SEP 16 2019

SECTION 1. TITLE PAGE AND TABLE OF CONTENTS

APPLICATIONS FOR RENEWAL
NPDES PERMIT
STEAM MILL SAND PLANT

STEAM MILL PARTNERS
CERRO GORDO ROAD
JACKSON, TN 38301
AFFECTED AREA = 16.8 Ac.
LATITUDE N 35° 34' 54" LONGITUDE 088° 51 44"

Application Prepared By
Surveying Services, Inc.
Jackson, TN 38305
&
Waypoint Analytical
2269 F. E. Wright Dr.
Jackson, TN 38305
731-423-5330
Contact: Billie Haynes

SECTION II INTRODUCTION

This mine is in southern Madison County, TN, and is located on the South Jackson USGS quadrangle map at latitude 35° 34' 54" and longitude 88° 51' 44" (See Site Map #1). The mine is located with the South Fork of the Forked Deer River watershed and is drained by an man made ditch to Hicks Creek and thence to the South Fork of the Forked Deer River.
This application has been submitted for a renewal permit for Steam Mill Partners sand plant, owned by Steam Mill Partners, P.O. Box 3037, Jackson, TN 38303. This mining site has been in operation since 1999. Typically, the mine operated from 7 a.m. until 5 p.m., Monday through Friday, twelve months per year. Mine ownership includes:

William "Bubba" Johnson, 1772 Hollywood Drive, Jackson, TN 38301 – 50% interest
Freddie Teague, 875 Westover Road, Jackson, TN 38301 – 25% interest
David Teague, 875 Westover Road, Jackson, TN 38301 – 25% interest

This operation removes sand from sand veins with a front end loader or backhoe as needed. There is currently no process water used in this sand mining operation, however, the owners have installed a well capable of providing enough water to wash a portion of the mined sand such that the mine will produce both fill sand and washed sand.

The enclosed Site Plan Map #1 shows the location of the permit boundaries on a 7.5 minute U.S.G.S topographic map.

The enclosed Site Plan Map #2 shows the permit boundaries, including existing mining areas as well as proposed new mining areas and other mine features.

Storm water which falls into the mine flows westward toward a holding basin and, when clarified, flows off property and empties into Hicks Creek.

The permit area is 16.8 acres. The total fee simple land owned by Steam Mill Partners, which includes this mine, is 412.5 acres. The property can be found as Parcel 125.00, Madison County Tax Map 099, Deed Book 407, Page 146.

Site Location

Access to the site is along and just south of Cerro Gordo Road. Beginning at the intersection of Main Street and Riverside Drive, downtown Jackson, TN, proceed south on Riverside Dr. for a distance of 1.66 miles. Turn right on Boone Lane and proceed west for 0.75 miles. Turn left on Well Lassiter Road and proceed south for 0.49 miles. Turn right on Cerro Gordo road and proceed west for 0.58 miles. The entrance to the mine area is a gravel road to the left, i.e., running south from Cerro Gordo road and along the eastern side of Hicks Creek. Site Map #1, which can be found within this permit application, is a topographic map showing the route from downtown Jackson to the mine site. Additionally, Site Map #1 shows the location of the mine with respect to surrounding structures and known private and public water wells.

STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES
Water-Based Systems
William R. Snodgrass - Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor
Nashville, TN 37243-1102

SEP 16 2019

PERMIT CONTACT INFORMATION

Please complete all sections. If one person serves multiple functions, please repeat this information in each section.

PERMIT NUMBER: TN0079642 **DATE:** 9-16-2019

PERMITTED FACILITY: BUBBA JOHNSON CONST. SAND PLANT **COUNTY:** MADISON

OFFICIAL PERMIT CONTACT:

(The permit signatory authority, e.g. responsible corporate officer, principle executive officer or ranking elected official)

Official Contact: BUBBA JOHNSON	Title or Position: OWNER		
Mailing Address: P.O. BOX 3037	City: JACKSON	State: TN	Zip: 38303
Phone number(s): 731-664-1477	E-mail:		

PERMIT BILLING ADDRESS (where invoices should be sent):

Billing Contact: BUBBA JOHNSON	Title or Position: OWNER		
Mailing Address: P.O. BOX 3037	City: JACKSON	State: TN	Zip: 38303
Phone number(s): 731-664-1477	E-mail:		

FACILITY LOCATION (actual location of permit site and local contact for site activity):

Facility Location Contact: BUBBA JOHNSON	Title or Position: OWNER		
Facility Location (physical street address): CERRO GORDO ROAD	City: JACKSON	State: TN	Zip: 38301
Phone number(s): 731-664-1477	E-mail:		
Alternate Contact (if desired):	Title or Position:		
Mailing Address:	City:	State:	Zip:
Phone number(s):	E-mail:		

FACILITY REPORTING (Discharge Monitoring Report (DMR) or other reporting):

Cognizant Official authorized for permit reporting: BUBBA JOHNSON	Title or Position: OWNER		
Mailing Address: P.O. BOX 3037	City: JACKSON	State: TN	Zip: 38303
Phone number(s): 731-664-1477	E-mail:		
Fax number for reporting:	Does the facility have interest in starting electronic DMR reporting? Yes No NO		

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
TN0079642	TN0079642	Bubba Johnson Contractors	

Form 1 NPDES | EPA

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

GENERAL INFORMATION

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

Activities Requiring an NPDES Permit

1.1 Applicants *Not Required* to Submit Form 1

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

1.2 Applicants *Required* to Submit Form 1

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

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

Name, Mailing Address, and Location

2.1 Facility Name

Bubba Johnson Contractors Sand Plant

2.2 EPA Identification Number

TN0079642

2.3 Facility Contact

Name (first and last)	Title	Phone number
Bubba Johnson	Owner	731-664-1477

Email address: sandandgravel31@yahoo.com

2.4 Facility Mailing Address

Street or P.O. box: P.O. Box 3037

City or town	State	ZIP code
Jackson	TN	38303

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
TN0079642	TN0079642	Bubba Johnson Contractors	

Name, Mailing Address, and Location Continued

2.5	Facility Location		
	Street, route number, or other specific identifier: 198 Cerro Gordo Rd.		
	County name: Madison	County code (if known): 057	
	City or town: Jackson	State: TN	ZIP code: 38301

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

SIC and NAICS Codes

3.1	SIC Code(s)	Description (optional)
	1441	Secondary Construction Sand & Gravel

3.2	NAICS Code(s)	Description (optional)
	212321	Sand & Gravel Quarrying

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

Operator Information

4.1	Name of Operator
	Bubba Johnson Contractors Sand Plant

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

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

4.4	Phone Number of Operator
	731-664-1477

Operator Information Continued

4.5	Operator Address		
	Street or P.O. Box: P.O. Box 3037		
	City or town: Jackson	State: TN	ZIP code: 38303
	Email address of operator: sandandgravel31@yahoo.com		

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

Indian Land

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

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
TN0079642	TN0079642	Bobby Johnson Contractors	

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

Existing Environmental Permits

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

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

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

Map

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

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

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

Nature of Business

8.1 Describe the nature of your business.

Mining of Sand

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

Cooling Water Intake Structures

9.1 Does your facility use cooling water?

☐ Yes ☒ No → SKIP to Item 10.1.

