NPDES PERMIT APPLICATION

FORM 1

ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER DIVISION
5301 Northshore Drive
North Little Rock, AR 72118-5317
www.adeq.state.ar.us/water

PURPOSE OF THIS APPLICATION

- ☐ INITIAL PERMIT APPLICATION FOR NEW FACILITY
- ☐ INITIAL PERMIT APPLICATION FOR EXISTING FACILITY
- ☐ MODIFICATION OF EXISTING PERMIT
- ☒ REISSUANCE (RENEWAL) OF EXISTING PERMIT
- ☐ MODIFICATION AND CONSTRUCTION OF EXISTING PERMIT
- ☐ CONSTRUCTION PERMIT

SECTION A- GENERAL INFORMATION

1. Operator (Legal) Applicant Name (who has ultimate decision making responsibility over the operation of a facility or activity):
   JOHN D. STAUFFER
   Note: The legal name of the operator must be identical to the name listed with the Arkansas Secretary of State.

2. Operator Type: Private ☐ State ☐ Federal ☐ Partnership ☐ Corporation ☐ Other ☒
   State of Incorporation: _____

3. Facility Name: CITY OF BULL SHOALS WASTEWATER TREATMENT PLANT

4. Is the operator identified in number 1 above, the owner of the facility? ☐ Yes ☒ No

5. NPDES Permit Number (If Applicable): AR00 37028

6. NPDES General Permit Number (If Applicable): ARG

7. NPDES General Storm Water Permit Number (If Applicable): _____

8. Permit Numbers and/or names of any permits issued by ADEQ or EPA for an activity located in Arkansas that is presently held by the applicant or its parent or subsidiary corporation which are not listed above:

Permit Name	Permit Number	Held by

9. Give driving directions to the wastewater treatment plant with respect to known landmarks:
   LEFT ON C.S. WOODS, OFF OF HIGHWAY 178 TO GOLF COURSE TERRACE; TO END OF ROAD (258 GOLF COURSE TERRACE)

10. Facility Physical Location: (Attach a map with location marked; street, route no. or other specific identifier)

    Street: 258 GOLF COURSE TERRACE
    City: BULL SHOALS County: MARION State: ARKANSAS Zip: 72619

11. Facility Mailing Address for permit, DMR, and Invoice (Street or Post Office Box):

Name: CITY OF BULL SHOALS Title: JOHN STAUFFER

Street: P.O. BOX 390 P.O. Box

City: BULL SHOALS State: ARKANSAS Zip: 72619

E-mail address*: Bullshoalscityhall@suddenlinkmail.com Fax: (870) 445-4948

* Is emailing all documents (permit, letters, DMRs, invoices, etc.) acceptable to the applicant? ☐ Yes ☒ No

12. Neighboring States Within 20 Miles of the permitted facility (Check all that apply):

Oklahoma ☐ Missouri ☒ Tennessee ☐ Louisiana ☐ Texas ☐ Mississippi ☐

13. Indicate applicable Standard Industrial Classification (SIC) Codes and NAICS codes for primary processes

_____ SIC Facility Activity under this SIC or NAICS:

_____ NAICS _____

14. Design Flow: .500 MGD Highest Monthly Average of the last two years Flow: .252 MGD

15. Is Outfall equipped with a diffuser? ☒ Yes ☐ No

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

Name: JOHN D. STAUFFER Title: SUPERVISOR LEVEL III

Address: P.O. BOX 390 Phone Number: (505) 629-8340

E-mail Address: Bullshoalscityhall@suddenlinkmail.com

City: BULL SHOALS State: ARKANSAS Zip: 72619

17. Cognizant Official (Duly Authorized Representative of responsible official as describe on the last page of this application):

Name: BRUCE POWELL Title: MAYOR

Address: P.O. BOX 390 Phone Number (870) 656-2926

E-mail Address: same as above

City: BULL SHOALS State: ARKANSAS Zip: 72619

18. Name, address and telephone number of active consulting engineer firm (If none, so state):

Contact Name: _____

Company Name: _____

Address: _____ Phone Number:

E-mail Address: _____

City: _____ State: _____ Zip: _____

19. Wastewater Operator Information

Wastewater Operator Name: JOHN D. STAUFFER License number: 01 0446

Class of municipal wastewater operator: I ☐ II ☐ III ☒ IV ☐

Class of industrial wastewater operator: Basic ☐ Advanced ☐

SECTION B: FACILITY AND OUTFALL INFORMATION

1. Facility Location (All information must be based on **front door (Gate)** location of the facility):

Lat: 36 ° 21 ' 33.1 " Long: 92 ° 35 ' 41.32 " County: MARION Nearest Town: BULL SHOALS

2. **Outfall** Location (The location of the end of the pipe Discharge point.):

Outfall No. 001**:**

Latitude: 36 ° 21 ' 30 " Longitude: 92 ° 35 ' 40 "

Where is the collection point? _____

Name of Receiving Stream (i.e. an unnamed tributary of Mill Creek, thence into Mill Creek; thence into Arkansas River):

THROUGH A 12 INCH PIPE TO THE WHITE RIVER SEGMENT 41 OF THE WHITE RIVER BASIN

Outfall No. _____**:**

Latitude: _____ ° _____ ' _____ " Longitude: _____ ° _____ ' _____ "

Where is the collection point? _____

Name of Receiving Stream (i.e. an unnamed tributary of Mill Creek, thence into Mill Creek; thence into Arkansas River):

3. **Monitoring** Location (If the monitoring is conducted at a location different than the above **Outfall** location):

Outfall No. _____**:**

Lat: _____ ° _____ ' _____ " Long: _____ ° _____ ' _____ "

Outfall No. _____**:**

Lat: _____ ° _____ ' _____ " Long: _____ ° _____ ' _____ "

Outfall No. _____**:**

Lat: _____ ° _____ ' _____ " Long: _____ ° _____ ' _____ "

4. Type of Treatment system (Included all components of treatment system and Attach the process flow diagram):

PUMP HOUSE - TO MICRO SCREENER TO PACKAGE ACTIVATED SLUDGE TREATMENT PLANT TO TERTIARY SAND FILTER TO UV LIGHT DISENFECTION SYSTEM. ALSO WASTE SOLIDS TO DIGESTER, SOLIDS FROM FULL DIGESTER WILL BE PUMPED INTO DRYING BEDS.

** (A CATALYST IS BEING USED IN 7 OF OUR 19 LIFT STANTIONS AND IN OUR DIGESTER. THIS CATALYST IS USED TO ENHANCE SLUDGE DIGESTION AND TO REDUCE SLUDGE VOLUME. A MSDS WILL BE SENT WITH APPLICATION)

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

Current:	Flow Metering	☒	Yes	Type: BRISTOL BABCOCK TOTALIZER	☐	No	☐	N/A ☐
	Sampling Equipment	☐	Yes	Type: _____	☒	No	☐	N/A ☐
Planned:	Flow Metering	☐	Yes	Type: _____	☐	No	☐	N/A ☐
	Sampling Equipment	☐	Yes	Type: _____	☐	No	☐	N/A ☐

If yes, please indicate the present or future location of this equipment on the sewer schematic and describe the equipment below:

_____

_____

6. Is the proposed or existing facility located above the 100-year flood level? ☒ Yes ☐ No

NOTE: FEMA Map must be included with this application. Maps can be ordered at www.fema.gov .

