

NPDES PERMIT APPLICATION

FORM 1

ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER DIVISION

POST OFFICE BOX 8913

LITTLE ROCK, AR 72219

www.adeg.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. Facility Name: Georgia-Pacific LLC, Crossett Paper Operations
2. Legal Applicant Name (If the applicant is different from the above): _____
3. Operator name: Rachel Johnson / Jim Cutbirth License number: 008956 / 008958 class of wastewater operator: Industrial
*Rachel Johnson and Jim Cutbirth are employees of the owner, Georgia-Pacific, LLC
4. Is the operator identified in number 3 above, the owner of the facility? Yes No
5. NPDES Permit Number (If Applicable): AR0001210
6. NPDES General Permit Number (If Applicable): ARG
7. NPDES General Storm Water Permit Number (If Applicable): ARR00A776
8. Does your facility hold any other permits which are not listed above? Yes No
9. 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: **Below are the operating permits for the operations within the Crossett Complex**

<u>Permit Name</u>	<u>Permit Number</u>	<u>Held by</u>
Operating Air Permit	597-AOP-R12	GEORGIA PACIFIC LLC
Hazardous Waste	ARD035466648	GEORGIA PACIFIC LLC

Solid Waste Disposal Facility	270-S3N-R2	GEORGIA PACIFIC LLC
Solid Waste Disposal Facility	292-S3N	GEORGIA PACIFIC LLC
Operating Air Permit	736-AOP-R6	GEORGIA PACIFIC LLC (PLYWOOD/STUDMILL)
Hazardous Waste	ARD980621262	GEORGIA PACIFIC LLC (PLYWOOD/STUDMILL)
General Storm Water Permit	ARR000000	GEORGIA PACIFIC LLC (PLYWOOD/STUDMILL)
Operating Air Permit	1177-AOP-R8	GEORGIA PACIFIC CHEMICALS, LLC
Hazardous Waste	ARD980621239	GEORGIA PACIFIC CHEMICALS, LLC
Regulated Storage Tank	02001653	GEORGIA PACIFIC CHEMICALS, LLC

10. Driving directions to the facility with respect to known landmarks:
On the North side of Highway 82 West in Crossett, AR

11. Give a driving direction to the wastewater treatment plant:

Going west on Highway 82 from the papermill, go approximately 1 mile before turning left onto Texas Avenue. Go approximately 2 miles and turn right. Proceed approximately 1 mile, turn right towards the primary clarifier.

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

Street: 100 Mill Supply Road

City: Crossett County: Ashley State: AR Zip: 71635

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

Name: James W Cutbirth

Title: Mgr. Environmental & Quality

Street: 100 Mill Supply Road

P.O. Box 3333

City: Crossett

State: AR

Zip: 71635

E-mail address: james.cutbirth@gpac.com

Fax: 870-364-9076

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

Oklahoma Missouri Tennessee Louisiana Texas Mississippi

15. Type of ownership: Public Private State Federal Other

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

2621,2611,2631, SIC Georgia-Pacific, LLC - Paper
2436/2439, Georgia-Pacific, LLC - Building Products
2821/2861/2869 Georgia-Pacific Chemicals, LLC

32212, NAICS Georgia-Pacific, LLC - Paper
321212, 321213, Georgia-Pacific, LLC - Building Products

SECTION B: FACILITY AND OUTFALL INFORMATION

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

Lat: 33 ° 08 ' 30 " Long: 91 ° 58 ' 12 " Section: 18 Township: 175
 Range: 8w County: Ashley Nearest Town: Crossett USGS Hydrologic Unit Code: 8040202
 What map scale is used? 1:24,000 What Method is used? A-Map interpolation Indicate Technical Accuracy 4-30seconds
 What map datum is used? 1-North America Datum 1929 Where is the collection point? 2-Front door of facility

2. Outfall monitoring Location:

Outfall No. 001:

Latitude: 33 ° 06 ' 45 " Longitude: 92 ° 02 ' 17 " USGS Hydrologic Unit Code: 8040202
 What map scale is used? 1:24,000 What Method is used? A-Map interpolation
 Indicate Technical Accuracy 4-30 seconds What map datum is used? I-north America Datum 1929
 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):
 Polishing Pond (Mossy Lake), thence into Coffee Creek, then into Ouachita River

Outfall No. 002:

Lat: 33 ° 02 ' 00 " Long: 92 ° 04 ' 24 " USGS Hydrologic Unit Code: 8040202
 What map scale is used? 1:24,000 What Method is used? A-Map interpolation
 Indicate Technical Accuracy 4-30 seconds What map datum is used? I-north America Datum 1929
 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):
 Coffee Creek to Ouachita River

3. Outfall Location (If the location of end of the pipe (Discharge point) is different from the above monitoring location (internal monitoring locations))

Outfall No. 101:

Lat: 33 ° 08 ' 29 " Long: 91 ° 58 ' 28 "

Outfall No. 102:

Lat: 33 ° 08 ' 29 " Long: 91 ° 58 ' 28 "

Outfall No. 103:

Lat: 33 ° 09 ' 29 " Long: 91 ° 58 ' 29 "

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

Primary treatment by clarifier and settling basins. Equalization by a surge basin.

Biological treatment by an aerated stabilization basin (ASB) and Polishing Pond (Mossy Lake).

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

Current: Flow Metering	<input checked="" type="checkbox"/> Yes	Type	<u>CONTINUOUS</u>	<input type="checkbox"/>	No	<input type="checkbox"/>	N/A
Sampling Equipment	<input checked="" type="checkbox"/> Yes	Type	<u>AUTOMATIC</u>	<input type="checkbox"/>	No	<input type="checkbox"/>	N/A
Planned: Flow Metering	<input type="checkbox"/> Yes	Type	_____	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	N/A
Sampling Equipment	<input type="checkbox"/> Yes	Type	_____	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	N/A

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

The automatic sampling equipment and continuous flow metering equipment are located at Outfalls 001 and SMS 002.

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 facilities? storm water in immediate production areas is routed to the WWTP, storm water in outlying areas is routed to separate storm water ditches in order to protect the WWTP

7. Population 11342 (including West and North Crossett)

SECTION C – WASTE STORAGE AND DISPOSAL INFORMATION

● Sludge Disposal Method (Check as many as are applicable):

Landfill

Landfill Site Name North Landfill ADEQ Solid Waste Permit No. 292-S3N

Land Application ADEQ State Permit No. _____

Method of sludge treatment _____

What is the estimated amount of sludge generated at the treatment facility?

Dry metric Ton/ per year _____ Gallon/Acres per year _____

List all the land application sites with the following information:

Field Number	New/Old	Range	Township	Section	Total Acres	Available Acres	Crop Cover	Loading Rate
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

Septic tank Arkansas Department of Health Permit No.: _____

Distribution and Marketing : Facility receiving sludge:

Name: _____ Address: _____
 City: _____ State: _____ Zip: _____ Phone: _____
 Rail: Pipe: Other: _____

Subsurface Disposal (Lagooning)

Location of lagoon _____ How old is the lagoon? _____
 Surface are of lagoon: _____ Acre Depth: _____ Ft Does lagoon have a liner? Yes No

Incineration: Location of incinerator _____

Other (Provide complete description) Closure material for the former sludge pond.