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

N/A

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

Variance Requests

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

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

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

Checklist and Certification Statement

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

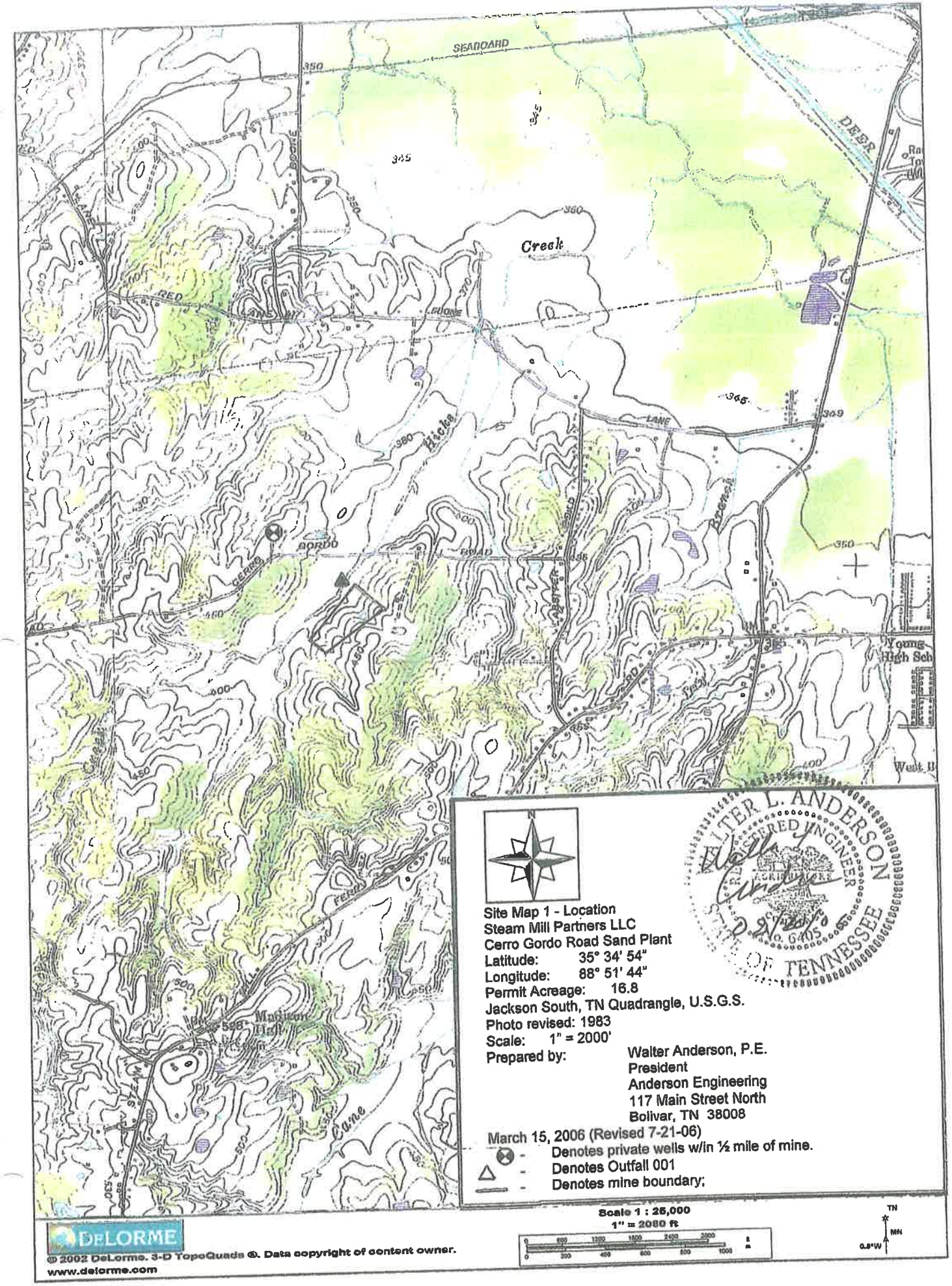
Column 1	Column 2
☒ Section 1: Activities Requiring an NPDES Permit	☐ w/ attachments
☒ Section 2: Name, Mailing Address, and Location	☐ w/ attachments
☒ Section 3: SIC Codes	☐ w/ attachments
☒ Section 4: Operator Information	☐ w/ attachments
☒ Section 5: Indian Land	☐ w/ attachments
☒ Section 6: Existing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

11.2 **Certification Statement**

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

Name (print or type first and last name)	Official title
Bubba Johnson	Owner
Signature	**Date signed**
	4/21/20

SEP 1 6 2019



Site Map 1 - Location
Steam Mill Partners LLC
Cerro Gordo Road Sand Plant
Latitude: 35° 34' 54"
Longitude: 88° 51' 44"
Permit Acreage: 16.8
Jackson South, TN Quadrangle, U.S.G.S.
Photo revised: 1983
Scale: 1" = 2000'
Prepared by: Walter Anderson, P.E.
President
Anderson Engineering
117 Main Street North
Bolivar, TN 38008

WALTER L. ANDERSON
REGISTERED ENGINEER
No. 6405
STATE OF TENNESSEE

March 15, 2006 (Revised 7-21-06)

- Denotes private wells w/in ½ mile of mine.
- Denotes Outfall 001
- Denotes mine boundary;

Scale 1 : 25,000
1" = 2080 ft

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Form 2C NPDES

EPA

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

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

Outfall Location

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

Outfall Number	Receiving Water Name	Latitude	Longitude
001	Hicks Creek	35° 34' 54"	88° 57' 44"
SW001	Hicks Creek	35° 35' 05"	88° 57' 37"
		° ' "	° ' "

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

Line Drawing

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

☒ Yes ☐ No

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

Average Flows and Treatment

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

****Outfall Number**** 001

Operations Contributing to Flow

Operation	Average Flow
Washing Sand	less than one mgd
	mgd
	mgd
	mgd

Treatment Units

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

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
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Average Flows and Treatment Continued

3.1 cont.