If "No", what measures are (or will be) used to protect the facility? _____

7. Population for Municipal and Domestic Sewer Systems: 1950

8. Backup Power Generation for Treatment Plants

Are there any permanent backup generators? Yes ☒ No ☐

If Yes, How many? ONE Total Horespower (hp)? 415

If No, Please explain? _____

SECTION C – WASTE STORAGE AND DISPOSAL INFORMATION

1. Sludge Disposal Method (Check as many as are applicable):

☒ **Landfill**

Landfill Site Name NABORS [redacted] ADEQ Solid Waste Permit No. _____

☐ **Land Application:** ADEQ State Permit No. _____

☐ **Septic tank** Arkansas Department of Health Permit No.: _____

☒ **Distribution and Marketing**: Facility receiving sludge:

Name: IESI Address: 10 CR510

City: MIDWAY State: AR Zip: 72619 Phone: 870-481-8600

Rail: ☐ Pipe: ☐ Other: TRUCK

☐ **Subsurface Disposal** (Lagooning):

Location of lagoon _____ How old is the lagoon? _____

Surface area of lagoon: _____ Acre Depth: _____ ft Does lagoon have a liner? ☐ Yes ☐ No

☐ **Incineration:** Location of incinerator _____

☐ **Remains in Treatment Lagoon(s):**

How old is the lagoon(s)? _____ Has sludge depth been measured? ☐ Yes ☐ No

If Yes, Date measured? _____ Sludge Depth? _____ ft If No, When will it be measured? _____

Has sludge ever been removed? Yes ☐ No ☐ If Yes, When was it removed? _____

☐ **Other** (Provide complete description): _____

SECTION D - WATER SUPPLY

Water Sources (check as many as are applicable):

☐ **Private Well** - Distance from Discharge point: ☐ Within 5 miles ☐ Within 50 miles

☑ **Municipal Water Utility** (Specify City): MARION COUNTY WATER (BULL SHOALS LAKE)

Distance from Discharge point: ☒ Within 5 miles ☐ Within 50 miles

☐ **Surface Water**- Name of Surface Water Source: BULL SHOALS LAKE

Distance from Discharge point: ☒ Within 5 miles ☐ Within 50 miles

Lat: _____ ° _____ ' _____ " Long: _____ ° _____ ' _____ "

☐ **Other** (Specify): _____

Distance from Discharge point: ☐ Within 5 miles ☐ Within 50 miles

SECTION E: FINANCIAL ASSURANCE AND DISCLOSURE STATEMENT

1. Act 409 of the 2009 Regular Session of the Arkansas Legislature (Act 409) provides for financial assurance requirements for permitting non-municipal domestic sewage treatment systems. Arkansas Code 8-4-203 (b)(1)(A)(i) – "The department shall not issue, modify, or renew a National Pollutant Discharge Elimination System permit or state permit for a non-municipal domestic sewage treatment works without the permit applicant first demonstrating to the department its financial ability to cover the estimated costs of operating and maintaining the non-municipal domestic sewage treatment works for a minimum period of five (5) years."

   The applicant must provide a detailed estimate of the operation and maintenance (O&M) costs for the facility for a five year period. Once the O&M estimate is approved, the applicant must provide **financial assurance** in order to show that the facility is able to cover the costs of operating and maintaining the treatment system for the next five years.

   The minimal financial assurance may be demonstrated to the department by using the following as outlined in Arkansas Code 8-4-203(b)(2):

   A. Obtaining insurance that specifically covers operation and maintenance costs
   B. Obtaining a letter of credit;
   C. Obtaining a surety/performance bond;
   D. Obtaining a trust fund or an escrow account; or
   E. Using a combination of insurance, letter of credit, surety bond, trust fund, or escrow account.

2. Disclosure Statement:

   Arkansas Code Annotated Section 8-1-106 requires that all applicants for any type of permit or transfer of any permit, license, certification or operational authority issued by the Arkansas Department of Environmental Quality (ADEQ) file a Disclosure Statement with their application. The filing of a Disclosure Statement is mandatory. No application can be considered administratively complete without a completed Disclosure Statement. The form may be obtained from the ADEQ web site at:

   http://www.adeq.state.ar.us/disclosure_stmt.pdf

SECTION F – INDUSTRIAL ACTIVITY

1. Does an effluent guideline limitation promulgated by EPA (Link to a Listing of the 40 CFR Effluent Limit Guidelines) under Section 304 of the Clean Water Act (CWA) apply to your facility?

   YES ☐ (Answer questions 2 and 3) NO ☒

2. What Part of 40 CFR? _____

3. What Subpart(s)? _____ _____

4. Give a brief description of all operations at this facility including primary products or services (attach additional sheets if necessary):

   _____

   _____

   _____

5. Production: (projected for new facilities)

Product(s) Manufactured	Last 12 Months lbs/day*		Highest Production Year of Last 5 Years lbs/day*	
(Brand name)	Highest Month	Days of Operation	Monthly Average	Days of Operation

* These units could be off-lbs, lbs quenched, lbs cleaned/etched/rinsed, lbs poured, lbs extruded, etc.

SECTION G - WASTEWATER DISCHARGE INFORMATION

Facilities that checked "Yes" in question 1 of Section F are considered Categorical Industrial Users and should skip to question 2.

1. **For Non-Categorical Users Only**: List average wastewater discharge, maximum discharge, and type of discharge (batch, continuous, or both), for each plant process. Include the reference number from the process flow schematic (reference Figure 1) that corresponds to each process. [New facilities should provide estimates for each discharge.]

No.	Process Description	Average Flow (GPD)	Maximum Flow (GPD)	Type of Discharge (batch, continuous, none)
1	PACKAGE ACTIVATED SLUDGE PROCESS	.122	.500	CONTINUOUS

If batch discharge occurs or will occur, indicate: [New facilities may estimate.]

Number of batch discharges: _____ per day Average discharge per batch: (GPD)

Time of batch discharges _____ (days of week) at _____ (hours of day)

Flow rate: _____ gallons/minute Percent of total discharge: _____

Answer questions 2, 3, and 4 only if you are subject to Categorical Standards.

2. For Categorical Users: Provide the wastewater discharge flows for each of your processes or proposed processes. Include the reference number from the process flow schematic (reference Figure 1) that corresponds to each process. [Note: 1) New facilities should provide estimates for each discharge and 2) Facilities should denote whether the flow was measured or estimated.]

No.	Regulated Process	Average Flow (GPD)	Maximum Flow (GPD)	Type of Discharge (batch, continuous, none)

No.	Unregulated Process	Average Flow (GPD)	Maximum Flow (GPD)	Type of Discharge (batch, continuous, none)

No.	Dilution (e.g., Cooling Water)	Average Flow (GPD)	Maximum Flow (GPD)	Type of Discharge (batch, continuous, none)

If batch discharge occurs or will occur, indicate: [New facilities may estimate.]

Number of batch discharges: _____ per day Average discharge per batch: (GPD)

Time of batch discharges _____ (days of week) at _____ (hours of day)

Flow rate: _____ gallons/minute Percent of total discharge: _____

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

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

If yes, please indicate the present or future location of this equipment on the sewer schematic and describe the equipment below:

_____

_____

_____

4. Are any process changes or expansions planned during the next three years that could alter wastewater volumes or characteristics?

☐ Yes ☐ No (If no, skip Question 5)

5. Briefly describe these changes and their effects on the wastewater volume and characteristics:

_____

_____

_____

SECTION H -TECHNICAL INFORMATION

Technical information to support this application shall be furnished in appropriate detail to understand the project. Information in this Part is required for obtaining a **construction permit** or for **modification** of the treatment system.

1. Describe the treatment system. Include the types of control equipment to be installed along with their methods of operation and control efficiency.

PACKAGE DUAL CONTACT ACTIVATED SLUDGE PROCESS WITH A TERTIARY SAND FILTER PROCESS, DISINFECTION PROCESS IS A UV SYSTEM

2. One set of construction plans and specifications, approved (Signed and stamped) by a **Professional Engineer** (PE) registered in **Arkansas**, must be submitted as follows:

    a. The plans must show flow rates in addition to pertinent dimensions so that detention times, overflow rates, and loadings per acre, etc. can be calculated.
    b. Specifications and complete design calculations.
    c. All treated wastewater discharges should have a flow measuring device such as a weir or Parshall flume installed. Where there is a significant difference between the flow rates of the raw and treated wastewater, a flow measuring device should be provided both before and after treatment.