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): Crossett

Distance from Discharge point: Within 5 miles Within 50 miles

Surface Water- Name of Surface Water Source: GP Lake/Saline river

Distance from Discharge point: Within 5 miles Within 50 miles

Lat: 33 ° 15 ' 075 " Long: 92 ° 02 ' 554 "

Other (Specify): _____

Distance from Discharge point: Within 5 miles Within 50 miles

SECTION E: FINANCIAL ASSURANCE AND DISCLOSURE FORM

1. Act 336 of 1995 provides for financial assurance requirements for permitting common sewage systems. Arkansas Code 8-5-703 (a)(1)-The Department of Pollution Control and Ecology shall not permit or register any common sewage system serving two(2) or more occupied lots, residences, businesses, or other discernible occupied init without the applicant first demonstrating to the department its financial ability to cover the costs of operating and maintaining the system for a period of five (5) years.

Please provide **financial assurance** in order to shows 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 (Arkansas Code 8-5-703(a)(2)):

- A. By obtaining insurance;
- B. By passing a financial test;
- C. By obtaining a letter of credit;
- D. By obtaining a surety bond;
- E. By obtaining a trust fund or escrow account;
- F. Through the use of a combination of insurance, financial test, 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 the issuance, 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 applications. The filing of a disclosure statement is mandatory. No application can be considered complete without one. The form may be obtained from ADEQ web site at:

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

Declaration of No Changes:

The violation history, experience and credentials, involvement in current or pending environmental lawsuits, civil and criminal, have not changed since the last Disclosure Statement I filed with ADEQ on _____ (Date of submittal).

NA - First time submittal

Signature of Individual or Authorized Representative of Firm or Legal Entity

The following statement must be completed for Declaration of No Changes.

VERIFICATION AND ACKNOWLEDGEMENT

The Applicant agrees to provide any other information the director of the Arkansas Department of Environmental Quality may require any time to comply with the provisions of the Disclosure Law and any regulations promulgated thereto. The Applicant further agrees to provide the Arkansas Department of Environmental Quality with any changes, modifications, deletions, additions or amendments to any part of this Disclosure Statement as they occur by filing an amended Disclosure Statement.

DELIBERATE FALSIFICATION OR OMISSION OF RELEVANT INFORMATION FROM DISCLOSURE STATEMENTS SHALL BE GROUNDS FOR CIVIL OR CRIMINAL ENFORCEMENT ACTION OR ADMINISTRATIVE DENIAL OF A PERMIT, LICENSE, CERTIFICATION OR OPERATIONAL AUTHORIZATION.

State of _____

County of _____

I, _____, swear and affirm that the information contained in the previous Disclosure Statement is true and correct to the best of my knowledge, information and belief.

APPLICANT SIGNATURE: _____

COMPANY TITLE: _____

Date _____

SUBSCRIBED AND SWORN TO BEFORE ME THIS DAY _____ OF _____ 20

NOTARY PUBLIC

MY COMMISSION EXPIRES: _____

SECTION F – INDUSTRIAL ACTIVITY

Does an effluent guidelines limitation promulgated by EPA (<http://www.epa.gov/epacfr40/chapt-I.info/chi-toc.htm>) 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? 430, 429, 414 and 454

3. What Subpart (s) ? 430 Subpart B, 429 Subparts C&K, 414 Subparts E&F, and 454 Subpart D

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

The Georgia-Pacific Complex consists of a Kraft Pulp and Papermill, which produces tissue paper, communication papers, and paperboard, Plywood and Stud mills, and a Chemical Plant, which manufactures phenol and urea formaldehyde resins and tall oil. For a more detailed description please see the attachments.

5. Production: (projected for new facilities)

Product(s) Manufactured	Last 12 Months		Highest Production Year of Last 5 Years	
	lbs/day		lbs/day	
(Brand name)	Highest Month	Days of Operation	Monthly Average	Days of Operation
See 2C pg 2 of 4 Section 3.C.1.				

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)

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

Current: Flow Metering	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Sampling Equipment	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Planned: Flow Metering	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Sampling Equipment	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A

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

The automatic sampling equipment and continuous flow metering equipment are located at Outfalls 001 and SMS 002

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/disposal system.

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

Not applicable

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

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.

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:

Karen Dickinson

Date:

2/24/09

Printed name of responsible official:

Karen R. Dickinson

Official title of responsible official:

Vice President – Operations Manager

Telephone Number

(870) 567-8310

signature in Section I above, the applicant certifies that the named individual is qualified as print below 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).

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:

NAME (first, last)

TITLE

TELEPHONE

ADEQ

A K A N S A S
Department of Environmental Quality

Application Form PPS

Priority Pollutant Scan Information

ATTENTION

AClean@ Sampling Techniques

Water quality (WQ) standards (Based on aquatic toxicity and human health criteria) for many of the heavy metals are Aat@ analytical methods= detection levels (MDL).

It is recognized that **unclean** sampling and lab techniques can and do **cause** contamination sometimes causing measurements to be Aseen@ as **violations** of the WQ standards. Therefore, the permittee must recognize the **importance** of **eliminating** contamination.

For personnel responsible for collecting samples in answer to effluent monitoring requirements, the Department recommends following sample collection and handling in accordance with EPA=s **Method 1669: Sampling Ambient Water for Determination of Trace Metals at EPA Water Quality Criteria Levels** as closely as possible and as economically feasible. A copy of Method 1669 is available upon request.

Please convey to your contract testing laboratory the extreme importance of proper sampling techniques associated with analytical testing for heavy metals. Some of the techniques may be considered too expensive to justify implementation but it could be in the best interest of your facility to **submit the PPS Form by using common sense AClean@ Sampling Techniques.**

GENERAL INSTRUCTION

1. **Generation of a form similar to the PPS form is prohibited without expressed written permission of ADEQ, Discharge Permits Section, Water Division.**
2. All major facilities, all categorical industries, or any facility that believes there are priority pollutant(s) present in their discharge, must submit the Form PPS.
3. All facilities must monitor for **metals and cyanide**.
4. Testing requirements for categorical industries are listed in Attachment 1.
5. If one of the EPA approved test methods (40 CFR Part 136) is used the method detection level (MDL) **must be as low as Minimum Quantification Levels (MQL)**. MQLs are based on EPA Region 6 guidance dated April 10, 2006: "MQL = 3.3 X MDL"
6. All the units must be expressed in $\mu\text{g/l}$ (Micro grams per liter).
7. **All the results less than Used Method Detection Level Achieved are reported as ND (Not Detected)**.
8. The data requested for the priority pollutant scan in the enclosures shall be submitted with copies of the laboratory results, MDLs and MQLs. Certification that QA/QC procedures were implemented must be submitted with the requested information.
9. All analyses must be performed at the minimum level of sensitivity. The analyses must demonstrate that an acceptable calibration point as low as MQL was used. Test procedures must conform to approved EPA methodology listed in 40 CFR Part 136.

TESTING REQUIREMENTS FOR ORGANIC TOXIC POLLUTANTS INDUSTRY CATEGORY

INDUSTRY CATEGORY	volatile	Acid	Base/Neutral	Pesticide
Adhesives & Sealants ..	X	X	X	-
Aluminum Forming ..	X	X	X	-
Auto & Other Laundries ..	X	X	X	X
Battery Manufacturing ..	X	-	X	-
Coal Mining ..	X	X	X	X
Coil Coating ..	X	X	X	-
Copper Forming ..	X	X	X	-
Electric & Electronic Compounds ..	X	X	X	X
Electroplating ..	X	X	X	-
Explosives Manufacturing ..	-	X	X	-
Foundries ..	X	X	X	-
Gum & Wood Chemicals ..	X	X	X	X
Inorganic Chemicals Manufacturing ..	X	X	X	-
Iron & Steel Manufacturing ..	X	X	X	-
Leather Tanning & Finishing ..	X	X	X	X
Mechanical Products Manufacturing ..	X	X	X	-
Nonferrous Metals Manufacturing ..	X	X	X	X
Ore Mining ..	X	X	X	X
Organic Chemicals Manufacturing ..	X	X	X	X
Paint & Ink Formulation ..	X	X	X	X
Pesticides ..	X	X	X	X
Petroleum Refining ..	X	X	X	X
Pharmaceutical Preparations ..	X	X	X	-
Photographic Equipment & Supplies ..	X	X	X	X
Plastic & Synthetic Materials Manufacturing ..	X	X	X	X
Plastic Processing ..	X	-	-	-
Porcelain Enameling ..	X	-	X	X
Printing & Publishing ..	X	X	X	X
Pulp & Paperboard Mills ..	X	X	X	X
Rubber Processing ..	X	X	X	-
Soap & Detergent Manufacturing ..	X	X	X	-
Steam Electric Power Plants ..	X	X	X	-
Textile Mills ..	X	X	X	X
Timber Products Processing ..	X	X	X	X

X Testing required.
 - Testing not required.