****Outfall Number**** SW001

Operations Contributing to Flow

Operation	Average Flow
Storm Water	Intermittent mgd
	mgd
	mgd
	mgd

Treatment Units

Description (include size, flow rate through each treatment unit, retention time, etc.)	Code from Table 2C-1	Final Disposal of Solid or Liquid Wastes Other Than by Discharge
Stormwater Outfall	None	None

****Outfall Number**** _____

Operations Contributing to Flow

Operation	Average Flow
	mgd
	mgd
	mgd
	mgd

Treatment Units

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

System Users

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

☐ Yes ☒ No → SKIP to Section 4.

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

☐ Yes ☐ No

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
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SECTION 4. INTERMITTENT FLOWS (40 CFR 122.21(g)(4))

Intermittent Flows

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

☒ Yes ☐ No → SKIP to Section 5.

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

Outfall Number	Operation (list)	Frequency		Flow Rate		Duration
		Average Days/Week	Average Months/Year	Long-Term Average	Maximum Daily	
001	Washing Sand	days/week	1-2 months/year	less than 1 mgd	less than 1 mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days

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

Applicable ELGs

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

☐ Yes ☒ No → SKIP to Section 6.

5.2 Provide the following information on applicable ELGs.

ELG Category	ELG Subcategory	Regulatory Citation

Production-Based Limitations

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

☐ Yes ☐ No → SKIP to Section 6.

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

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

Request for Waiver
Testing and/or Monitoring of Effluent
EPA Application Form 2C

[Requirements found in *40 CFR 122.21 (g) or (k)*]

Company Bubba Johnson Contractors Sand Pit

Minename Bubba Johnson Contractors Sand Pit

NPDES TN0079642

Only one sample needs to be collected from outfalls where effluent quality is substantially identical. However, where effluent quality varies, additional samples must be collected.

Check the boxes that apply and fill in the information, where applicable.
Submit three copies. One copy must have the original signature of the permittee.

☐ Outfall effluent quality varies. Samples were collected and tested for outfalls:

_____.

Outfalls _____ have substantially identical effluent quality.

Outfalls _____ have substantially identical effluent quality.

Outfalls _____ have substantially identical effluent quality.

☐ This is my request to the Director to allow the testing of one outfall. Outfalls for my facility have substantially identical effluent quality.

☑ This is my request to the Director for a waiver from the testing and reporting of the parameters: Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Total Organic Carbon (TOC), Ammonia (as N), and Temperature. Testing and reporting of these parameters do not provide information essential to NPDES permit issuance.

Signature	4	21	20
Title Owner	Mo.	Day	Year
	Date Signed		

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
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SECTION 6. IMPROVEMENTS (40 CFR 122.21(g)(6))

Upgrades and Improvements

6.1 Are you presently required by any federal, state, or local authority to meet an implementation schedule for constructing, upgrading, or operating wastewater treatment equipment or practices or any other environmental programs that could affect the discharges described in this application?

☐ Yes ☒ No ➔ SKIP to Item 6.3.

6.2 Briefly identify each applicable project in the table below.

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

6.3 Have you attached sheets describing any additional water pollution control programs (or other environmental projects that may affect your discharges) that you now have underway or planned? *(optional item)*

☐ Yes ☐ No ☒ Not applicable

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

Effluent and Intake Characteristics

See the instructions to determine the pollutants and parameters you are required to monitor and, in turn, the tables you must complete. Not all applicants need to complete each table.

Table A. Conventional and Non-Conventional Pollutants

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

☒ Yes ☐ No ➔ SKIP to Item 7.3.

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

Outfall Number 001 Outfall Number _____ Outfall Number _____

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

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

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

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

☐ Yes ☒ No ➔ SKIP to Item 7.8.

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

☐ Yes ☐ No

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

Primary Industry Category	Required GC/MS Fraction(s) (Check applicable boxes.)			
	☐ Volatile	☐ Acid	☐ Base/Neutral	☐ Pesticide
	☐ Volatile	☐ Acid	☐ Base/Neutral	☐ Pesticide
	☐ Volatile	☐ Acid	☐ Base/Neutral	☐ Pesticide

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
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Effluent and Intake Characteristics Continued

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

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

Used or Manufactured Toxics

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

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

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
TN0079647	TN0079647	Bubba Johnson Contractors	

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

Biological Toxicity Tests

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

☐ Yes ☒ No → SKIP to Section 10.

9.2 Identify the tests and their purposes below.

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

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

Contract Analyses

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

☒ Yes ☐ No → SKIP to Section 11.

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

	Laboratory Number 1	Laboratory Number 2	Laboratory Number 3
Name of laboratory/firm	Waypoint Analytical		
Laboratory address	2269 Dr. F.E. Wright Dr. Jackson, TN 38305		
Phone number	731-423-5330		
Pollutant(s) analyzed	pH; TSS		

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

Additional Information

11.1 Has the NPDES permitting authority requested additional information?

☐ Yes ☒ No → SKIP to Section 12.

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

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

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
TN0079642	TN0079642	Bobby Johnson Contractors	

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

Checklist and Certification Statement

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

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

12.2 **Certification Statement**

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

Name (print or type first and last name)	Official title
Bobby Johnson	Owner
Signature	**Date signed**
[signature]	4/21/20

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
TN0079642	TN0079642	Bubba Johnson Contractors	001

Form Approved 03/05/19
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TABLE A. CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(iii))[1]

	Pollutant	Waiver Requested (if applicable)	Units (specify)		Effluent: Maximum Daily Discharge (required)	Effluent: Maximum Monthly Discharge (if available)	Effluent: Long-Term Average Daily Discharge (if available)	Effluent: Number of Analyses	Intake (Optional): Long-Term Average Value	Intake (Optional): Number of Analyses
☐	Check here if you have applied to your NPDES permitting authority for a waiver for all of the pollutants listed on this table for the noted outfall.									
1.	Biochemical oxygen demand (BOD_5)	☒	Concentration							
			Mass							
2.	Chemical oxygen demand (COD)	☒	Concentration							
			Mass							
3.	Total organic carbon (TOC)	☒	Concentration							
			Mass							
4.	Total suspended solids (TSS)	☐	Concentration		179 PPM	179 PPM				
			Mass							
5.	Ammonia (as N)	☒	Concentration							
			Mass							
6.	Flow	☐	Rate							
7.	Temperature (winter)	☒	°C	°C						
	Temperature (summer)	☒	°C	°C						
8.	pH (minimum)	☐	Standard units	s.u.	6.4	6.4				
	pH (maximum)	☐	Standard units	s.u.	9.8	9.8				