3. If this application includes a construction permit disturbing five or more acres, a storm water construction permit must be obtained by submitting a notice of intent (NOI) to ADEQ.

SECTION I: SIGNATORY REQUIREMENTS

Cognizant Official (Duly Authorized Representative)

40 CFR 122.22(b) states that all reports required by the permit, or other information requested by the Director, shall be signed by the applicant (or person authorized by the applicant) or by a duly authorized representative of that person. A person is duly authorized representative only if:

(1) the authorization is made in writing by the applicant (or person authorized by the applicant);
(2) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity responsibility, or an individual or position having overall responsibility for environmental matters for the company.

The applicant hereby designates the following person as a Cognizant Official, or duly authorized representative, for signing reports, etc., including Discharge Monitoring Reports (DMR) required by the permit, and other information requested by the Director:

Signature of Cognizant Official: John D. Stauffer Date: 2-16-12

Printed name of Cognizant Official: JOHN D. STAUFFER

Official title of Cognizant Official: SUPERVISOR Telephone Number: (505) 629-8340 - CELL -

Responsible Official

The information contained in this form must be certified by a ***responsible official*** as defined in the "signatory requirements for permit applications" (40 CFR 122.22).

Responsible official is defined as follows:

Corporation, a principal officer of at least the level of vice president
Partnership, a general partner
Sole proprietorship: the proprietor
Municipal, state, federal, or other public facility: principal executive officer, or ranking elected official.

_____ *(Initial)* "I certify that the cognizant official designated above is qualified to act as a duly authorized representative under the provisions of 40 CFR 122.22(b)." NOTE: If no duly authorized representative is designated in this section, the Department considers the applicant to be the responsible official for the facility and only reports, etc., signed by the applicant will be accepted by the Department.

BEO *(Initial)* "I certify that, if this facility is a corporation, it is registered with the Secretary of State in Arkansas. Please provide the full name of the corporation if different than that listed in Section A above."

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. I further certify under penalty of law that all analyses reported as less than detectable in this application or attachments thereto were performed using the EPA approved test method having the lowest detection limit for the substance tested."

Signature of Responsible Official: Bruce E. Powell Date: 15 FEB 2012

Printed name of Responsible Official: BRUCE E. POWELL

Official title of Responsible Official: MAYOR Telephone Number: 870-445-4775

MATERIAL SAFTEY DATA SHEET

SECTION I

IDENTITY: CATAWATER

SECTION II - Hazardous Ingredients - Identify Information

No hazardous components (per OSHA Regulation 29 CFR-1910,1200)
Does not violate any OSHA, NTP or IARC Monograms.

SECTION III Physical/Chemical Characteristics:

Boiling Point: 100 degrees C. (212 degrees F.)
Vapor Pressure: Same as water Evaporation Rate: Same as water
Solubility in Water: Total Appearance and Odor: Clear, same as water

SECTION IV Fire and Explosion Hazard Data:

Flash Point: None Special Fire Fighting Procedures: Same as water
Extinguishing Media: NA Unusual Fire and Explosion Hazards: None

SECTION V Reactivity Data:

Stability: Stable Conditions to Avoid: none
Incompatibility: Materials that react violently with water
Hazardous Decomposition or By Products: none
Hazardous Polymerization: Will not occur

SECTION VI Health Hazard Data:

Threshold Limit Values: NA
Primary Routes of Entry: Inhalation, skin and ingestion
Health Hazards:

- Inhalation: None, same as water
- Skin Contact: None, same as water
- Eye Contact: none
- Ingestion: none
- Carcinogenicity: OSHA/NTP/IARC regulated - None
- Medical Conditions Aggravated by Exposure: None

Emergency and First Aid Procedures:

- Inhalation: None
- Eye and Skin Contact: none

SECTION VII Precautions for Safe Handling and Use:

Released or Spilled: Same as water
Precautions to be Taken in Handling or Storage: Same as water, but do not expose to direct sunlight.
Spills in Undiluted Form: Soak up residue with absorbent materials
Waste Disposal Procedures: None required

SECTION VIII Special Protection Information or Control Measures:

Respiratory Protection: Not required
Ventilation Required: Normal
Local Exhaust Required: None
Protective Clothing: None required
Eye Protection: None required

The information on this Material Safety Data Sheet reflects the latest information and data that we have on hazard properties and handling of this product under the recommended conditions of use. Any use of this product of method of application, which is not described on the label or in the Product Data Sheet, is the responsibility of the user.

FACILITY NAME AND PERMIT NUMBER:

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

FORM 2A NPDES

NPDES FORM 2A APPLICATION OVERVIEW

APPLICATION OVERVIEW

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

BASIC APPLICATION INFORMATION:

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

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

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

SUPPLEMENTAL APPLICATION INFORMATION:

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

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

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

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

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

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

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

ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)

FACILITY NAME AND PERMIT NUMBER:
CITY OF BULL SHOALS WASTEWATER TREATMENT PLANT AR0037028

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

BASIC APPLICATION INFORMATION

PART A: BASIC APPLICATION INFORMATION FOR ALL APPLICANTS

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

A.1. Facility Information.

Facility name: CITY OF BULL SHOALS WASTEWATER TREATMENT PLANT

Mailing Address: CITY OF BULL SHOALS
P.O. BOX 390 BULL SHOALS, AR 72619

Contact person: JOHN D. STAUFFER

Title: SUPERVISOR

Telephone number: (505) 629-8340 (CELL)

Facility Address (not P.O. Box): 258 GOLF COURSE TERRACE
BULL SHOALS, ARKANSAS 72619

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

Applicant name: _____

Mailing Address: _____

_____

Contact person: _____

Title: _____

Telephone number: _____

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

✓ owner _____ operator

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

✓ facility _____ applicant

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

NPDES: AR0037028 PSD: _____

UIC: _____ Other: _____

RCRA: _____ Other: _____

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

Name	Population Served	Type of Collection System	Ownership
BULL SHOALS	1950	SEPARATE	MUNICIPAL
BULL SHOALS/WHITE RIVER STATE PARK	107	SEPERATE	MUNICIPAL

Total population served: _____

FACILITY NAME AND PERMIT NUMBER:

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

A.5. Indian Country.

a. Is the treatment works located in Indian Country?

____ Yes ✓ No

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

____ Yes ✓ No

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

a. Design flow rate .500 mgd

	Two Years Ago	Last Year	This Year	
b. Annual average daily flow rate	.173	.166	.196	mgd
c. Maximum daily flow rate	.607	.623	.761	mgd

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

✓ Separate sanitary sewer	100 %
____ Combined storm and sanitary sewer	____ %

A.8. Discharges and Other Disposal Methods.

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

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

i. Discharges of treated effluent ✓

ii. Discharges of untreated or partially treated effluent ____

iii. Combined sewer overflow points ____

iv. Constructed emergency overflows (prior to the headworks) ____

v. Other ____ ____

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

If yes, provide the following for each surface impoundment:

Location: ____

Annual average daily volume discharged to surface impoundment(s) ____ mgd

Is discharge ____ continuous or ____ intermittent?

c. Does the treatment works land-apply treated wastewater? ____ Yes ✓ No

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

Location: ____

Number of acres: ____

Annual average daily volume applied to site: ____ Mgd

Is land application ____ continuous or ____ intermittent?