ARKANSAS Department of Environmental Quality
PPS REQUIREMENTS

1. Name of facility:

Georgia-Pacific LLC, Crossett Paper Operations

2. Name, address and telephone number of laboratory:

PPS w/o TCDD
Ana-Lab Corp
P.O. Box 9000
Kilgore, TX 75663
(903) 984-0551

TCDD
Analytical Perspectives
2714 Exchange Dr
Wilmington, NC 28405
(910) 794-1613

3. Is the lab certified by the State of Arkansas? Yes No

4. What are the certification dates?

Issued date 19 October 2008 Expire date 19 October 2009

Issued date 20 June 2008 Expire date 20 June 2009

5. Is the laboratory certified for all the parameters?

YES No (Explain)

6. Date and time of samples collected:

9/18/08 at 10:05 a.m.

7. Date and time samples were received in the laboratory:

9/18/08 at 4:30 p.m.

8. Sample location (Outfall No.):

Outfall 001

9. Samples collected by:

Name Rachel Johnson
Title Environmental Engineer
Telephone (870) 567-8170

10. I certify under penalty of law that this document and all attachments were prepared under my direction of 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 submitted is, to the best of my knowledge and belief, 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.

Karen R. Dickinson
Printed Name of person signing

Karen Dickinson
Signature

Vice-President
Title

2/24/09
Date signed

List all attachments to this form:

METALS AND CYANIDE	LABORATORY ANALYSIS			REQUIRED MQL ($\mu\text{g}/\text{l}$)
	RESULTS ($\mu\text{g}/\text{l}$)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED ($\mu\text{g}/\text{l}$)	
1. Antimony (Total), Recoverable	ND	200.8, Rev. 5.4	2.00	60
2. Arsenic (Total), Recoverable	<0.5	200.8, Rev. 5.4	2.00	0.5
3. Beryllium (Total), Recoverable	ND	200.8, Rev. 5.4	0.5	0.5
4. Cadmium (Total), Recoverable	ND	200.8, Rev. 5.4	0.5	0.5
5. Chromium (Total), Recoverable	<10	200.8, Rev. 5.4	1.00	10
7. Chromium (6+), Dissolved	<10			10
8. Copper (Total), Recoverable	6.79	200.8, Rev. 5.4	1.00	0.5
9. Lead (Total), Recoverable	2.37	200.8, Rev. 5.4	1.00	0.5
10. Mercury (Total), Recoverable	0.00833	245.1, Rev. 2.1	0.005	0.005
12. Nickel (Total), Recoverable	7.07	200.8, Rev. 5.4	1.00	0.5
13. Selenium (Total), Recoverable	<5	200.8, Rev. 5.4	2.00	5
14. Silver (Total), Recoverable	3.58	200.8, Rev. 5.4	1.00	0.5
15. Thallium (Total), Recoverable	2.96	200.8, Rev. 5.4	1.00	0.5
16. Zinc (Total), Recoverable	373	200.8, Rev. 5.4	5.00	20
129. Phenols, Total Recoverable	<5	420.1(1978)	0.005	5
17. Cyanide (Total), Recoverable	ND	SM 4500 CN E 20th Ed	0.005	10

DIOXIN	LABORATORY ANALYSIS			REQUIRED MQL ($\mu\text{g}/\text{l}$)
	RESULTS ($\mu\text{g}/\text{l}$)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED ($\mu\text{g}/\text{l}$)	
18. 2,3,7,8-Tetrachloro-debenzo-p-dioxin (TCDD)	ND	1613B	0.00001	0.00001

VOLATILE COMPOUNDS	LABORATORY ANALYSIS			REQUIRED MQL ($\mu\text{g}/\text{l}$)
	RESULTS ($\mu\text{g}/\text{l}$)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED ($\mu\text{g}/\text{l}$)	
19. Acrolein	ND	Method 624	15	50
20. Acrylonitrile	ND	Method 624	5	20
21. Benzene	ND	Method 624	5	10
22. Bromoform	ND	Method 624	5	10
23. Carbon Tetrachloride	ND	Method 624	2	2
24. Chlorobenzene	ND	Method 624	5	10
25. Chlorodibromomethane	ND	Method 624	5	10
26. Chloroethane	ND	Method 624	5	50
27. 2-Chloroethyl vinyl ether	ND	Method 624	5	10
28. Chloroform	ND	Method 624	5	10
29. Dichlorobromomethane	ND	Method 624	5	10
30. 1,1-Dichloroethane	ND	Method 624	10	10
31. 1,2-Dichloroethane	ND	Method 624	5	10
32. 1,1-Dichloroethylene	ND	Method 624	5	10
33. 1,2-Dichloropropane	ND	Method 624	5	10
34. 1,3-Dichloropropylene	ND	Method 624	5	10
35. Ethylbenzene	ND	Method 624	10	10
36. Methyl Bromide [Bromomethane]	ND	Method 624	50	50
37. Methyl chloride [Chloromethane]	ND	Method 624	5	50
38. Methylene chloride	ND	Method 624	5	20
39. 1,1,2,2-Tetrachloroethane	ND	Method 624	10	10
40. Tetrachloroethylene	ND	Method 624	10	10
41. Toluene	ND	Method 624	10	10
42. 1,2-trans-Dichloroethylene	ND	Method 624	10	10
43. 1,1,1-Trichloroethane	ND	Method 624	10	10
44. 1,1,2-Trichloroethane	ND	Method 624	10	10
45. Trichloroethylene	ND	Method 624	10	10
46. Vinyl chloride	ND	Method 624	5	10

ACID COMPOUNDS	LABORATORY ANALYSIS			REQUIRED MQL ($\mu\text{g/l}$)
	RESULTS ($\mu\text{g/l}$)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED ($\mu\text{g/l}$)	
47. 2-Chlorophenol	ND	Method 625	1.02	10
48. 2,4-Dichlorophenol	ND	Method 625	1.02	10
49. 2,4-Dimethylphenol	ND	Method 625	1.02	10
50. 4,6-Dinitro-o-Cresol [2 methyl 4,6-dinitrophenol]	ND	Method 625	2.04	50
51. 2,4-Dinitrophenol	ND	Method 625	1.02	50
52. 2-Nitrophenol	ND	Method 625	1.02	20
53. 4-Nitrophenol	ND	Method 625	1.02	50
54. P-Chloro-m-Cresol [4 chloro-3-methylphenol]	ND	Method 625	1.02	10
55. Pentachlorophenol	ND	Method 625	5	5
56. Phenol	ND	Method 625	1.02	10
57. 2,4,6-Trichlorophenol	ND	Method 625	1.02	10