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

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
TN0079642	TN0079642	Buddy Johnson Contractors	001

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

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

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
TN0071642	TN0071642	Bill Dickinson Contractors	001

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

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

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
TN0079642	TN0079642	Bibb & Johnson Contractors	001

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

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

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
TN0079642	TN0079642	Bibb & Tchaso Contractors	001

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

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

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

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

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
TN0079642	TN0079642	Bibb & Johnson Contractors	001

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

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

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
TN0079642	TN0079642	Bibba Johnson Contractors	001

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

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

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TN0079647	TN0079647	Bobby Johnson Contractors	001

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

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

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TN0079643	TN0079643	Bobby Johnson Contractors	001

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

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

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
TN0079647	TN0079647	Bobby Johnson Contractors	001

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

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

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
TN0079642	TN0079642	Bobby Johnson Contractors	001

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

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

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

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

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
TN0079647	TN0079647	Bubba Johnson Contractors	SW001

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

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

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
TN0079647	TN0079647	Bulldog Three Contractors	SW001

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OMB No. 2040-0004

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

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

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
TN0079642	TN0079642	Bobby Thompson Contractors	SW001

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OMB No. 2040-0004

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

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

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

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
TN0079642	TN0079642	Bobby Johnson Contractors	SW001

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

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

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
TN0079642	TN0079642	Butler Paving Contractors	SW001

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

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

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
TN0079647	TN0079647	Bubba Johnson Contractors	SW001

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

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

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
TN0079642	TN0079642	Bubba Johnson Contractors	SW001

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

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

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
TN0079642	TN0079642	Bubba Johnson Contractors	SW001

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

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

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

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
TN0079642	TN0079642	Bulldog Johnson Contractors	SW001

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

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

Antidegradation Statement Guidance

To Be Used When Administering Tennessee's Antidegradation Statement as Associated with Obtaining a National Pollutant Discharge Elimination System (NPDES) Permit

The Antidegradation Statement Guidance document is to be used in accordance with the *Tennessee's Antidegradation Statement Rule 0400-40-03-.06* as it pertains to completing the application requirements for a NPDES permit. This document may be used as equivalent information for the EPA Worksheets (A, G, O, R, V, W, X, Y, Z, and AB for the private sector and O, P, Q, S, T, U, and AA for the public sector).

Specifically the document is divided into five parts. Parts 1 - 2 are general information regarding the facility and receiving water. Part 3 characterizes the level of degradation and the alternatives analysis (including social, economic, and environmental considerations of each alternative). Parts 4 – 5 detail the social and economic justification required to demonstrate that the degradation associated with the proposed discharge to an Exceptional Tennessee water (ETW) is justified. All permit applicants must complete, at a minimum, Parts 1-3 of this document. If you propose to discharge to an ETW, you must complete the document in its entirety.

Part 1. Contact Information	
1. Company name:	Bubba Johnson Sand and Gravel
2. NPDES No.: TN00	TN0079642
3. Facility or mine name:	Bubba Johnson Contractors Sand Plant
4. County:	Madison

Part 2. Mine and Stream Information

1. Please select the type of mine.

   Noncoal

   ☐ Limestone
   ☒ Sand and gravel
   ☐ Ball Clay
   ☐ Industrial sand
   ☐ Zinc
   ☐ Marble
   ☐ Dimension stone
   ☐ Quartzite
   ☐ Other

Coal

☐ Reclamation
☐ Active mining
☐ Post mining
☐ Prep plants / associated areas
☐ Tipple / load out

2. Please select the type of permit activity requested.

☒ Renewal of permit based on currently approved plans
☐ Renewal and modification of permit
☐ Modification of permit
☒ New permit

3. Please list each outfall number, the name of receiving stream(s) and the corresponding stream designation (either Outstanding National Resource Water (ONRW), Exceptional Tennessee Water (ETW), or Non Exceptional Tennessee Water (Non ETW). Use separate paper if necessary.

Outfall(s)	Receiving Stream(s)	Stream Designation		
		ONRW	ETW	NON ETW
001	Hicks Creek	☐	☐	☒
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐

Part 3. Characterize the Level of Degradation in the Proposed Activity and Analysis of Alternatives.

Please select one of the following levels and support your conclusion in the space that follows. Finally, complete the Alternatives Analysis.

Part 3-A- Level of Degradation

☒ The proposed activity is to renew an existing permit.
No changes to the acreage size, the number or location of outfall(s), or the volume of the existing discharge are proposed at this time. Renewal of the permit does not cause degradation above what is already permitted. (If this applies, skip to Part 3-B.)

☒ The proposed activity will cause no measurable degradation.
Activities causing no measurable degradation are defined as those activities that do not cause a measurable increase in levels of a given parameter in the receiving water.

☐ The proposed activity will cause de minimis degradation.
Activities causing de minimis degradation are defined as those activities that cause degradation of a small magnitude as described in *Rule 0400-40-03-.04 (4)(a).* De minimis activities are described as single discharges that use less than five percent of the available assimilative capacity of the substance being discharged.

*Note, this option is not applicable if the 7Q10 of the receiving water is zero or if the receiving water has unavailable parameters for the pollutant to be discharged.

☐ The proposed activity will cause **more** than de minimis degradation.
Applications for activities causing degradation above the level of de minimis must analyze all reasonable alternatives and describe the level of degradation caused by each of the feasible alternatives. Analysis of each of these alternatives should also discuss the social and economic consequences of each alternative. Applicants must also demonstrate that the proposed degradation will not violate the water quality criteria for existing uses in the receiving waters and is necessary to accommodate important economic and social development in the area.

Attach additional pages as needed

Soil Loss Attached

Part 3-B - Alternatives Analysis

The following are examples of alternatives relative to natural resource extraction that are to be considered by applicants under Tennessee's *Antidegradation Statement 0400-40-03-.06*. Please check which treatment option(s) are currently used or will be used at the facility.

☐ Connect to existing treatment system

☒ Use over-sized ponds to increase treatment ability and holding capacity beyond the 10yr/24hr design storm.

Design capacity of the pollution control system
Current capacity of the system (%)

☐ Divert drainage from non-disturbed areas away from treatment structures, separating storm water from mine wastewater – i.e. diversion berm, ditches, other BMPs.

☐ Use pit as primary treatment and/or storage to increase ability to hold water on site during storm events.

☐ Use ponds in series, forebays, and/or baffles to increase treatment and retention time.

☐ Use chemical treatment for pH adjustment or treatment of solids.