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

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

_____

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

Transporter name: _____

Mailing Address: _____

_____

Contact person: _____

Title: _____

Telephone number: _____

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

Name: _____

Mailing Address: _____

_____

Contact person: _____

Title: _____

Telephone number: _____

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

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

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

If yes, provide the following for each disposal method:

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

_____

Annual daily volume disposed of by this method: _____

Is disposal through this method _____ continuous or _____ intermittent?

FACILITY NAME AND PERMIT NUMBER:

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

WASTEWATER DISCHARGES:

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

A.9. Description of Outfall.

a. Outfall number 001

b. Location

BULL SHOALS (City or town, if applicable) 72619 (Zip Code)

MARION (County) ARKANSAS (State)

36° 12' 30" (Latitude) 92° 35' 40" (Longitude)

c. Distance from shore (if applicable) 12 ft.

d. Depth below surface (if applicable) 10 ft.

e. Average daily flow rate .196 mgd

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

If yes, provide the following information:

Number of times per year discharge occurs: ____

Average duration of each discharge: ____

Average flow per discharge: ____ mgd

Months in which discharge occurs: ____

g. Is outfall equipped with a diffuser? ✓ Yes ____ No

A.10. Description of Receiving Waters.

a. Name of receiving water THROUGH A 12 INCH PIPE TO THE WHITE RIVER IN SEGMENT 41 OF THE WHITE RIVER BASIN

b. Name of watershed (if known) UNKNOWN

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

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

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

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

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

FACILITY NAME AND PERMIT NUMBER:

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A.11. Description of Treatment.

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

_____ Primary ✓ Secondary

_____ Advanced _____ Other. Describe: _____

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

Design BOD_5 removal or Design $CBOD_5$ removal	96 TO 98	%
Design SS removal	99	%
Design P removal	UNKNOWN	%
Design N removal	UNKNOWN	%
Other _____	UNKNOWN	%

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

UV LIGHT UNIT

If disinfection is by chlorination, is dechlorination used for this outfall? _____ Yes _____ No

d. Does the treatment plant have post aeration? _____ Yes ✓ No

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

Outfall number: 001

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	6.70	s.u.			
pH (Maximum)	7.49	s.u.			
Flow Rate	.196	mgd			
Temperature (Winter)	AMBIENT	F°			
Temperature (Summer)	AMBIENT	F°			

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

POLLUTANT		MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
		Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.								
BIOCHEMICAL OXYGEN DEMAND (Report one)	BOD-5	5.7	mg/L	<2	mg/L	3	SM 5210B	2 mg/L
	CBOD-5							
FECAL COLIFORM		490	#/100mL	125	#/100mL	3	SM 9222D	1n/100 mls
TOTAL SUSPENDED SOLIDS (TSS)		8.5	mg/L	4	mg/L	3	SM 2540D	1 mg/L

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

FACILITY NAME AND PERMIT NUMBER:

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BASIC APPLICATION INFORMATION

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

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

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

10,000 gpd

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

HAVE AGGRESSIVELY INTRODUCE A SMOKE TEST FACT FINDER IN LAST 6 MONTHS

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

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

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

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

d. Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.

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

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

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

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

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

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

Name: _____

Mailing Address: _____

_____

Telephone Number: _____

Responsibilities of Contractor: _____

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

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

NO IMPROVEMENTS HAVE BEEN MADE

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

___Yes ✓No

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

_____

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

Implementation Stage	Schedule MM / DD / YYYY	Actual Completion MM / DD / YYYY
– Begin construction	___/___/____	___/___/____
– End construction	___/___/____	___/___/____
– Begin discharge	___/___/____	___/___/____
– Attain operational level	___/___/____	___/___/____

e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained? ___Yes ✓No

Describe briefly: _____

_____

B.6. EFFLUENT TESTING DATA (GREATER THAN O.1 MGD ONLY).

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

Outfall Number:_____

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

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

FACILITY NAME AND PERMIT NUMBER:

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BASIC APPLICATION INFORMATION

PART C. CERTIFICATION

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

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

✓ Basic Application Information packet

Supplemental Application Information packet:

_____ Part D (Expanded Effluent Testing Data)

_____ Part E (Toxicity Testing: Biomonitoring Data)

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

_____ Part G (Combined Sewer Systems)

ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.

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

Name and official title: BRUCE E. POWELL - MAYOR

Signature: Bruce E. Powell

Telephone number: 870-445-4775

Date signed: 24 FEB 2012

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

SEND COMPLETED FORMS TO:

FACILITY NAME AND PERMIT NUMBER:

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SUPPLEMENTAL APPLICATION INFORMATION

PART D. EXPANDED EFFLUENT TESTING DATA

Refer to the directions on the cover page to determine whether this section applies to the treatment works.

Effluent Testing: 1.0 mgd and Pretreatment Treatment Works. If the treatment works has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE						
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples	ANALYTICAL METHOD	ML/ MDL
METALS (TOTAL RECOVERABLE), CYANIDE, PHENOLS, AND HARDNESS.											
ANTIMONY											
ARSENIC											
BERYLLIUM											
CADMIUM											
CHROMIUM											
COPPER											
LEAD											
MERCURY											
NICKEL											
SELENIUM											
SILVER											
THALLIUM											
ZINC											
CYANIDE											
TOTAL PHENOLIC COMPOUNDS											
HARDNESS (AS $CaCO_3$)											
Use this space (or a separate sheet) to provide information on other metals requested by the permit writer.											

FACILITY NAME AND PERMIT NUMBER:	Form Approved 1/14/99 OMB Number 2040-0086

Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
VOLATILE ORGANIC COMPOUNDS.											
ACROLEIN											
ACRYLONITRILE											
BENZENE											
BROMOFORM											
CARBON TETRACHLORIDE											
CLOROBENZENE											
CHLORODIBROMO-METHANE											
CHLOROETHANE											
2-CHLORO-ETHYLVINYL ETHER											
CHLOROFORM											
DICHLOROBROMO-METHANE											
1,1-DICHLOROETHANE											
1,2-DICHLOROETHANE											
TRANS-1,2-DICHLORO-ETHYLENE											
1,1-DICHLOROETHYLENE											
1,2-DICHLOROPROPANE											
1,3-DICHLORO-PROPYLENE											
ETHYLBENZENE											
METHYL BROMIDE											
METHYL CHLORIDE											
METHYLENE CHLORIDE											
1,1,2,2-TETRACHLORO-ETHANE											
TETRACHLORO-ETHYLENE											
TOLUENE											

FACILITY NAME AND PERMIT NUMBER:

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Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE						
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples	ANALYTICAL METHOD	ML/ MDL
1,1,1-TRICHLOROETHANE											
1,1,2-TRICHLOROETHANE											
TRICHLORETHYLENE											
VINYL CHLORIDE											
Use this space (or a separate sheet) to provide information on other volatile organic compounds requested by the permit writer.											
ACID-EXTRACTABLE COMPOUNDS											
P-CHLORO-M-CRESOL											
2-CHLOROPHENOL											
2,4-DICHLOROPHENOL											
2,4-DIMETHYLPHENOL											
4,6-DINITRO-O-CRESOL											
2,4-DINITROPHENOL											
2-NITROPHENOL											
4-NITROPHENOL											
PENTACHLOROPHENOL											
PHENOL											
2,4,6-TRICHLOROPHENOL											
Use this space (or a separate sheet) to provide information on other acid-extractable compounds requested by the permit writer.											
BASE-NEUTRAL COMPOUNDS.											
ACENAPHTHENE											
ACENAPHTHYLENE											
ANTHRACENE											
BENZIDINE											
BENZO(A)ANTHRACENE											
BENZO(A)PYRENE											

FACILITY NAME AND PERMIT NUMBER:

