1	1.2	1.2	116	111	70-130	5	20	
Boron	mg/L	ND	1	1	1.1	0.98	104	97	70-130	7	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Madison Plant

Pace Project No.: 92501063

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3040221												3040222	
Parameter	Units	92500857001 Result	MS	MSD	MS	MSD	MS	MSD	% Rec	Limits	RPD	Max RPD	Qual
			Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec					
Cadmium	mg/L	ND	0.1	0.1	0.10	0.098	100	98	70-130	2	20		
Chromium	mg/L	ND	0.1	0.1	0.11	0.10	105	100	70-130	5	20		
Copper	mg/L	102 ug/L	0.1	0.1	0.20	0.19	102	91	70-130	6	20		
Iron	mg/L	ND	1	1	1.1	1.0	104	98	70-130	6	20		
Magnesium	mg/L	2030 ug/L	1	1	3.1	3.0	108	93	70-130	5	20		
Manganese	mg/L	ND	0.1	0.1	0.11	0.10	105	98	70-130	7	20		
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.098	104	98	70-130	6	20		
Nickel	mg/L	ND	0.1	0.1	0.10	0.097	103	96	70-130	7	20		
Potassium	mg/L	1630 ug/L	1	1	2.7	2.6	110	93	70-130	7	20		
Silver	mg/L	ND	0.1	0.1	0.10	0.096	101	96	70-130	5	20		
Zinc	mg/L	349 ug/L	0.1	0.1	0.45	0.44	103	87	70-130	4	20		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3040223												3040224	
Parameter	Units	92500857012 Result	MS	MSD	MS	MSD	MS	MSD	% Rec	Limits	RPD	Max RPD	Qual
			Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec					
Aluminum	mg/L	ND	1	1	1.2	1.2	111	111	70-130	0	20		
Boron	mg/L	ND	1	1	1.0	0.99	99	98	70-130	2	20		
Cadmium	mg/L	ND	0.1	0.1	0.10	0.099	100	99	70-130	0	20		
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	104	103	70-130	1	20		
Copper	mg/L	51.6 ug/L	0.1	0.1	0.15	0.15	100	94	70-130	4	20		
Iron	mg/L	ND	1	1	1.0	1.0	100	99	70-130	1	20		
Magnesium	mg/L	1370 ug/L	1	1	2.4	2.3	100	88	70-130	5	20		
Manganese	mg/L	ND	0.1	0.1	0.10	0.10	102	100	70-130	2	20		
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	102	103	70-130	1	20		
Nickel	mg/L	ND	0.1	0.1	0.10	0.098	99	98	70-130	2	20		
Potassium	mg/L	2270 ug/L	1	1	3.3	3.2	99	96	70-130	1	20		
Silver	mg/L	ND	0.1	0.1	0.099	0.099	99	99	70-130	0	20		
Zinc	mg/L	146 ug/L	0.1	0.1	0.25	0.24	100	92	70-130	4	20		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Madison Plant
Pace Project No.: 92501063

QC Batch: 574525 Analysis Method: SM 2540D-2011
QC Batch Method: SM 2540D-2011 Analysis Description: 2540D Total Suspended Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92501063001

METHOD BLANK: 3041571 Matrix: Water
Associated Lab Samples: 92501063001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Suspended Solids	mg/L	ND	5.0	10/20/20 17:55	

LABORATORY CONTROL SAMPLE: 3041572

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Suspended Solids	mg/L	100	102	102	90-110	

SAMPLE DUPLICATE: 3041573

Parameter	Units	92501256002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	10.5	11.0	5	10	

SAMPLE DUPLICATE: 3041574

Parameter	Units	92500893001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	20.0	19.5	3	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Madison Plant
Pace Project No.: 92501063

QC Batch: 574482	Analysis Method: SM 4500-Cl G
QC Batch Method: SM 4500-Cl G	Analysis Description: 4500CLG Chlorine, Total Residual ATL
	Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92501063001

METHOD BLANK: 3041324 Matrix: Water
Associated Lab Samples: 92501063001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chlorine, Total Residual	mg/L	ND	0.10	10/20/20 14:01	

LABORATORY CONTROL SAMPLE: 3041325

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chlorine, Total Residual	mg/L	1	1.0	102	90-110	

SAMPLE DUPLICATE: 3041326

Parameter	Units	92501272001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chlorine, Total Residual	mg/L	ND	ND		10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Madison Plant

Pace Project No.: 92501063

QC Batch: 574329

Analysis Method: SM 4500-H+B-2011

QC Batch Method: SM 4500-H+B-2011

Analysis Description: 4500H+B pH ATL

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92501063001

SAMPLE DUPLICATE: 3040488

Parameter	Units	92500953001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	7.7	7.8	1	10	H1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Madison Plant