☐ Reuse/recycle treated process water to reduce discharge frequency. What percentage is already or will be recycled?

☐ Create no-discharge system.

☐ Use concurrent reclamation with mining activity.

☐ Land application of treated wastewater.

If treatment option used is not listed, please describe in space below.

2) Based on the alternatives indicated above, describe the level of degradation caused by each, as well as the social and economic consequences of each alternative. Examples of social and economic consequences may include but are not limited to, improved infrastructure such as road projects, housing development, as well as increasing local tax revenue and employment opportunities.

No Measurable

3) Can the level of treatment achievable at the facility ensure that water quality criteria will not be violated? Please explain.

Yes. Oversized treatment plus soil loss results.

4) Is there another discharge location that would have less impact on the watershed?

No

5) Evaluate the mining technique used at the site. Would another technique result in a reduction in quantity or improvement in quality of the discharge from the site?

No

6) Were other locations for the facility evaluated? Describe the reasons why other locations were selected or rejected.

No, Existing site.

7) If this is an existing site, how long has the company mined at this location? If the option to mine has been reserved through payments to the owner or lessor of the rights, how long has that option been reserved? What is the projected life of the mine?

13 years, indefinite

Part 4. Economic Justification

If you are applying for a new or expanded permit that discharges to Exceptional Tennessee Waters (ETW), complete Parts 4 and 5.

The following section shows economic/financial information for the facility. This information is necessary to determine if the applicant can afford to implement appropriate pollution control measures to protect water quality in the receiving water. Attach additional pages as needed.

1. Annual cost of operation and maintenance of pollution control project (including but not limited to monitoring, inspection, permitting fees, waste disposal charges, repair, administration, and replacement).	$
2. Annual earnings without pollution control project costs	$
3. Annual earnings with pollution control project costs	$

Part 5. Social Justification

The following section shows social justification of the proposed degradation within the community where the facility is located. Attach additional pages as needed.

1. Define the affected community in this case; what areas are included?	
2. What is the current unemployment rate in affected community (if available)?	
3. What is the current national unemployment rate?	

4. How many jobs will the facility provide in the affected community?	
5. What is the average salary of these jobs?	
6. What is the median household income in affected community?	$
7. What is the total number of households in affected community?	$
8. What are the current total tax revenues in the affected community?	
9. What amount of tax revenues will be paid by the private entity to the affected community?	$

Pre-Mine Soil Loss

A = R * K * L * S * C * P

A = average annual soil loss (tons/acre/year)

R = rainfall and runoff erosivity index for the geographic location

K = soil erodibility factor

L = slope length factor

S = slope steepness factor

C = cover management factor

P = conservation practice factor

R = **337** https://lew.epa.gov/ (Use 1 year time period.)

K = **0.33769** https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

Define area of interest on map using : 

Click Soil Data Explorer (top of page)

Click Soil Properties and Qualities (next row)

Click Soil Erosion Factors (side menu)

Click K factor, whole soil

Click View Rating

Rating	Acres
0.55	1.4
0.55	0.1
0.32	18

LS = **2.225** Disturbed Soil Vegetated Land

(Use total length of area and average slope.)

(Use pre-mine conditions.)

C = **0.002** Table on Sheet 2 (Use pre-mine conditions.)

P = **1** (Generally = 1; If conservation faming practices are used, then = .5)

(Use pre-mine conditions.)

A = **0.506420269** tons of soil lost per acre per year before mining

Post-Mine Soil Loss

Permit Sediment Effluent Limit:	**40**	mg/L
Average Annual Rainfall:	**54**	inches
0.244738057	tons of soil lost per acre per year under NPDES limits	

SECTION VI NARRATIVE DISCUSSIONS

The application is being submitted for a renewed permit for Steam Mill Partners Sand Mine, owned by Steam Mill Partners, P.O. Box 3037, Jackson, TN. This mining site has been in operation by Steam Mills Partners but has not been permitted through the Division of Water Pollution Control's Mining Section. The mine has been in operation by the current owners since 1999 and produced 16,766 tons of sand in 2005. The permit area, including the proposed new area of mining is 16.8 acres. The mine is on a 412.5 acre tract of property owned by Steam Mill Partners. There are no associated or adjacent facilities. The haul/access road, constructed of gravel, is located on the western side of the property and parallels Hicks Creek. Site Map #2 also shows the permit boundaries. There are no other landowners within 500 feet of the permit area.

This is a closed loop system with no process water currently being used. A diagram of the system, with description and capacities of equipment can be found as Figure 1, page 23. There are no shakers, conveyors or other such equipment on site. A trackhoe/front end loader excavates and loads fill sand into dump trucks. No sand is stockpiled as it is mined as needed. In some cases, spoil from mining activities will be transported off site in dump trucks to be used as topsoil. Otherwise, spoil from mining activities will be spread over areas of previous mining activity and stabilized with erosion control measures as outlined in the Tennessee Erosion Control Handbook. There are no plans to stockpile spoil other than that which accumulates at the mine prior to removal to the previously mined area, where it will be stabilized.

Fuel for diesel powered equipment will be dispensed from delivery trucks. There will be no fuel storage tanks, either above ground or below ground, at the facility.

Care will be taken to restrict or eliminate construction traffic through wet areas having soils with the potential of tracking off site.

Figure 2, found on page 24, is a schematic of water flow throughout the mine. Figure 3, page 25, are drawings of the retention pond showing the location of two 24 inch CMPs and elevations associated with the pipe and pond top and bottom.

Storm water and excess process water will gravity flow to the main retention pond located at the northwest corner of the mine. Water within the retention pond will be held and, if necessary, treated prior to discharge into the ditch running along the southern side of the haul road from the mine to the Cerro Gordo Road, at which point it enters into Hicks Creek, a tributary of the South Fork of the Forked Deer River.

Erosion Control

The Tennessee Erosion & Sediment Control Handbook will be utilized for all required erosion control activities, including but not limited to overburn stockpile stabilization, previously mined areas stabilizations and access/haul road stabilization.

The western boundary of the mine area, including the haul road, is located adjacent to Hicks Creek, a stream listed by the Division of Water Pollution Control as impacted by sediment. Accordingly, the mine owners will take necessary steps to preserve the buffer area between the mine road and the stream. Measures will include silt fence, erosion control blanket and vegetative cover along the length of the mine road. The silt fence will be inspected on a regular basis and repaired or cleaned out as needed to protect the integrity of the sediment barrier and the health of the buffer zone area.