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Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
3,4 BENZO-FLUORANTHENE											
BENZO(GHI)PERYLENE											
BENZO(K)FLUORANTHENE											
BIS (2-CHLOROETHOXY) METHANE											
BIS (2-CHLOROETHYL)-ETHER											
BIS (2-CHLOROISO-PROPYL) ETHER											
BIS (2-ETHYLHEXYL) PHTHALATE											
4-BROMOPHENYL PHENYL ETHER											
BUTYL BENZYL PHTHALATE											
2-CHLORONAPHTHALENE											
4-CHLORPHENYL PHENYL ETHER											
CHRYSENE											
DI-N-BUTYL PHTHALATE											
DI-N-OCTYL PHTHALATE											
DIBENZO(A,H) ANTHRACENE											
1,2-DICHLOROBENZENE											
1,3-DICHLOROBENZENE											
1,4-DICHLOROBENZENE											
3,3-DICHLOROBENZIDINE											
DIETHYL PHTHALATE											
DIMETHYL PHTHALATE											
2,4-DINITROTOLUENE											
2,6-DINITROTOLUENE											
1,2-DIPHENYLHYDRAZINE											

FACILITY NAME AND PERMIT NUMBER:

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Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE						
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples	ANALYTICAL METHOD	ML/ MDL
FLUORANTHENE											
FLUORENE											
HEXACHLOROBENZENE											
HEXACHLOROBUTADIENE											
HEXACHLOROCYCLO-PENTADIENE											
HEXACHLOROETHANE											
INDENO(1,2,3-CD)PYRENE											
ISOPHORONE											
NAPHTHALENE											
NITROBENZENE											
N-NITROSODI-N-PROPYLAMINE											
N-NITROSODI- METHYLAMINE											
N-NITROSODI-PHENYLAMINE											
PHENANTHRENE											
PYRENE											
1,2,4-TRICHLOROBENZENE											
Use this space (or a separate sheet) to provide information on other base-neutral compounds requested by the permit writer.											
Use this space (or a separate sheet) to provide information on other pollutants (e.g., pesticides) requested by the permit writer.											

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

FACILITY NAME AND PERMIT NUMBER:

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SUPPLEMENTAL APPLICATION INFORMATION

PART E: TOXICITY TESTING DATA

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136, and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

E.1. Required Tests.

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

____chronic ____acute

E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

	Test number:_____	Test number:_____	Test number:_____
a. Test information.			
Test species & test method number			
Age at initiation of test			
Outfall number			
Dates sample collected			
Date test started			
Duration			
b. Give toxicity test methods followed.			
Manual title			
Edition number and year of publication			
Page number(s)			
c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.			
24-Hour composite			
Grab			
d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)			
Before disinfection			
After disinfection			
After dechlorination			

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	Test number:_____	Test number:_____	Test number:_____
e. Describe the point in the treatment process at which the sample was collected.			
Sample was collected:			
f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.			
Chronic toxicity			
Acute toxicity			
g. Provide the type of test performed.			
Static			
Static-renewal			
Flow-through			
h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.			
Laboratory water			
Receiving water			
i. Type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.			
Fresh water			
Salt water			
j. Give the percentage effluent used for all concentrations in the test series.			
k. Parameters measured during the test. (State whether parameter meets test method specifications)			
pH			
Salinity			
Temperature			
Ammonia			
Dissolved oxygen			
l. Test Results.			
Acute:			
Percent survival in 100% effluent	%	%	%
LC_{50}			
95% C.I.	%	%	%
Control percent survival	%	%	%
Other (describe)			

FACILITY NAME AND PERMIT NUMBER:			

Chronic:			
NOEC	%	%	%
IC_{25}	%	%	%
Control percent survival	%	%	%
Other (describe)			

m. Quality Control/Quality Assurance.

Is reference toxicant data available?			
Was reference toxicant test within acceptable bounds?			
What date was reference toxicant test run (MM/DD/YYYY)?			
Other (describe)			

E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

____Yes____No If yes, describe: _____

_____

_____

E.4. Summary of Submitted Biomonitoring Test Information. If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

Date submitted: _____ (MM/DD/YYYY)

Summary of results: (see instructions)

_____

_____

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

FACILITY NAME AND PERMIT NUMBER:

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SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

GENERAL INFORMATION:

F.1. Pretreatment Program. Does the treatment works have, or is it subject to, an approved pretreatment program?

____Yes____No

F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs. _____

b. Number of CIUs. _____

SIGNIFICANT INDUSTRIAL USER INFORMATION:

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

F.3. Significant Industrial User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: _____

Mailing Address: _____

_____

F.4. Industrial Processes. Describe all of the industrial processes that affect or contribute to the SIU's discharge.

_____

F.5. Principal Product(s) and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): _____

Raw material(s): _____

F.6. Flow Rate.

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

_____ gpd (_____continuous or _____intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

_____ gpd (_____continuous or _____intermittent)

F.7. Pretreatment Standards. Indicate whether the SIU is subject to the following:

a. Local limits ____Yes ____No

b. Categorical pretreatment standards ____Yes ____No

If subject to categorical pretreatment standards, which category and subcategory?

_____

F.8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU. Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

____Yes____No If yes, describe each episode.

_____

_____

RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:

F.9. RCRA Waste. Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe? ____Yes ___No (go to F.12.)

F.10. Waste Transport. Method by which RCRA waste is received (check all that apply):

_____Truck _____Rail _____Dedicated Pipe

F.11. Waste Description. Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA Hazardous Waste Number	Amount	Units

CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:

F.12. Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

____Yes (complete F.13 through F.15.) ____No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

F.13. Waste Origin. Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in the next five years).

_____

_____

_____

F.14. Pollutants. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

_____

_____

F.15. Waste Treatment.

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

____Yes ____No

If yes, describe the treatment (provide information about the removal efficiency):

_____

_____

b. Is the discharge (or will the discharge be) continuous or intermittent?

____Continuous ____Intermittent If intermittent, describe discharge schedule.

_____

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

FACILITY NAME AND PERMIT NUMBER:

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

SUPPLEMENTAL APPLICATION INFORMATION

PART G. COMBINED SEWER SYSTEMS

If the treatment works has a combined sewer system, complete Part G.

G.1. System Map. Provide a map indicating the following: (may be included with Basic Application Information)

a. All CSO discharge points.

b. Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding natural resource waters).

c. Waters that support threatened and endangered species potentially affected by CSOs.

G.2. System Diagram. Provide a diagram, either in the map provided in G.1. or on a separate drawing, of the combined sewer collection system that includes the following information:

a. Locations of major sewer trunk lines, both combined and separate sanitary.

b. Locations of points where separate sanitary sewers feed into the combined sewer system.

c. Locations of in-line and off-line storage structures.

d. Locations of flow-regulating devices.

e. Locations of pump stations.

CSO OUTFALLS:

Complete questions G.3 through G.6 once for each CSO discharge point.

G.3. Description of Outfall.

a. Outfall number _____

b. Location _____
(City or town, if applicable) (Zip Code)

_____
(County) (State)

_____
(Latitude) (Longitude)

c. Distance from shore (if applicable) _____ ft.

d. Depth below surface (if applicable) _____ ft.

e. Which of the following were monitored during the last year for this CSO?

____Rainfall ____CSO pollutant concentrations ____CSO frequency

____CSO flow volume ____Receiving water quality

f. How many storm events were monitored during the last year? _____

G.4. CSO Events.

a. Give the number of CSO events in the last year.

_____ events (___ actual or ___ approx.)

b. Give the average duration per CSO event.

_____ hours (____ actual or ____ approx.)

c. Give the average volume per CSO event.

_____ million gallons (_____ actual or _____ approx.)

d. Give the minimum rainfall that caused a CSO event in the last year.

_____ inches of rainfall

G.5. Description of Receiving Waters.

a. Name of receiving water: _____

b. Name of watershed/river/stream system: _____

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

c. Name of State Management/River Basin: _____

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

G.6. CSO Operations.