Pace Project No.: 92501063

QC Batch: 574459

Analysis Method: EPA 624.1

QC Batch Method: EPA 624.1

Analysis Description: 624 MSV

Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92501063001, 92501063002

METHOD BLANK: 3041189

Matrix: Water

Associated Lab Samples: 92501063001, 92501063002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloroform	ug/L	ND	2.0	10/20/20 14:19	
1,2-Dichloroethane-d4 (S)	%	96	70-130	10/20/20 14:19	
4-Bromofluorobenzene (S)	%	104	70-130	10/20/20 14:19	
Toluene-d8 (S)	%	103	70-130	10/20/20 14:19	

LABORATORY CONTROL SAMPLE: 3041190

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloroform	ug/L	20	20.9	105	70-130	
1,2-Dichloroethane-d4 (S)	%			96	70-130	
4-Bromofluorobenzene (S)	%			103	70-130	
Toluene-d8 (S)	%			98	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3041191 3041192

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92501030001 Result	Spike Conc.	Spike Conc.	Result						
Chloroform	ug/L	ND	20	20	26.5	24.4	131	120	70-121	8	30 M1
1,2-Dichloroethane-d4 (S)	%						98	101	70-130		
4-Bromofluorobenzene (S)	%						109	104	70-130		
Toluene-d8 (S)	%						97	99	70-130		

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QUALITY CONTROL DATA

Project: Madison Plant

Pace Project No.: 92501063

QC Batch: 574617

Analysis Method: EPA 351.2 Rev 2.0 1993

QC Batch Method: EPA 351.2 Rev 2.0 1993

Analysis Description: 351.2 TKN

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92501063001

METHOD BLANK: 3041900

Matrix: Water

Associated Lab Samples: 92501063001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	ND	0.50	10/23/20 04:03	

LABORATORY CONTROL SAMPLE: 3041901

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	10	9.7	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3041902 3041903

Parameter	Units	3041902		3041903		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Nitrogen, Kjeldahl, Total	mg/L	3.1	10	12.9	12.4	97	92	90-110	4	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3041904 3041905

Parameter	Units	3041904		3041905		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Nitrogen, Kjeldahl, Total	mg/L	ND	10	9.2	9.5	88	91	90-110	3	10 M1	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Madison Plant
Pace Project No.: 92501063

QC Batch: 574884 Analysis Method: SM 4500-CN-E-2011
QC Batch Method: SM 4500-CN-E-2011 Analysis Description: 4500CNE Cyanide, Total
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92501063001

METHOD BLANK: 3043345 Matrix: Water
Associated Lab Samples: 92501063001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.0080	10/23/20 01:42	

LABORATORY CONTROL SAMPLE: 3043346

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	0.1	0.10	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3043347 3043348

Parameter	Units	92500860050		3043348		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MS Spike Conc.	MS Result	MSD Spike Conc.						
Cyanide	mg/L	ND	0.1	0.059	0.1	58	89	80-120	41	10	M1,R1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3043349 3043350

Parameter	Units	92500860051		3043350		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MS Spike Conc.	MS Result	MSD Spike Conc.						
Cyanide	mg/L	ND	0.1	0.088	0.1	86	92	80-120	7	10	

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QUALITY CONTROL DATA

Project: Madison Plant
Pace Project No.: 92501063

QC Batch: 574348 Analysis Method: SM 5220D-2011
QC Batch Method: SM 5220D-2011 Analysis Description: 5220D COD
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92501063001

METHOD BLANK: 3040595 Matrix: Water
Associated Lab Samples: 92501063001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	ND	25.0	10/21/20 14:33	

LABORATORY CONTROL SAMPLE: 3040596

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	750	745	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3040597 3040598

Parameter	Units	3040597		3040598		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Chemical Oxygen Demand	mg/L	128	100	234	241	106	113	90-110	3	3	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3040599 3040600

Parameter	Units	3040599		3040600		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Chemical Oxygen Demand	mg/L	236	100	337	358	101	122	90-110	6	3	M1,R1

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Madison Plant

Pace Project No.: 92501063

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

H1 Analysis conducted outside the EPA method holding time.

H3 Sample was received or analysis requested beyond the recognized method holding time.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

R1 RPD value was outside control limits.