XII RAINFALL CALCULATIONS

The total area under the mining permit, including the proposed mining area, is 16.8 acres. There is an additional 5 acres southeast of the mine's southeast border which will drain into the mine. Using the permit mine area and the additional five acres outside the permit area to calculate the effect of a 10 year, 24 hour storm event, shown by the NOAA to be 5.4 inches for Western Madison County, the following calculations were performed:

Expected runoff from 16.8 acres for a 10 year flood event (considering a 6.5% slope and a run off coefficient of 50%)	=	198,057 cu ft.
Expected runoff from 5 acres for a 10 year flood event	=	58,800 cu ft.
TOTAL RUNOFF	=	256,857 cu ft.
Retention Pond Capacity	=	366,000 cu ft.
Retention Pond % Capacity	=	**142 percent**

In addition to accumulating storm water, the retention pond will accept excess process water as needed from the sand washing operation.

Drainage Plan

There will typically be no regular discharge from the retention pond. Site Map #2 also shows the location of the proposed storm water retention pond. It is located at the northwest corner of the mine. The pond receives storm water from all portions of the mine, including the southwestern portion of the haul road, as well as any excess water from the sand washing operation holding pond. While the retention pond is to be constructed to contain 10 year storm events, and thus have no discharge, the owners will, as necessary, clarify and discharge retention pond water into the roadside ditch along the southeastern side of the haul road. The discharge point for the retention pond has been designated Outfall 001. Outfall 001 lies adjacent to the emergency spillway, a structure designed to accommodate a 25 year/24 hour storm event. Outfall 001 is the point where a pump will be used to pump water from retention basin to the roadside ditch running along the eastern boundary of the mine haul road. Riprap, located at intervals within the haul road ditch, will be used to dissipate the energy of the flowing water. An engineering drawing of the emergency spillway can be found as Figure 4.

Erosion control measures were installed prior to construction of the retention pond. Measures include properly installed silt fence to prevent sediment loss from the mine site. In addition, sediment removed during the construction process will be stockpiled around the east and north sides of the retention pond as well as immediately east of the retention pond site. The stockpile will be restricted in elevation to no more than ten feet in height and will be constructed with sides having a 1:1.5 slope. The top and sides of the stockpile material will be covered with topsoil to a depth of four inches. The top of the stockpile will be seeded with rye grass. The sides of the stockpile will be covered with erosion control blanket and seeded with rye grass. In addition, the stockpile will have properly installed silt fence along the down gradient sides so as to restrict sediment migration prior to establishment of vegetative.

A bull nose structure is constructed just west of the mine entrance which turns western access road storm water into the mine proper. The stormwater from the western portion of the mine and haul road will flow via two 24" culverts under the mine entrance road and then to the main retention pond. The existing culvert which drains the south side of the haul road (at the mine entrance) to the north side haul road and into the waters of Hicks Creek will be removed. A fifty foot Riparian Buffer Zone with trees and vegetation has been left undisturbed along the east side of Hicks Creek between the mine and the haul road exit onto the Cerro Gordo Road. Silt fences along with straw and hay bales at the Project perimeter will help insure minimal TSS discharges into Hicks Creek.

Storm water falling on the eastern portion of the haul road, i.e., from the mine entrance toward the Cerro Gordo Road, will empty into a roadside ditch located on the southeastern side of the haul road. SW001 is the designation for the one and only storm water outfall and will be located at the north eastern most portion of the mine haul road where it enters into the ditch associated with the Cerro Gordo Road.

VIII. MISCELLANEOUS

It is the intention of Steam Mill Partners to build the retention pond with sufficient capacity so as not to discharge any water from the mine site other than stormwater falling upon the northwestern most mine haul road.

At such time water needs to be discharged from the retention pond, it will be treated as required with a coagulant so as to assure compliance with TSS and other parameters prior to discharge.