BASE/NEUTRAL COMPOUNDS	LABORATORY ANALYSIS			REQUIRED MQL ($\mu\text{g/l}$)
	RESULTS ($\mu\text{g/l}$)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED ($\mu\text{g/l}$)	
58. Acenaphthene	ND	Method 625	1.02	10
59. Acenaphthylene	ND	Method 625	1.02	10
60. Anthracene	ND	Method 625	1.02	10
61. Benzidine	ND	Method 625	2.04	50
62. Benzo(a)anthracene	ND	Method 625	1.02	5
63. Benzo(a)pyrene	ND	Method 625	1.02	5
64. 3,4-Benzofluoranthene	ND	Method 625	1.02	10
65. Benzo(ghi)perylene	ND	Method 625	1.02	20
66. Benzo(k)fluoranthene	ND	Method 625	1.02	5
67. Bis(2-chloroethoxy) methane	ND	Method 625	1.02	10
68. Bis(2-chloroethyl) ether	ND	Method 625	1.02	10
69. Bis(2-chloroisopropyl) ether	ND	Method 625	1.02	10
70. Bis(2-ethylhexyl) phthalate	ND	Method 625	2.04	10
71. 4-Bromophenyl phenyl ether	ND	Method 625	1.02	10
72. Butyl benzyl phthalate	ND	Method 625	1.02	10
73. 2-Chloronaphthalene	ND	Method 625	1.02	10
74. 4-chlorophenyl phenyl ether	ND	Method 625	1.02	10
75. Chrysene	ND	Method 625	1.02	5
76. Dibenzo (a,h) anthracene	ND	Method 625	1.02	5
77. 1,2-Dichlorobenzene	ND	Method 625	1.02	10
78. 1,3-Dichlorobenzene	ND	Method 625	1.02	10
79. 1,4-Dichlorobenzene	ND	Method 625	2.04	10
80. 3,3'-Dichlorobenzidine	ND	Method 625	1.02	5
81. Diethyl Phthalate	ND	Method 625	1.02	10
82. Dimethyl Phthalate	ND	Method 625	1.02	10
83. Di-n-Butyl Phthalate	ND	Method 625	1.02	10
84. 2,4-Dinitrotoluene	ND	Method 625	1.02	10
85. 2,6-Dinitrotoluene	ND	Method 625	1.02	10
86. Di-n-octyl Phthalate	ND	Method 625	1.02	10

BASE/NEUTRAL COMPOUNDS	LABORATORY ANALYSIS			REQUIRED MQL ($\mu\text{g/l}$)
	RESULTS ($\mu\text{g/l}$)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED ($\mu\text{g/l}$)	
87. 1,2-Diphenylhydrazine	ND	Method 625	1.02	20
89. Fluorene	ND	Method 625	1.02	10
90. Hexachlorobenzene	ND	Method 625	1.02	5
91. Hexachlorobutadiene	ND	Method 625	2.04	10
92. Hexachlorocyclopentadiene	ND	Method 625	1.02	10
93. Hexachloroethane	ND	Method 625	1.02	20
94. Indeno (1,2,3-cd) pyrene (2,3-o-phenylene pyrene)	ND	Method 625	1.02	5
95. Isophorone	ND	Method 625	1.02	10
96. Naphthalene	ND	Method 625	1.02	10
97. Nitrobenzene	ND	Method 625	1.02	10
98. N-nitrosodimethylamine	ND	Method 625	2.04	50
99. N-nitrosodi-n-propylamine	ND	Method 625	1.02	20
100. N-nitrosodiphenylamine	ND	Method 625	5.10	20
101. Phenanthrene	ND	Method 625	1.02	10
102. Pyrene	ND	Method 625	1.02	10
103. 1,2,4-Trichlorobenzene	ND	Method 625	2.04	10

PESTICIDES	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
104. Aldrin	ND	Method 608	0.01	0.01
105. Alpha-BHC	0.0501	Method 608	0.0258	0.05
106. Beta-BHC	ND	Method 608	0.0258	0.05
107. Gamma-BHC	0.0642	Method 608	0.0258	0.05
108. Delta-BHC	0.0688	Method 608	0.0258	0.05
109. Chlordane	ND	Method 608	0.103	0.2
110. 4,4'-DDT	ND	Method 608	0.02	0.02
111. 4,4'-DDE (p,p-DDX)	ND	Method 608	0.0258	0.1
112. 4,4'-DDD 9(p,p-TDE)	ND	Method 608	0.0258	0.1
113. Dieldrin	ND	Method 608	0.02	0.02
114. Alpha-endosulfan	ND	Method 608	0.01	0.01
115. Beta-endosulfan	ND	Method 608	0.02	0.02
116. Endosulfan sulfate	0.0662	Method 608	0.0258	0.1
117. Endrin	ND	Method 608	0.02	0.02
118. Endrin aldehyde	0.269	Method 608	0.0258	0.1
119. Heptachlor	ND	Method 608	0.01	0.01
120. Heptachlor epoxide (BHC-hexachlorocyclohexane)	ND	Method 608	0.01	0.01
130. Chlorpyrifos	ND	Method 614	0.04	0.07
121. PCB-1242	ND	Method 608	0.2	0.2
122. PCB-1254	ND	Method 608	0.2	0.2
123. PCB-1221	ND	Method 608	0.2	0.2
124. PCB-1232	ND	Method 608	0.2	0.2
125. PCB-1248	ND	Method 608	0.2	0.2
126. PCB-1260	ND	Method 608	0.2	0.2
127. PCB-1016	ND	Method 608	0.2	0.2
128. Toxaphene	ND	Method 608	0.0258	0.3

ARKANSAS Department of Environmental Quality
PPS REQUIREMENTS

1. Name of facility:

Georgia-Pacific LLC, Crossett Paper Operations

2. Name, address and telephone number of laboratory:

PPS w/o TCDD
Ana-Lab Corp
P.O. Box 9000
Kilgore, TX 75663
(903) 984-5914

TCDD
Analytical Perspectives
2714 Exchange Dr.
Wilmington, NC 28405
(910) 794-1613

3. Is the lab certified by the State of Arkansas? Yes No

4. What are the certification dates?

Issued date 19 October 2008 Expire date 19 October 2009

Issued date 20 June 2008 Expire date 20 June 2009

5. Is the laboratory certified for all the parameters?

YES No (Explain)

6. Date and time of samples collected:

11/25/08 at 10:00 a.m.

7. Date and time samples were received in the laboratory:

11/25/08 at 4:30 p.m.

8. Sample location (Outfall No.):

outfall 002

9. Samples collected by:

Name Christopher Agosta
Title Environmental Engineer
Telephone (870) 567-8170

10. I certify under penalty of law that this document and all attachments were prepared under my direction of 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 submitted is, to the best of my knowledge and belief, 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.