Describe any known water quality impacts on the receiving water caused by this CSO (e.g., permanent or intermittent beach closings, permanent or intermittent shell fish bed closings, fish kills, fish advisories, other recreational loss, or violation of any applicable State water quality standard).

_____

_____

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

Additional information, if provided, will appear on the following pages.

http://mapper.acme.com/

GPS LOCATIONS FOR THE FOLLOWING:

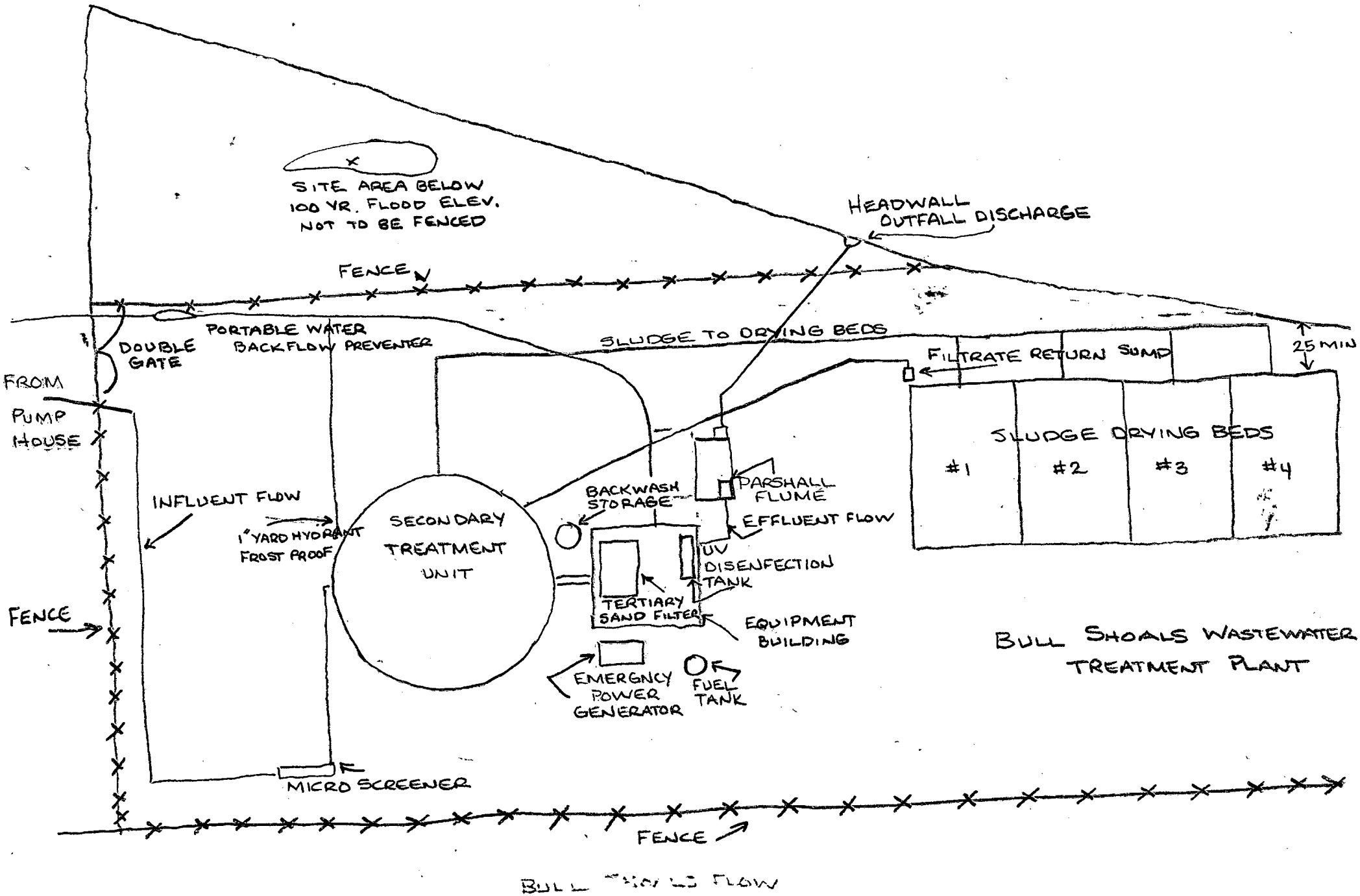
TREATMENT PLANT: 36° 358931 NORTH – 92° 595132 WEST

OUTFALL DISCHARGE POINT: 36° 358382 NORTH – 92° 594906 WEST

SAMPLING LOCATION: 36° 358650 NORTH – 92° 595178 WEST

Creation Date: Mar 10, 2011 13:04
Modification Date: Mar 16, 2011 21:51

Creation Date: Mar 06, 2011 15:46
Modification Date: Mar 24, 2011 19:22


SITE AREA BELOW
100 YR. FLOOD ELEV.
NOT TO BE FENCED
HEADWALL
OUTFALL DISCHARGE
FENCE
PORTABLE WATER
BACKFLOW PREVENTER
DOUBLE
GATE
SLUDGE TO DRYING BEDS
FILTRATE RETURN SUMP
25 MIN
FROM
PUMP
HOUSE
SLUDGE DRYING BEDS
#1
#2
#3
#4
INFLUENT FLOW
1" YARD HYDRANT
FROST PROOF
SECONDARY
TREATMENT
UNIT
BACKWASH
STORAGE
PARSHALL
FLUME
EFFLUENT FLOW
UV
DISENFECTION
TANK
TERTIARY
SAND FILTER
EQUIPMENT
BUILDING
FENCE
EMERGNCY
POWER
GENERATOR
FUEL
TANK
MICRO SCREENER
FENCE
BULL SHOALS WASTEWATER
TREATMENT PLANT
BULL SHOALS FLOW

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BULL SHOALS

Collection Date / Time: December 28, 2011
10:00 AM 11:00 AM 12:00 PM BULL SHOALS

Collection Place: Final Discharge Point

Grab Collection: *Fecal, pH, DO* December 29, 2011 2:50 PM BET

Wastewater Analysis

Parameter	Analysis Begin Date / Time	Analysis End Date / Time	Results	Unit	Loading *lb/dy*	Analyst	% Spike	Rel %	Sample Type	Ref #
Flow	NA	NA	NA	MGD	NA	NA	NA	NA	NA	
BOD	12/30 9:00 AM	01/04 9:00 AM	< 2	mg/l	NA	KLB / KLB	94.3	5.64	FWC	1
TSS	01/04 11:00 AM	NA	1	mg/l	NA	KLB	NA	0.00	FWC	2
Fecal Coliform	12/29 6:30 PM	12/30 4:55 PM	< 1	N/100mls	NA	BET / BET	NA	0.00	GRAB	3
pH	12/29 2:51 PM	NA	7.63	S.U.	NA	BET	NA	0.40	GRAB	4
Dissolved Oxygen	12/29 2:51 PM	NA	8.3	mg/l	NA	BET	NA	1.13	GRAB	5

Quality Assurance: All Parameters include 10% duplication studies by random selection. The following equipment is checked and calibrated daily: pH meter, balance, incubators, water baths, drying oven and sterilizing apparatus. Ammonia Nitrogen and Oil & Grease Analysis include duplication and spike studies at a rate of at least 10%.