FIGURES 1- 5

&

QUAD MAP

TAKEN FROM PRIOR PERMIT

FIGURE 1
Schematic of Mining Operation

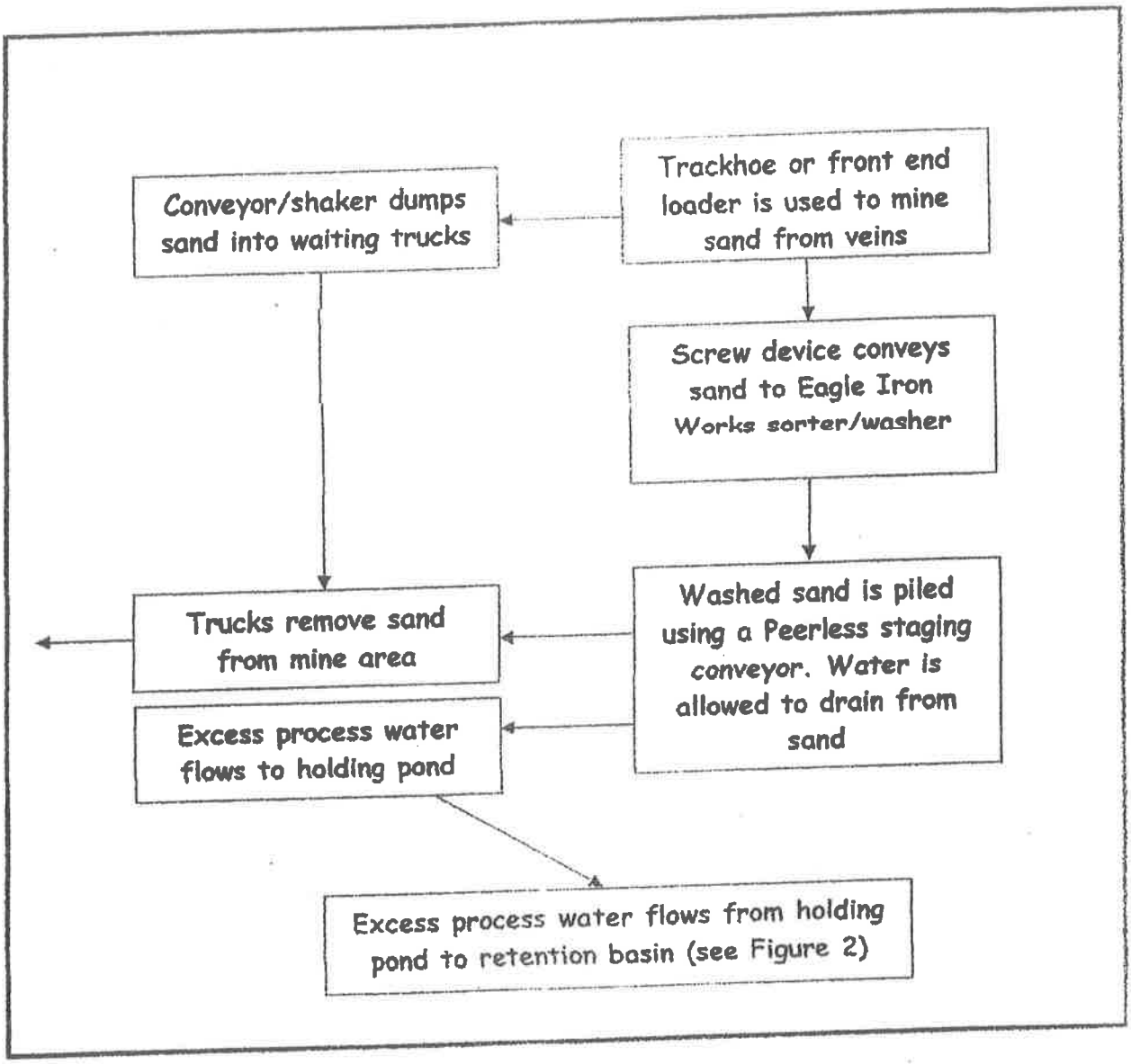

FIGURE 2

Schematic of Stormwater & Process Water Flows

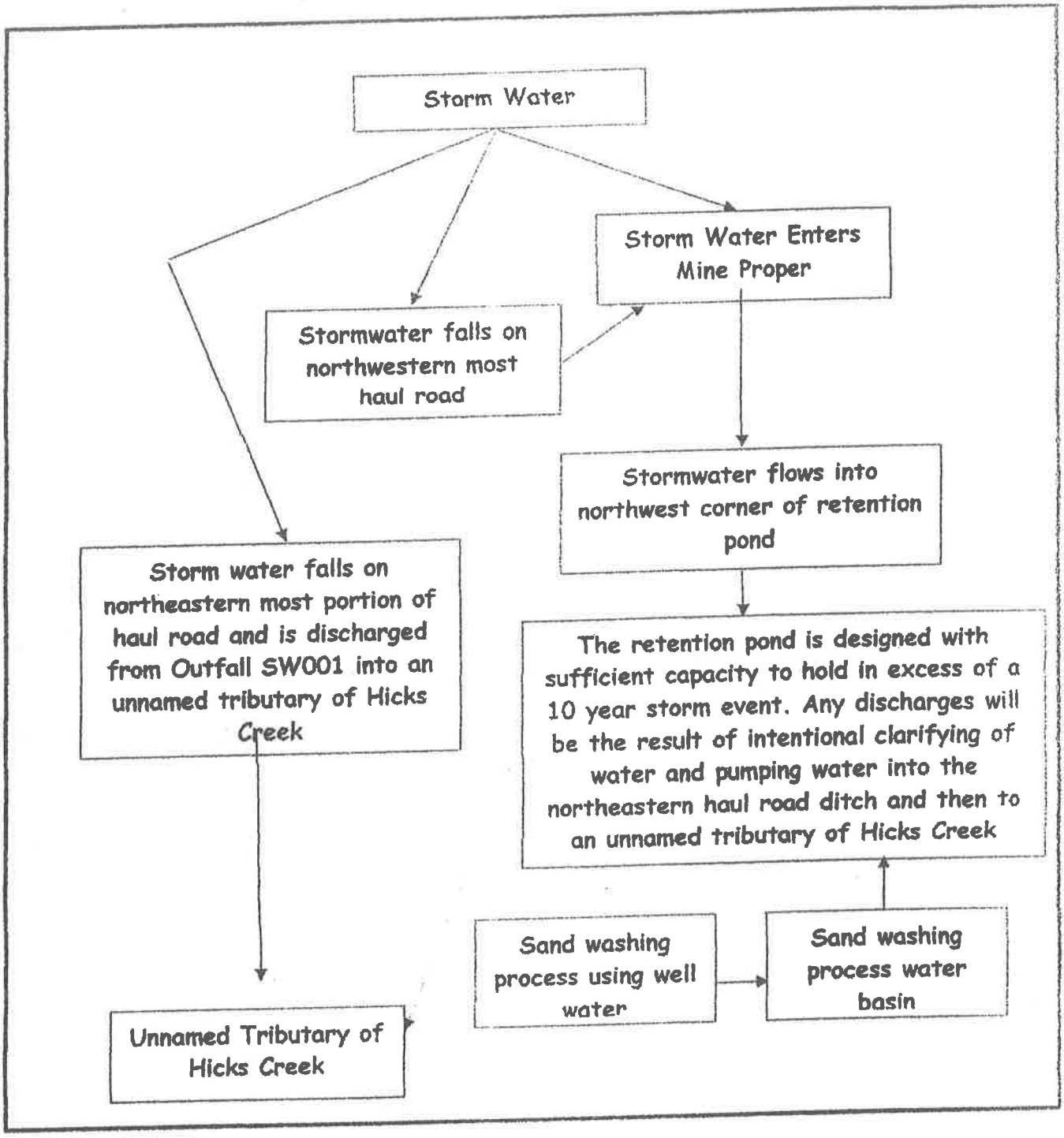

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FIGURE 3
Mine Entry Culvert and Retention Pond Detail