Karen R. Dickinson
Printed Name of person signing

Karen Dickinson
Signature

Vice-President
Title

2/24/09
Date signed

List all attachments to this form:

METALS AND CYANIDE		LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
		RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
1.	Antimony (Total), Recoverable	ND	200.8, Rev. 5.4	2.00	60
2.	Arsenic (Total), Recoverable	ND	200.8, Rev. 5.4	0.5	0.5
3.	Beryllium (Total), Recoverable	ND	200.8, Rev. 5.4	0.5	0.5
4.	Cadmium (Total), Recoverable	1.17	200.8, Rev. 5.4	0.5	1
5.	Chromium (Total), Recoverable	<10	200.8, Rev. 5.4	1.00	10
7.	Chromium (6+), Dissolved	<10			10
8.	Copper (Total), Recoverable	11.7	200.8, Rev. 5.4	1.00	0.5
9.	Lead (Total), Recoverable	3.13	200.8, Rev. 5.4	1.00	0.5
10.	Mercury (Total), Recoverable	0.009	245.1, Rev. 2.1	0.005	0.005
12.	Nickel (Total), Recoverable	7.87	200.8, Rev. 5.4	1.00	0.5
13.	Selenium (Total), Recoverable	11.3	200.8, Rev. 5.4	2.00	5
14.	Silver (Total), Recoverable	ND	200.8, Rev. 5.4	0.5	0.5
15.	Thallium (Total), Recoverable	ND	200.8, Rev. 5.4	0.5	0.5
16.	Zinc (Total), Recoverable	251	200.8, Rev. 5.4	5.00	20
129.	Phenols, Total Recoverable	ND	420.1(1978)	0.005	5
17.	Cyanide (Total), Recoverable	ND	SM 4500 CN E 20th Ed	0.005	10

DIOXIN		LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
		RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
18.	2,3,7,8-Tetrachloro-debenzo-p-dioxin (TCDD)	ND	1613B	0.00001	0.00001

VOLATILE COMPOUNDS	LABORATORY ANALYSIS			REQUIRED MQL ($\mu\text{g}/\text{l}$)
	RESULTS ($\mu\text{g}/\text{l}$)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED ($\mu\text{g}/\text{l}$)	
19. Acrolein	ND	Method 624	15	50
20. Acrylonitrile	ND	Method 624	5	20
21. Benzene	ND	Method 624	5	10
22. Bromoform	ND	Method 624	5	10
23. Carbon Tetrachloride	ND	Method 624	2	2
24. Chlorobenzene	ND	Method 624	5	10
25. Chlorodibromomethane	ND	Method 624	5	10
26. chloroethane	ND	Method 624	5	50
27. 2-chloroethyl vinyl ether	ND	Method 624	5	10
28. chloroform	ND	Method 624	5	10
29. Dichlorobromomethane	ND	Method 624	5	10
30. 1,1-Dichloroethane	ND	Method 624	5	10
31. 1,2-Dichloroethane	ND	Method 624	5	10
32. 1,1-Dichloroethylene	ND	Method 624	5	10
33. 1,2-Dichloropropane	ND	Method 624	5	10
34. 1,3-Dichloropropylene	ND	Method 624	5	10
35. Ethylbenzene	ND	Method 624	5	10
36. Methyl Bromide [Bromomethane]	ND	Method 624	5	50
37. Methyl chloride [Chloromethane]	ND	Method 624	5	50
38. Methylene chloride	ND	Method 624	5	20
39. 1,1,2,2-Tetrachloroethane	ND	Method 624	5	10
40. Tetrachloroethylene	ND	Method 624	5	10
41. Toluene	ND	Method 624	5	10
42. 1,2-trans-Dichloroethylene	ND	Method 624	5	10
43. 1,1,1-Trichloroethane	ND	Method 624	5	10
44. 1,1,2-Trichloroethane	ND	Method 624	5	10
45. Trichloroethylene	ND	Method 624	5	10
46. vinyl chloride	ND	Method 624	5	10

ACID COMPOUNDS	LABORATORY ANALYSIS			REQUIRED MQL ($\mu\text{g/l}$)
	RESULTS ($\mu\text{g/l}$)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED ($\mu\text{g/l}$)	
47. 2-Chlorophenol	ND	Method 625	1	10
48. 2,4-Dichlorophenol	ND	Method 625	1	10
49. 2,4-Dimethylphenol	ND	Method 625	1	10
50. 4,6-Dinitro-o-Cresol [2 methyl 4,6-dinitrophenol]	ND	Method 625	2	50
51. 2,4-Dinitrophenol	ND	Method 625	2	50
52. 2-Nitrophenol	ND	Method 625	1	20
53. 4-Nitrophenol	ND	Method 625	1	50
54. P-Chloro-m-Cresol [4 chloro-3-methylphenol]	ND	Method 625	1	10
55. Pentachlorophenol	ND	Method 625	1	5
56. Phenol	ND	Method 625	1	10
57. 2,4,6-Trichlorophenol	ND	Method 625	1	10

BASE/NEUTRAL COMPOUNDS	LABORATORY ANALYSIS			REQUIRED MQL ($\mu\text{g}/\text{l}$)
	RESULTS ($\mu\text{g}/\text{l}$)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED ($\mu\text{g}/\text{l}$)	
58. Acenaphthene	ND	Method 625	1	10
59. Acenaphthylene	ND	Method 625	1	10
60. Anthracene	ND	Method 625	1	10
61. Benzidine	ND	Method 625	1	50
62. Benzo(a)anthracene	ND	Method 625	1	5
63. Benzo(a)pyrene	ND	Method 625	1	5
64. 3,4-Benzofluoranthene	ND	Method 625	1	10
65. Benzo(ghi)perylene	ND	Method 625	1	20
66. Benzo(k)fluoranthene	ND	Method 625	1	5
67. Bis(2-chloroethoxy) methane	ND	Method 625	1	10
68. Bis(2-chloroethyl) ether	ND	Method 625	1	10
69. Bis(2-chloroisopropyl) ether	ND	Method 625	1	10
70. Bis(2-ethylhexyl) phthalate	<10	Method 625	1	10
71. 4-Bromophenyl phenyl ether	ND	Method 625	1	10
72. Butyl benzyl phthalate	ND	Method 625	1	10
73. 2-Chloronapthalene	ND	Method 625	1	10
74. 4-Chlorophenyl phenyl ether	ND	Method 625	1	10
75. Chrysene	ND	Method 625	1	5
76. Dibenzo (a,h) anthracene	ND	Method 625	1	5
77. 1,2-Dichlorobenzene	ND	Method 625	1	10
78. 1,3-Dichlorobenzene	ND	Method 625	1	10
79. 1,4-Dichlorobenzene	ND	Method 625	1	10
80. 3,3'-Dichlorobenzidine	ND	Method 625	1	5
81. Diethyl Phthalate	ND	Method 625	1	10
82. Dimethyl Phthalate	ND	Method 625	1	10
83. Di-n-Butyl Phthalate	ND	Method 625	1	10
84. 2,4-Dinitrotoluene	ND	Method 625	1	10
85. 2,6-Dinitrotoluene	ND	Method 625	1	10
86. Di-n-octyl Phthalate	ND	Method 625	1	10

BASE/NEUTRAL COMPOUNDS	LABORATORY ANALYSIS			REQUIRED MQL ($\mu\text{g/l}$)
	RESULTS ($\mu\text{g/l}$)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED ($\mu\text{g/l}$)	
87. 1,2-Diphenylhydrazine	ND	Method 625	1	20
89. Fluorene	ND	Method 625	1	10
90. Hexachlorobenzene	ND	Method 625	1	5
91. Hexachlorobutadiene	ND	Method 625	1	10
92. Hexachlorocyclopentadiene	ND	Method 625	1	10
93. Hexachloroethane	ND	Method 625	1	20
94. Indeno (1,2,3-cd) pyrene (2,3-o-phenylene pyrene)	ND	Method 625	1	5
95. Isophorone	ND	Method 625	1	10
96. Naphthalene	ND	Method 625	1	10
97. Nitrobenzene	ND	Method 625	1	10
98. N-nitrosodimethylamine	ND	Method 625	1	50
99. N-nitrosodi-n-propylamine	ND	Method 625	1	20
100. N-nitrosodiphenylamine	ND	Method 625	1	20
101. Phenanthrene	ND	Method 625	1	10
102. Pyrene	ND	Method 625	1	10
103. 1,2,4-Trichlorobenzene	ND	Method 625	1	10