Notes: Samples iced at collection. Preserved with H_2SO_4 to pH_2: Oil & Grease, Ammonia, COD

References:

Analysis complies with 40 CFR Part 136:

1. SM 5210 B
2. SM 2540 D
3. SM 9222 D
4. SM 4500-HB
5. SM 4500-OG
6. SM 4500-P-E
7. SM 4500 NO3-E

Neville Adams, Manager

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BULL SHOALS

Wastewater Analysis

Collection Date / Time: December 13, 2011
10:00 AM 11:00 AM 12:00 PM BULL SHOALS
Collection Place: Final Discharge Point
Grab Collection: *Fecal, pH, DO* December 14, 2011 10:02 AM KWS

Parameter	Analysis Begin Date / Time	Analysis End Date / Time	Results	Unit	Loading lb/dy	Analyst	% Spike	Rel %	Sample Type	Ref #
Flow	NA	NA	NA	MGD	NA	NA	NA	NA	NA	
BOD	12/14 4:00 PM	12/19 10:30 AM	6	mg/l	NA	KLB / KLB	92.8	3.37	FWC	1
TSS	12/16 1:45 PM	NA	1	mg/l	NA	MNE	NA	0.00	FWC	2
Fecal Coliform	12/14 3:45 PM	12/15 2:30 PM	162	N/100mls	NA	KWS / KLB	NA	2.47	GRAB	3
pH	12/14 10:02 AM	NA	7.87	S.U.	NA	KWS	NA	0.00	GRAB	4
Dissolved Oxygen	12/14 10:02 AM	NA	9.1	mg/l	NA	KWS	NA	0.00	GRAB	5

Quality Assurance: All Parameters include 10% duplication studies by random selection. The following equipment is checked and calibrated daily: pH meter, balance, incubators, water baths, drying oven and sterilizing apparatus. Ammonia Nitrogen and Oil & Grease Analysis include duplication and spike studies at a rate of at least 10%.

Notes: Samples iced at collection. Preserved with H_2SO_4 to pH_2: Oil & Grease, Ammonia, COD

References:

Analysis complies with 40 CFR Part 136:

1. SM 5210 B
2. SM 2540 D
3. SM 9222 D
4. SM 4500-HB
5. SM 4500-OG
6. SM 4500-P-E
7. SM 4500 NO3-E

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BULL SHOALS

Wastewater Analysis

Collection Date / Time: December 6, 2011
10:00 AM 11:00 AM 12:00 PM BULL SHOALS
Collection Place: Final Discharge Point
Grab Collection: *Fecal, pH, DO* December 7, 2011 11:30 AM KWS

Parameter	Analysis Begin Date / Time	Analysis End Date / Time	Results	Unit	Loading lb/dy	Analyst	% Spike	Rel %	Sample Type	Ref #
Flow	NA	NA	NA	MGD	NA	NA	NA	NA	NA	
BOD	12/07 3:15 PM	12/12 10:00 AM	< 2	mg/l	NA	KLB / KLB	97.5	2.71	FWC	1
TSS	12/08 1:20 PM	NA	6	mg/l	NA	MNE	NA	0.00	FWC	2
Fecal Coliform	12/07 2:40 PM	12/08 3:00 PM	< 2	N/100mls	NA	KWS / KLB	NA	3.15	GRAB	3
pH	12/07 11:30 AM	NA	7.10	S.U.	NA	KWS	NA	0.13	GRAB	4
Dissolved Oxygen	12/07 11:30 AM	NA	8.8	mg/l	NA	KWS	NA	0.84	GRAB	5
Phosphorus	12/08 8:00 AM	NA	2.28	mg/l	NA	KLB	98.4	1.53	GRAB	6
NO3/ NO2	12/08 10:00 AM	NA	9.84	mg/l	NA	KLB	95.3	7.41	GRAB	7

Quality Assurance: All Parameters include 10% duplication studies by random selection. The following equipment is checked and calibrated daily: pH meter, balance, incubators, water baths, drying oven and sterilizing apparatus. Ammonia Nitrogen and Oil & Grease Analysis include duplication and spike studies at a rate of at least 10%.

Notes: Samples iced at collection. Preserved with H_2SO_4 to pH_2: Oil & Grease, Ammonia, COD

References:

Analysis complies with 40 CFR Part 136:

1. SM 5210 B
2. SM 2540 D
3. SM 9222 D
4. SM 4500-HB
5. SM 4500-OG
6. SM 4500-P-E
7. SM 4500 NO3-E

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BULL SHOALS

Collection Date / Time: May 4, 2010 10:00 AM 11:00 AM 12:00 PM BULL SHOALS

Wastewater Analysis

Collection Place: Final Discharge Point

Grab Collection: *Fecal, pH, DO* May 5, 2010 9:55 AM KWS

Parameter	Analysis Begin Date / Time	Analysis End Date / Time	Results	Unit	Loading *lb/dy*	Analyst	% Spike	Rel %	Sample Type	Ref #
Flow	NA	NA	**0.135**	MGD	NA	BS	NA	NA	NA	
BOD	05/05 2:00 PM	05/10 11:00 AM	**< 2**	mg/l	NA	KLB / KLB	88.8	6.21	FWC	1
TSS	05/06 2:00 PM	NA	**6**	mg/l	NA	SBS	NA	3.14	FWC	2
Fecal Coliform	05/05 12:50 PM	, 05/06 1:30 PM	**156**	N/100mls	NA	KWS / KLB	NA	15.39	GRAB	3
pH	05/05 9:55 AM	NA	**7.27**	S.U.	NA	KWS	NA	0.14	GRAB	4
Dissolved Oxygen	05/05 9:55 AM	NA	**8.0**	mg/l	NA	KWS	NA	1.10	GRAB	5
Phosphorus	05/07 2:00 PM	NA	**1.43**	mg/l	NA	KLB	93.8	0.27	GRAB	6
NO3/ NO2	05/06 10:00 AM	NA	**1.01**	mg/l	NA	KLB	99.4	1.49	GRAB	7

Quality Assurance: All Parameters include 10% duplication studies by random selection. The following equipment is checked and calibrated daily: pH meter, balance, incubators, water baths, drying oven and sterilizing apparatus. Ammonia Nitrogen and Oil & Grease Analysis include duplication and spike studies at a rate of at least 10%.

Notes: Samples Iced at collection. Preserved with H_2SO_4 to pH_2: Oil & Grease, Ammonia, COD

References:

Analysis complies with 40 CFR Part 136:

1. SM 5210 B
2. SM 2540 D
3. SM 9222 D
4. SM 4500-HB
5. SM 4500-OG
6. SM 4500-P-E
7. SM 4500 NO3-E

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BULL SHOALS

Collection Date / Time: May 11, 2010
10:00 AM 11:00 AM 12:00 PM BULL SHOALS

Wastewater Analysis

Collection Place: Final Discharge Point
Grab Collection: *Fecal, pH, DO* May 12, 2010 8:30 AM KWS

Parameter	Analysis Begin Date / Time	Analysis End Date / Time	Results	Unit	Loading *lb/dy*	Analyst	% Spike	Rel %	Sample Type	Ref #
Flow	NA	NA	**0.207**	MGD	NA	BS	NA	NA	NA	
BOD	05/12 3:00 PM	05/17 9:00 AM	**2**	mg/l	NA	KLB / KLB	93.8	4.65	FWC	1
TSS	05/13 11:30 AM	NA	**3**	mg/l	NA	SBS	NA	4.18	FWC	2
Fecal Coliform	05/12 2:25 PM	05/13 1:30 PM	**490**	N/100mls	NA	NSA / KLB	NA	9.52	GRAB	3
pH	05/12 8:30 AM	NA	**7.27**	S.U.	NA	KWS	NA	0.00	GRAB	4
Dissolved Oxygen	05/12 8:30 AM	NA	**7.1**	mg/l	NA	KWS	NA	0.00	GRAB	5

Quality Assurance: All Parameters include 10% duplication studies by random selection. The following equipment is checked and calibrated daily: pH meter, balance, incubators, water baths, drying oven and sterilizing apparatus. Ammonia Nitrogen and Oil & Grease Analysis include duplication and spike studies at a rate of at least 10%.