REPORT OF LABORATORY ANALYSIS

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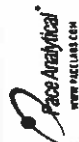
QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Madison Plant
Pace Project No.: 92501063

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92501063001	Madison County Potable Water	EPA 1664B	574624		
92501063001	Madison County Potable Water	EPA 200.7	574220	EPA 200.7	574446
92501063001	Madison County Potable Water	EPA 200.8	574226	EPA 200.8	574447
92501063001	Madison County Potable Water	SM 2540D-2011	574525		
92501063001	Madison County Potable Water	SM 4500-Cl G	574482		
92501063001	Madison County Potable Water	SM 4500-H+B-2011	574329		
92501063001	Madison County Potable Water	EPA 624.1	574459		
92501063002	Trip Blank	EPA 624.1	574459		
92501063001	Madison County Potable Water	EPA 351.2 Rev 2.0 1993	574617	EPA 351.2 Rev 2.0 1993	575236
92501063001	Madison County Potable Water	SM 4500-CN-E-2011	574884	SM 4500-CN-E-2011	575203
92501063001	Madison County Potable Water	SM 5220D-2011	574348	SM 5220D-2011	574773

REPORT OF LABORATORY ANALYSIS

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CHAIN-OF-CUSTODY
The Chain-of-Custody is a LEGAL

WO#: 92501063



92501063

Section B
Invoice Information

Attention:

Company Name:

Address:

Pace Quote:

Pace Project Manager:

Pace Profile #:

Section C
Regulatory Agency

State / Location:

Regulatory Agency:

Section A
Client Information

Report To:

Copy To:

Purchase Order #:

Project Name:

Project #:

Section D
Sample Information

MATRIX CODE (see valid codes to left)

SAMPLE TYPE (G-GRAB C-COMP)

START DATE TIME

END DATE TIME

SAMPLE TEMP AT COLLECTION

OF CONTAINERS

Preservatives

Analyses Test

Requested Analysis Filtered (Y/N)

TEMP IN C

Received on

Ice

Custody

Sealed

Cooler

Samples

Inter

(Y/N)

(Y/N)

(Y/N)

(Y/N)

(Y/N)

(Y/N)

(Y/N)

(Y/N)

(Y/N)

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Company: Veolia Water North America

Address: 123 HV Chandler Road

City: xerl, GA 30628

Email: jacquelyn.scarbary@veolia.com

Phone: (678) 249-4613

Fax: **RUSH**

Project Name: Madison Plant

Project #: **RUSH**

Pace Project Manager: nyan.brumfield@pacelabs.com

Pace Profile #: 12398

State / Location: **GA**

Regulatory Agency: **GA**

MATRIX CODE (see valid codes to left)

SAMPLE TYPE (G-GRAB C-COMP)

START DATE TIME

END DATE TIME

SAMPLE TEMP AT COLLECTION

OF CONTAINERS

Preservatives

Analyses Test

Requested Analysis Filtered (Y/N)

TEMP IN C

Received on

Ice

Custody

Sealed

Cooler

Samples

Inter

(Y/N)

(Y/N)

(Y/N)

(Y/N)

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Sample Condition Upon Receipt



Client Name: Veolia Water
North America

Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____
Tracking #: _____

WO#: 92501063

PM: RNB Due Date: 10/23/20
CLIENT: GA-Veolia

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other _____

Thermometer Used TH2030 Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature 14.2 Biological Tissue is Frozen: Yes No
Temp should be above freezing to 6°C

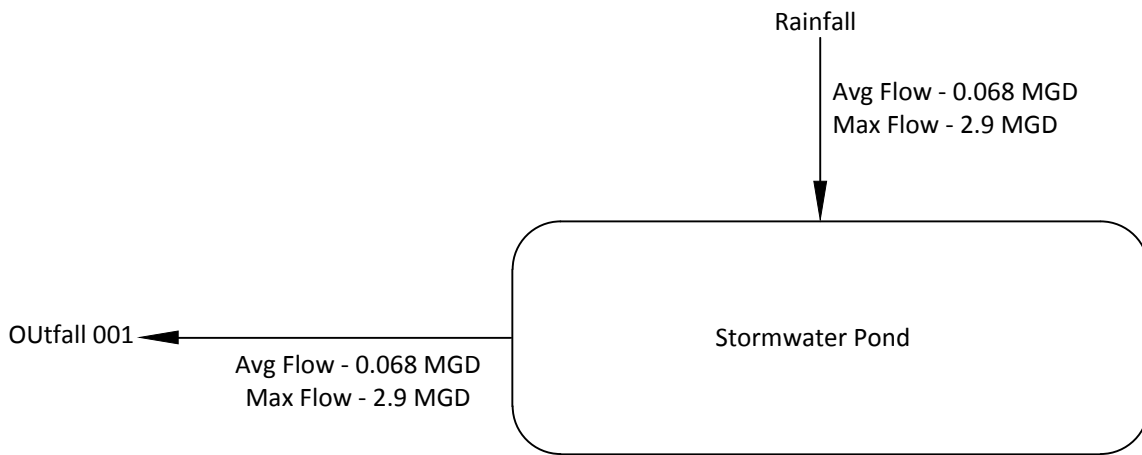
Date and Initials of person examining contents: Kew 10/19/20