PESTICIDES	LABORATORY ANALYSIS			REQUIRED MQL ($\mu\text{g/l}$)
	RESULTS ($\mu\text{g/l}$)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED ($\mu\text{g/l}$)	
104. Aldrin	ND	Method 608	0.01	0.01
105. Alpha-BHC	ND	Method 608	0.025	0.05
106. Beta-BHC	ND	Method 608	0.025	0.05
107. Gamma-BHC	0.0969	Method 608	0.025	0.05
108. Delta-BHC	<0.05	Method 608	0.025	0.05
109. Chlordane	ND	Method 608	0.1	0.2
110. 4,4'-DDT	ND	Method 608	0.02	0.02
111. 4,4'-DDE (p,p-DDX)	ND	Method 608	0.025	0.1
112. 4,4'-DDD 9(p,p-TDE)	ND	Method 608	0.025	0.1
113. Dieldrin	.113	Method 608	0.02	0.02
114. Alpha-endosulfan	.0211	Method 608	0.02	0.01
115. Beta-endosulfan	ND	Method 608	0.02	0.02
116. Endosulfan sulfate	ND	Method 608	0.025	0.1
117. Endrin	ND	Method 608	0.02	0.02
118. Endrin aldehyde	ND	Method 608	0.025	0.1
119. Heptachlor	ND	Method 608	0.01	0.01
120. Heptachlor epoxide (BHC-hexachlorocyclohexane)	ND	Method 608	0.01	0.01
130. Chlorpyrifos	ND	Method 614	0.04	0.07
121. PCB-1242	ND	Method 608	0.2	0.2
122. PCB-1254	ND	Method 608	0.2	0.2
123. PCB-1221	ND	Method 608	0.2	0.2
124. PCB-1232	ND	Method 608	0.2	0.2
125. PCB-1248	ND	Method 608	0.2	0.2
126. PCB-1260	ND	Method 608	0.2	0.2
127. PCB-1016	ND	Method 608	0.2	0.2
128. Toxaphene	ND	Method 608	0.025	0.3

Disclaimer

This is an updated PDF document that allows you to type your information directly into the form, print it, and save the completed form.

Note: This form can be viewed and saved only using Adobe Acrobat Reader version 7.0 or higher, or if you have the full Adobe Professional version.

Instructions:

1. Type in your information
2. Save file (if desired)
3. Print the completed form
4. Sign and date the printed copy
5. Mail it to the directed contact.



Permits Division

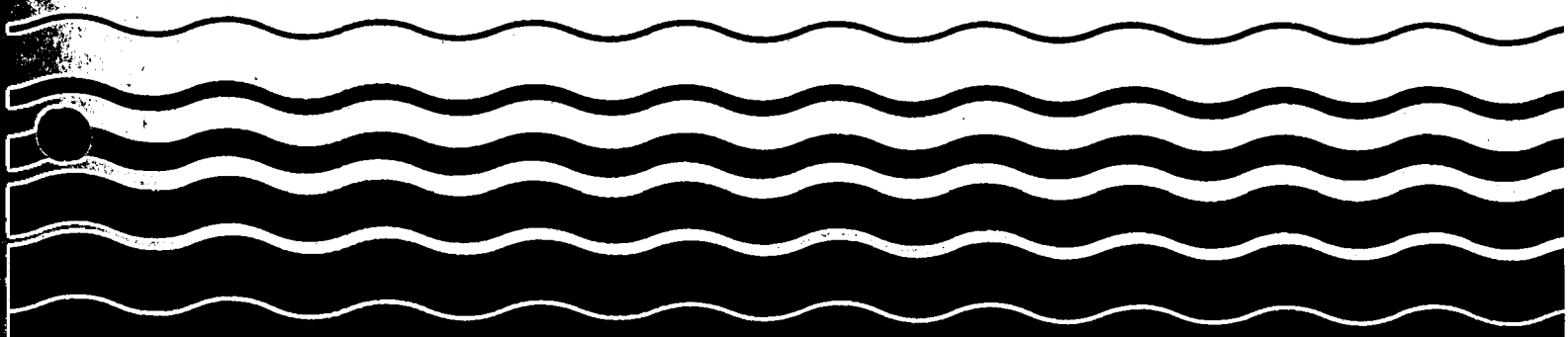
Application Form 2C – Wastewater Discharge Information

Consolidated Permits Program

This form must be completed by all persons applying for an EPA permit to discharge wastewater (*existing manufacturing, commercial, mining, and silvicultural operations*).



Printed on recycled paper



Paperwork Reduction Act Notice

The public reporting burden for this collection of information is estimated to average 33 hours per response. This estimate includes time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information to the Chief, Information Policy Branch (PM-223), US Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503, marked **Attention:** Desk Officer for EPA.



INSTRUCTIONS – FORM 2c
Application for Permit to Discharge Wastewater
EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURAL OPERATIONS

This form must be completed by all applicants who check "yes" to item II-C in Form 1.

Public Availability of Submitted Information.

Your application will not be considered complete unless you answer every question on this form and on Form 1. If an item does not apply to you, enter "NA" (*for not applicable*) to show that you considered the question.

You may not claim as confidential any information required by this form or Form 1, whether the information is reported on the forms or in an attachment. This information will be made available to the public upon request.

Any information you submit to EPA which goes beyond that required by this form or Form 1 you may claim as confidential, but claims for information which is effluent data will be denied. If you do not assert a claim of confidentiality at the time of submitting the information, EPA may make the information public without further notice to you. Claims of confidentiality will be handled in accordance with EPA's business confidentiality regulations at 40 CFR Part 2.

Definitions

All significant terms used in these instructions and in the form are defined in the glossary found in the General Instructions which accompany Form 1.

EPA ID Number

Fill in your EPA Identification Number at the top of each page of Form 2c. You may copy this number directly from item I of Form 1.

Item I

You may use the map you provided for item XI of Form 1 to determine the latitude and longitude of each of your outfalls and the name of the receiving water.

Item II-A

The line drawing should show generally the route taken by water in your facility from intake to discharge. Show all operations contributing wastewater, including process and production areas, sanitary flows, cooling water, and stormwater runoff. You may group similar operations into a single unit, labeled to correspond to the more detailed listing in item II-B. The water balance should show average flows. Show all significant losses of water to products, atmosphere, and discharge. You should use actual measurements whenever available; otherwise use your best estimate. An example of an acceptable line drawing appears in Figure 2c-1 to these instructions.

Item II-B

List all sources of wastewater to each outfall. Operations may be described in general terms (*for example, "dye-making reactor" or "distillation tower"*). You may estimate the flow contributed by each source if no data are available. For stormwater discharges you may estimate the average flow, but you must indicate the rainfall event upon which the estimate is based and the method of estimation. For each treatment unit, indicate its size, flow rate, and retention time, and describe the ultimate disposal of any solid or liquid wastes not discharged. Treatment units should be listed in order and you should select the proper code from Table 2c-1 to fill in column 3-b for each treatment unit. Insert "XX" into column 3-b if no code corresponds to a treatment unit you list. If you are applying for a permit for a privately owned treatment works, you must also identify all of your contributors in an attached listing.

Item II-C

A discharge is intermittent unless it occurs without interruption during the operating hours of the facility, except for infrequent shutdowns for maintenance, process changes, or other similar activities. A discharge is seasonal if it occurs only during certain parts of the year. Fill in every applicable column in this item for each source of intermittent or seasonal discharges. Base your answers on actual data whenever available; otherwise, provide your best estimate. Report the highest daily value for flow rate and total volume in the

"Maximum Daily" columns (*columns 4-a-2 and 4-b-2*). Report the average of all daily values measured during days when discharge occurred within the last year in the "Long Term Average" columns (*columns 4-a-1 and 4-b-1*).