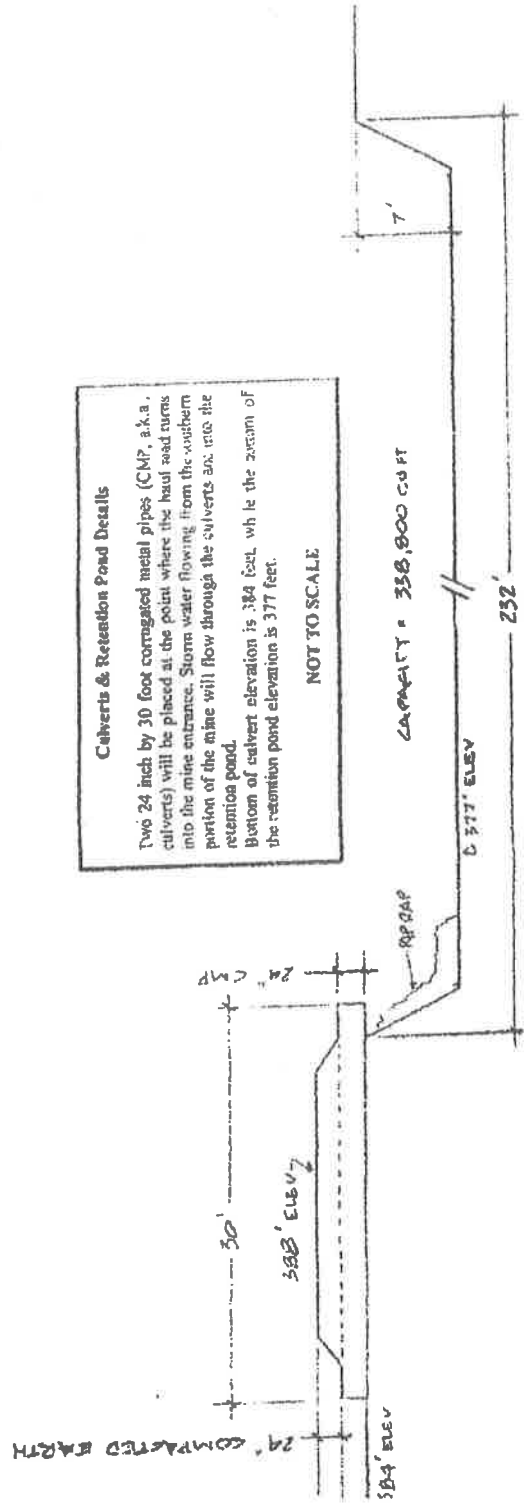

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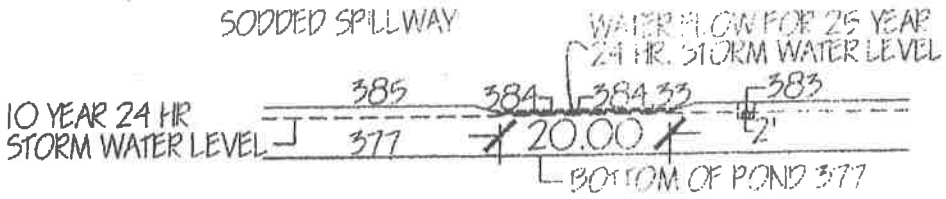
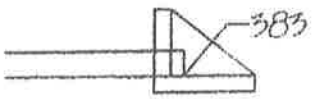
FIGURE 4
Emergency Spillway and Outfall Design Detail



ELEVATION OF DAM



12" PIPE WITH SCREW VALVE

NOTE: THERE WILL BE 2' OF WATER AT ALL TIMES

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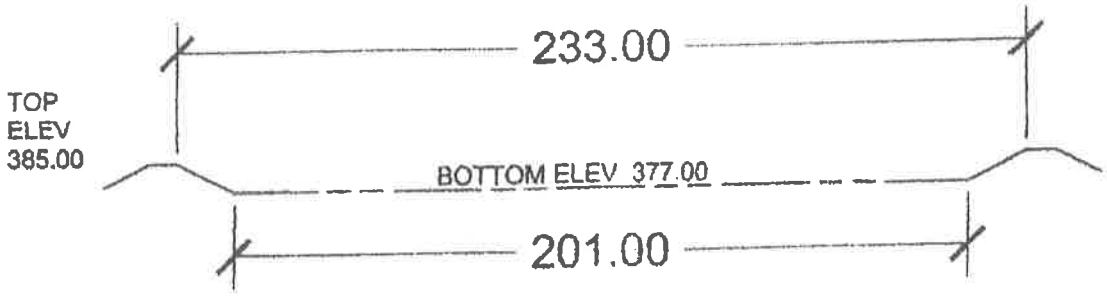

SECTION THRU POND

DRAINAGE AREA UP TO RIDGE WHERE CEMETERY IS LOCATED IS APPROXIMATELY 24.8 ACRES.

A 10 YEAR 24 HOUR STORM WITH A RUNOFF COEFFICIENT OF .50 WILL PRODUCE A TOTAL RUNOFF OF 275,400 CUBIC FEET. WITH NO OUTLET, THE WATER WOULD REACH A DEPTH OF 4.78 FEET DUE TO THIS STORM.

IF A 12" PIPE WERE INSTALLED 2' ABOVE THE BOTTOM OF THE POND, THE WATER WOULD REACH A DEPTH OF 3.00 FEET ABOVE THE PIPE AND THE POND WOULD DRAIN BACK DOWN TO THE PIPE I IN 48 HOURS

STEAM MILL PARTNERS, INC.
JACKSON, TN.

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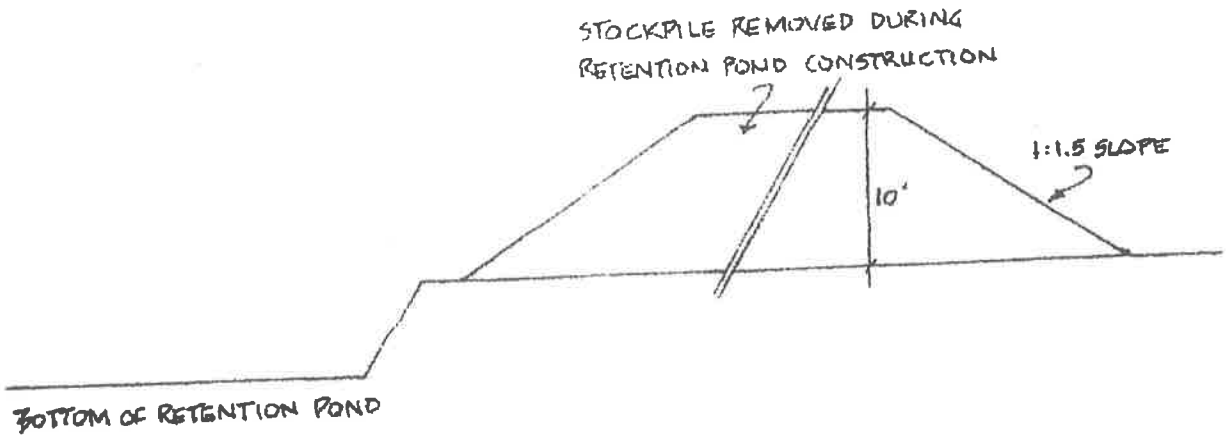
FIGURE 5
Retention Pond Stockpile Design Detail



Sediment removed during the construction process will be stockpiled around the east and north sides of the retention pond as well as immediately east of the retention pond site. The stockpile will be restricted in elevation to no more than ten feet in height and will be constructed with sides having a 1:1.5 slope. The top and sides of the stockpile material will be covered with topsoil to a depth of four inches. The top of the stockpile will be seeded with rye grass. The sides of the stockpile will be covered with erosion control blanket and seeded with rye grass. In addition, the stockpile will have properly installed silt fence along the down gradient sides so as to restrict sediment migration prior to establishment of vegetative cover.