Notes: Samples iced at collection. Preserved with H_2SO_4 to pH_2: Oil & Grease, Ammonia, COD

References:

Analysis complies with 40 CFR Part 136:

1. SM 5210 B
2. SM 2540 D
3. SM 9222 D
4. SM 4500-HB
5. SM 4500-OG
6. SM 4500-P-E
7. SM 4500 NO3-E

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BULL SHOALS

Collection Date / Time: May 25, 2010
10:00 AM 11:00 AM 12:00 PM BULL SHOALS

Wastewater Analysis

Collection Place: Final Discharge Point
Grab Collection: *Fecal, pH, DO* May 26, 2010 8:38 AM KWS

Parameter	Analysis Begin Date / Time	Analysis End Date / Time	Results	Unit	Loading *lb/dy*	Analyst	% Spike	Rel %	Sample Type	Ref #
Flow	NA	NA	**0.197**	MGD	NA	BS	NA	NA	NA	
BOD	05/26 2:30 PM	05/31 12:00 PM	**< 2**	mg/l	NA	KLB / BET	92.8	1.00	FWC	1
TSS	05/27 11:00 AM	NA	**9**	mg/l	NA	SBS	NA	0.00	FWC	2
Fecal Coliform	05/26 2:05 PM	05/27 2:00 PM	**310**	N/100mls	NA	KWS / KLB	NA	0.00	GRAB	3
pH	05/26 8:38 AM	NA	**7.02**	S.U.	NA	KWS	NA	0.13	GRAB	4
Dissolved Oxygen	05/26 8:38 AM	NA	**7.4**	mg/l	NA	KWS	NA	1.21	GRAB	5

Quality Assurance: All Parameters include 10% duplication studies by random selection. The following equipment is checked and calibrated daily: pH meter, balance, incubators, water baths, drying oven and sterilizing apparatus. Ammonia Nitrogen and Oil & Grease Analysis include duplication and spike studies at a rate of at least 10%.

Notes: Samples iced at collection. Preserved with H_2SO_4 to pH_2: Oil & Grease, Ammonia, COD

References:

Analysis complies with 40 CFR Part 136:

1. SM 5210 B
2. SM 2540 D
3. SM 9222 D
4. SM 4500-HB
5. SM 4500-OG
6. SM 4500-P-E
7. SM 4500 NO3-E

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BULL SHOALS

Collection Date / Time: June 7, 2011

10:00 AM 11:00 AM 12:00 AM BULL SHOALS

Collection Place: Final Discharge Point

Grab Collection: *Fecal, pH, DO* June 8, 2011 10:06 AM KWS

Wastewater Analysis

Parameter	Analysis Begin Date / Time	Analysis End Date / Time	Results	Unit	Loading *lb/dy*	Analyst	% Spike	Rel %	Sample Type	Ref #
Flow	NA	NA	NA	MGD	NA	NA	NA	NA	NA	
BOD	06/08 2:30 PM	06/13 10:30 AM	< 2	mg/l	NA	KLB / KLB	93.0	6.00	FWC	1
TSS	06/09 12:30 PM	NA	< 1	mg/l	NA	MNE	NA	2.09	FWC	2
Fecal Coliform	06/08 1:00 PM	06/09 11:30 AM	4	N/100mls	NA	KWS / KLB	NA	8.00	GRAB	3
pH	06/08 10:06 AM	NA	7.32	S.U.	NA	KWS	NA	0.13	GRAB	4
Dissolved Oxygen	06/08 10:06 AM	NA	5.0	mg/l	NA	KWS	NA	1.26	GRAB	5
Phosphorus	06/09 9:00 AM	NA	3.04	mg/l	NA	KLB	98.4	9.52	GRAB	6
NO3/ NO2	06/27 1:00 PM	NA	6.54	mg/l	NA	KLB	95.9	2.91	GRAB	7

Quality Assurance: All Parameters include 10% duplication studies by random selection. The following equipment is checked and calibrated daily: pH meter, balance, incubators, water baths, drying oven and sterilizing apparatus. Ammonia Nitrogen and Oil & Grease Analysis include duplication and spike studies at a rate of at least 10%.

Notes: Samples iced at collection. Preserved with H_2SO_4 to pH_2: Oil & Grease, Ammonia, COD

References:

Analysis complies with 40 CFR Part 136:

1. SM 5210 B
2. SM 2540 D
3. SM 9222 D
4. SM 4500-HB
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6. SM 4500-P-E
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BULL SHOALS

Wastewater Analysis

Collection Date / Time: June 14, 2011
10:00 AM 11:00 AM 12:00 AM BULL SHOALS
Collection Place: Final Discharge Point
Grab Collection: *Fecal, pH, DO* June 15, 2011 9:01 AM KWS

Parameter	Analysis Begin Date / Time	Analysis End Date / Time	Results	Unit	Loading lb/dy	Analyst	% Spike	Rel %	Sample Type	Ref #
Flow	NA	NA	NA	MGD	NA	NA	NA	NA	NA	
BOD	06/15 3:30 PM	06/20 9:00 AM	< 2	mg/l	NA	KLB / KLB	90.3	0.00	FWC	1
TSS	06/16 8:45 AM	NA	< 1	mg/l	NA	MNE	NA	0.00	FWC	2
Fecal Coliform	06/15 2:50 PM	06/16 1:00 PM	2	N/100mls	NA	BET / KLB	NA	2.16	GRAB	3
pH	06/15 9:01 AM	NA	7.19	S.U.	NA	KWS	NA	0.13	GRAB	4
Dissolved Oxygen	06/15 9:01 AM	NA	6.1	mg/l	NA	KWS	NA	1.34	GRAB	5

Quality Assurance: All Parameters include 10% duplication studies by random selection. The following equipment is checked and calibrated daily: pH meter, balance, incubators, water baths, drying oven and sterilizing apparatus. Ammonia Nitrogen and Oil & Grease Analysis include duplication and spike studies at a rate of at least 10%.

Notes: Samples iced at collection. Preserved with H_2SO_4 to pH_2: Oil & Grease, Ammonia, COD

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BULL SHOALS

Collection Date / Time: June 28, 2011

10:00 AM 11:00 AM 12:00 AM BULL SHOALS

Collection Place: Final Discharge Point

Grab Collection: *Fecal, pH, DO* June 29, 2011 8:00 AM KWS

Wastewater Analysis

Parameter	Analysis Begin Date / Time	Analysis End Date / Time	Results	Unit	Loading *lb/dy*	Analyst	% Spike	Rel %	Sample Type	Ref #
Flow	NA	NA	NA	MGD	NA	NA	NA	NA	NA	
BOD	06/29 3:00 PM	07/04 3:00 PM	2	mg/l	NA	KLB / BET	95.8	0.50	FWC	1
TSS	06/30 9:30 AM	NA	4	mg/l	NA	MNE	NA	0.00	FWC	2
Fecal Coliform	06/29 1:25 PM	06/30 12:30 PM	< 2	N/100mls	NA	KWS / KLB	NA	0.00	GRAB	3
pH	06/29 8:00 AM	NA	7.30	S.U.	NA	KWS	NA	0.13	GRAB	4
Dissolved Oxygen	06/29 8:00 AM	NA	6.7	mg/l	NA	KWS	NA	1.23	GRAB	5

Quality Assurance: All Parameters include 10% duplication studies by random selection. The following equipment is checked and calibrated daily: pH meter, balance, incubators, water baths, drying oven and sterilizing apparatus. Ammonia Nitrogen and Oil & Grease Analysis include duplication and spike studies at a rate of at least 10%.

Notes: Samples iced at collection. Preserved with H_2SO_4 to pH_2: Oil & Grease, Ammonia, COD

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6. SM 4500-P-E
7. SM 4500 NO3-E

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