Item III-A

All effluent guidelines promulgated by EPA appear in the Federal Register and are published annually in 40 CFR Subchapter N. A guideline applies to you if you have any operations contributing process wastewater in any subcategory covered by a BPT, BCT, or BAT guideline. If you are unsure whether you are covered by a promulgated effluent guideline, check with your EPA Regional office (*Table 1 in the Form 1 instructions*). You must check "yes" if an applicable effluent guideline has been promulgated, even if the guideline limitations are being contested in court. If you believe that a promulgated effluent guideline has been remanded for reconsideration by a court and does not apply to your operations, you may check "no."

Item III-B

An effluent guideline is expressed in terms of production (*or other measure of operation*) if the limitation is expressed as mass of pollutant per operational parameter; for example, "pounds of BOD per cubic foot of logs from which bark is removed," or "pounds of TSS per megawatt hour of electrical energy consumed by smelting furnace." An example of a guideline not expressed in terms of a measure of operation is one which limits the concentration of pollutants.

Item III-C

This item must be completed only if you checked "yes" to item III-B. The production information requested here is necessary to apply effluent guidelines to your facility and you cannot claim it as confidential. However, you do not have to indicate how the reported information was calculated. Report quantities in the units of measurement used in the applicable effluent guideline. The production figures provided must be based on actual daily production and not on design capacity or on predictions of future operations. To obtain alternate limits under 40 CFR 122.45(b)(2)(ii), you must define your maximum production capability and demonstrate to the Director that your actual production is substantially below maximum production capability and that there is a reasonable potential for an increase above actual production during the duration of the permit.

Item IV-A

If you check "yes" to this question, complete all parts of the chart, or attach a copy of any previous submission you have made to EPA containing same information.

Item IV-B

You are not required to submit a description of future pollution control projects if you do not wish to or if none is planned.

Item V-A, B, C, and D

The items require you to collect and report data on the pollutants discharged for each of your outfalls. Each part of this item addresses a different set of pollutants and must be completed in accordance with the specific instructions for that part. The following general instructions apply to the entire item.

General Instructions

Part A requires you to report at least one analysis for each pollutant listed. Parts B and C require you to report analytical data in two ways. For some pollutants, you may be required to mark "X" in the "Testing Required" column (*column 2-a, Part C*), and test (*sample and analyze*) and report the levels of the pollutants in your discharge whether or not you expect them to be present in your discharge. For all others, you must mark "X" in either the "Believe Present" column or the "Believe Absent" column (*columns 2-a or 2-b, Part B, and columns 2-b or 2-c, Part C*) based on your best estimate, and test for those which you believe to be present. (*See specific instructions on the form and below for Parts A through D.*) Base your determination that a pollutant is present in or absent from your discharge on your

Item V-A, B, C, and D (continued)

knowledge of your raw materials, maintenance chemicals, intermediate and final products and byproducts, and any previous analyses known to you of your effluent or similar effluent. (For example, if you manufacture pesticides, you should expect those pesticides to be present in contaminated stormwater runoff.) If you would expect a pollutant to be present solely as a result of its presence in your intake water, you must mark "Believe Present" but you are not required to analyze for that pollutant. Instead, mark an 'X' in the "Intake" column.

A. Reporting. All levels must be reported as concentration and as total mass. You may report some or all of the required data by attaching separate sheets of paper instead of filling out pages V-1 to V-9 if the separate sheets contain all the required information in a format which is consistent with pages V-1 to V-9 in spacing and in identification of pollutants and columns. (For example, the data system used in your GC/MS analysis may be able to print data in the proper format.) Use the following abbreviations in the columns headed "Units" (column 3, Part A, and column 4, Parts B and C).

Concentration	Mass
ppm.....parts per million	lbs.....pounds
mg/l...milligrams per liter	ton.....tons (English tons)
ppb.....parts per billion	mg.....milligrams
ug/l...micrograms per liter	g.....grams
	kg.....kilograms
	T.....tonnes (metric tons)

All reporting of values for metals must be in terms of "total recoverable metal," unless:

- (1) An applicable, promulgated effluent limitation or standard specifies the limitation for the metal in dissolved, valent, or total form; or
- (2) All approved analytical methods for the metal inherently measure only its dissolved form (e.g., hexavalent chromium); or
- (3) The permitting authority has determined that in establishing case-by-case limitations it is necessary to express the limitations on the metal in dissolved, valent, or total form to carry out the provisions of the CWA.

If you measure only one daily value, complete only the "Maximum Daily Values" columns and insert '1' into the "Number of Analyses" column (columns 2-a and 2-d, Part A, and column 3-a, 3-d, Parts B and C). The permitting authority may require you to conduct additional analyses to further characterize your discharges. For composite samples, the daily value is the total mass or average concentration found in a composite sample taken over the operating hours of the facility during a 24-hour period; for grab samples, the daily value is the arithmetic or flow-weighted total mass or average concentration found in a series of at least four grab samples taken over the operating hours of the facility during a 24-hour period.

If you measure more than one daily value for a pollutant and those values are representative of your wastestream, you must report them. You must describe your method of testing and data analysis. You also must determine the average of all values within the last year and report the concentration and mass under the "Long Term Average Values" columns (column 2-c, Part A, and column 3-c, Parts B and C), and the total number of daily values under the "Number of Analyses" columns (column 2-d, Part A, and columns 3-d, Parts B and C). Also, determine the average of all daily values taken during each calendar month, and report the highest average under the "Maximum 30-day Values" columns (column 2-c, Part A, and column 3-b, Parts B and C).

B. Sampling: The collection of the samples for the reported analyses should be supervised by a person experienced in performing sampling of industrial wastewater. You may contact your EPA or State permitting authority for detailed guidance on sampling techniques and for answers to specific questions. Any specific requirements contained in the applicable analytical methods should be followed for sample containers, sample preservation, holding

times, the collection of duplicate samples, etc. The time when you sample should be representative of your normal operation, to the extent feasible, with all processes which contribute wastewater in normal operation, and with your treatment system operating properly with no system upsets. Samples should be collected from the center of the flow channel, where turbulence is at a maximum, at a site specified in your present permit, or at any site adequate for the collection of a representative sample.

For pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, and fecal coliform, grab samples must be used. For all other pollutants 24-hour composite samples must be used. However, a minimum of one grab sample may be taken for effluents from holding ponds or other impoundments with a retention period of greater than 24 hours. For stormwater discharges a minimum of one to four grab samples may be taken, depending on the duration of the discharge. One grab must be taken in the first hour (or less) of discharge, with one additional grab (up to a minimum of four) taken in each succeeding hour of discharge for discharges lasting four or more hours. The Director may waive composite sampling for any outfall for which you demonstrate that use of an automatic sampler is infeasible and that a minimum of four grab samples will be representative of your discharge.

Grab and composite samples are defined as follows:

Grab sample: An individual sample of at least 100 milliliters collected at a randomly-selected time over a period not exceeding 15 minutes.

Composite sample: A combination of at least 8 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24 hour period. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically. For GC/MS Volatile Organic Analysis (VOA), aliquots must be combined in the laboratory immediately before analysis. Four (4) (rather than eight) aliquots or grab samples should be collected for VOA. These four samples should be collected during actual hours of discharge over a 24-hour period and need not be flow proportioned. Only one analysis is required.

The Agency is currently reviewing sampling requirements in light of recent research on testing methods. Upon completion of its review, the Agency plans to propose changes to the sampling requirements.

Data from samples taken in the past may be used, provided that:

All data requirements are met;

Sampling was done no more than three years before submission; and

All data are representative of the present discharge.