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	5. <u>spt arrived out of hold</u>
Short Hold Time Analysis (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. <u>NO labels present on containers.</u>
-Includes date/time/ID/Analysis Matrix: <u>WT</u>		
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: <u>VOA</u> coliform, TOC, <u>CaG</u> , WI-DRO (water)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed
		Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: _____ Field Data Required? Y / N
 Person Contacted: _____ Date/Time: _____
 Comments/ Resolution: Client stated everything written in the lower left corner of COC is what they have tested. Not analysis preprinted on COC. new 10/19/20

Project Manager Review: _____ Date: _____

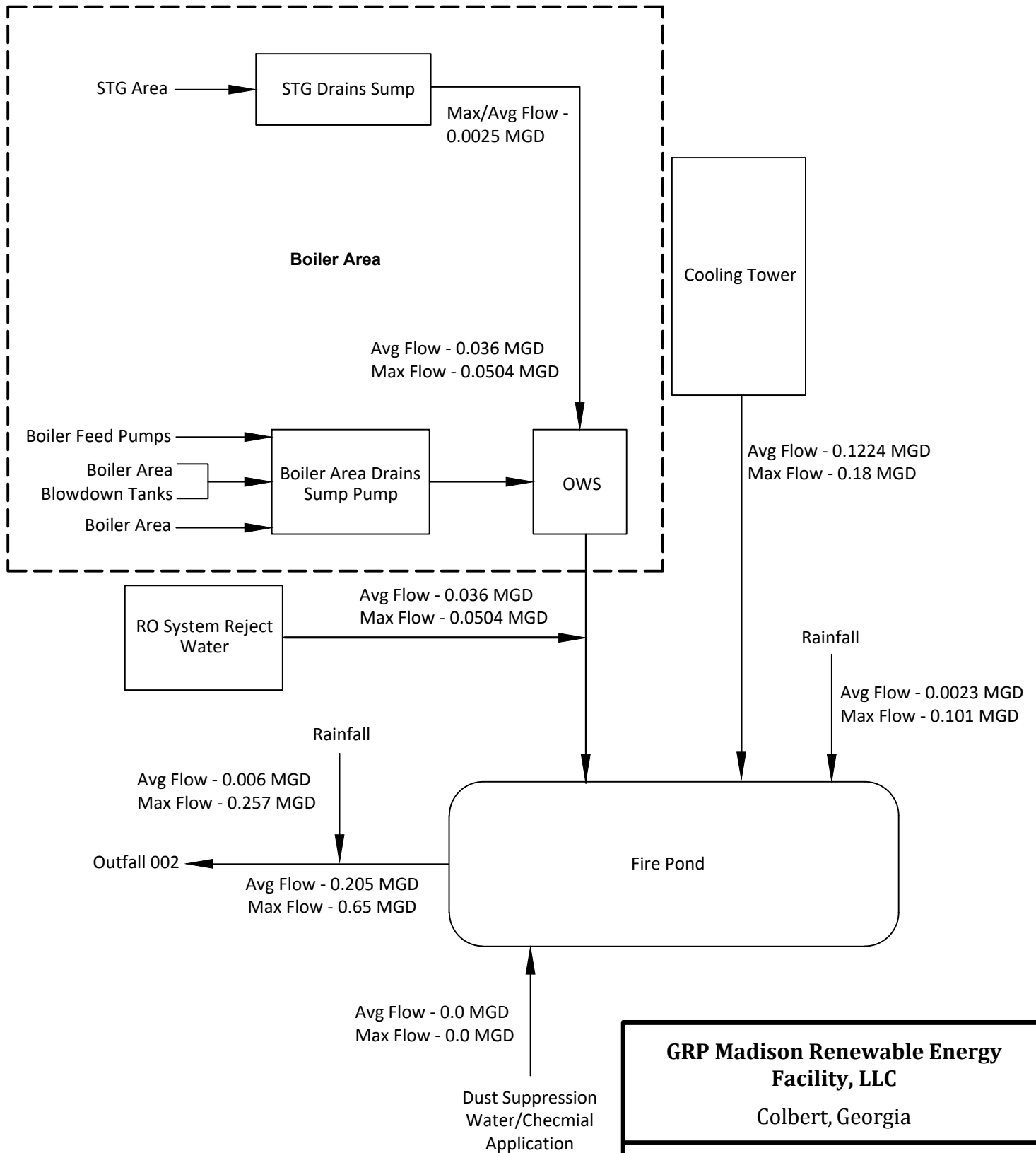
Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)



**GRP Madison Renewable Energy
Facility, LLC**

Colbert, Georgia

Figure 2
Outfall 001 Water Flow Diagram



GRP Madison Renewable Energy Facility, LLC

Colbert, Georgia

Figure 3
Outfall 002 Water Flow Diagram