Among the factors which would cause the data to be unrepresentative are significant changes in production level, changes in raw materials, processes, or final products, and changes in wastewater treatment. When the Agency promulgates new analytical methods in 40 CFR Part 136, EPA will provide information as to when you should use the new methods to generate data on your discharges. Of course, the Director may request additional information, including current quantitative data, if she or he determines it to be necessary to assess your discharges.

C. Analysis: You must use test methods promulgated in 40 CFR Part 136; however, if none has been promulgated for a particular pollutant, you may use any suitable method for measuring the level of the pollutant in your discharge provided that you submit a description of the method or a reference to a published method. Your description should include the sample holding time, preservation techniques, and the quality control measures which you used. If you have two or more substantially identical outfalls, you may request permission from your permitting authority to sample and analyze only one outfall and submit the results of the analysis for other substantially identical outfalls. If your request is granted by the

Item V-A, B, C, and D (continued)

permitting authority, on a separate sheet attached to the application form, identify which outfall you did test, and describe why the outfalls which you did not test are substantially identical to the outfall which you did test.

D. Reporting of Intake Data: You are not required to report data under the "Intake" columns unless you wish to demonstrate your eligibility for a "net" effluent limitation for one or more pollutants, that is, an effluent limitation adjusted by subtracting the average level of the pollutant(s) present in your intake water. NPDES regulations allow net limitations only in certain circumstances. To demonstrate your eligibility, under the "Intake" columns report the average of the results of analyses on your intake water (*if your water is treated before use, test the water after it is treated*), and discuss the requirements for a net limitation with your permitting authority.

Part V-A

Part V-A must be completed by all applicants for all outfalls, including outfalls containing only noncontact cooling water or storm runoff. However, at your request, the Director may waive the requirement to test for one or more of these pollutants, upon a determination that available information is adequate to support issuance of the permit with less stringent reporting requirements for these pollutants. You also may request a waiver for one or more of these pollutants for your category or subcategory from the Director, Office of Water Enforcement and Permits. See discussion in General Instructions to item V for definitions of the columns in Part A. The "Long Term Average Values" column (*column 2-c*) and "Maximum 30-day Values" column (*column 2-b*) are not compulsory but should be filled out if data are available.

Use composite samples for all pollutants in this Part, except use grab samples for pH and temperature. See discussion in General Instructions to item V for definitions of the columns in Part A. The "Long Term Average Values" column (*column 2-c*) and "Maximum 30-Day Values" column (*column 2-b*) are not compulsory but should be filled out if data are available.

Part V-B

Part V-B must be completed by all applicants for all outfalls, including outfalls containing only noncontact cooling water or storm runoff. You must report quantitative data if the pollutant(s) in question is limited in an effluent limitations guideline either directly, or indirectly but expressly through limitation on an indicator. (*e.g., use of TSS as an indicator to control the discharge of iron and aluminum*). For other discharged pollutants you must provide quantitative data or explain their presence in your discharge. EPA will consider requests to the Director of the Office of Water Enforcement and Permits to eliminate the requirement to test for pollutants for an industrial category or subcategory. Your request must be supported by data representative of the industrial category or subcategory in question. The data must demonstrate that individual testing for each applicant is unnecessary, because the facilities in the category or subcategory discharge substantially identical levels of the pollutant or discharge the pollutant uniformly at sufficiently low levels. Use composite samples for all pollutants you analyze for in this part, except use grab samples for residual chlorine, oil and grease, and fecal coliform. The "Long Term Average Values" column (*column 3-c*) and "Maximum 30-day Values" column (*column 3-b*) are not compulsory but should be filled out if data are available.

Part V-C

Table 2c-2 lists the 34 "primary" industry categories in the lefthand column. For each outfall, if any of your processes which contribute wastewater falls into one of those categories, you must mark "X" in "Testing Required" column (*column 2-a*) and test for (1) all of the toxic metals, cyanide, and total phenols, and (2) the organic toxic pollutants contained in Table 2c-2 as applicable to your category, unless you qualify as a small business (*see below*). The organic toxic pollutants are listed by GC/MS fractions on pages V-4 to V-9 in Part V-C. For example, the Organic Chemicals Industry has an asterisk in all four fractions; therefore, applicants in this category must test for all organic toxic pollutants in Part V-C. The inclusion of total phenols in Part V-C is not intended to classify total phenols as a toxic pollutant. If you are applying for a permit for a privately owned

treatment works, determine your testing requirements on the basis of the industry categories of your contributors. When you determine which industry category you are in to find your testing requirements, you are not determining your category for any other purpose and you are not giving up your right to challenge your inclusion in that category (*for example, for deciding whether an effluent guideline is applicable*) before your permit is issued. For all other cases (secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions), you must mark "X" in either the "Believed Present" column (*column 2-b*) or the "Believed Absent" column (*column 2-c*) for each pollutant. For every pollutant you know or have reason to believe is present in your discharge in concentrations of 10 ppb or greater, you must report quantitative data. For acrolein, acrylonitrile, 2, 4 dinitrophenol, and 2-methyl-4, 6 dinitrophenol, where you expect these four pollutants to be discharged in concentrations of 100 ppb or greater, you must report quantitative data. For every pollutant expected to be discharged in concentrations less than the thresholds specified above, you must either submit quantitative data or briefly describe the reasons the pollutant is expected to be discharged. At your request the Director, Office of Water Enforcement and Permits, may waive the requirement to test for pollutants for an industrial category or subcategory. Your request must be supported by data representatives of the industrial category or subcategory in question. The data must demonstrate that individual testing for each applicant is unnecessary, because the facilities in question discharge substantially identical levels of the pollutant, or discharge the pollutant uniformly at sufficiently low levels. If you qualify as a small business (*see below*) you are exempt from testing for the organic toxic pollutants, listed on pages V-4 to V-9 in Part C. For pollutants in intake water, see discussion in General Instructions to this item. The "Long Term Average Values" column (*column 3-c*) and "Maximum 30-day Values" column (*column 3-b*) are not compulsory but should be filled out if data are available. You are required to mark "Testing Required" for dioxin if you use or manufacture one of the following compounds:

- (a) 2,4,5-trichlorophenoxy acetic acid, (2,4,5-T);
- (b) 2-(2,4,5-trichlorophenoxy) propanoic acid, (Silvex, 2,4,5-TP)
- (c) 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate, (Erbon);
- (d) 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate, (Ronnel);
- (e) 2,4,5-trichlorophenol, (TCP); or
- (f) hexachlorophene, (HCP).

If you mark "Testing Required" or "Believed Present," you must perform a screening analysis for dioxins, using gas chromatography with an electron capture detector. A TCDD standard for quantitation is not required. Describe the results of this analysis in the space provided; for example, "no measurable baseline deflection at the retention time of TCDD" or "a measurable peak within the tolerances of the retention time of TCDD." The permitting authority may require you to perform a quantitative analysis if you report a positive result. The Effluent Guidelines Division of EPA has collected and analyzed samples from some plants for the pollutants listed in Part C in the course of its BAT guidelines development program. If your effluents are sampled and analyzed as part of this program in the last three years, you may use these data to answer Part C provided that the permitting authority approves, and provided that no process change or change in raw materials or operating practices has occurred since the samples were taken that would make the analyses unrepresentative of your current discharge.

Small Business Exemption: If you qualify as a "small business," you are exempt from the reporting requirements for the organic toxic pollutants, listed on pages V-4 to V-9 in Part C. There are two ways in which you can qualify as a "small business." If your facility is a coal mine, and if your probable total annual production is less than 100,000 tons per year, you may submit past production data or estimated future production (*such as a schedule of estimated total production under 30 CFR § 795.14(c)*) instead of conducting analyses for the organic toxic pollutants. If your facility is not a coal mine, and if your gross total annual sales for the most recent three years average less than \$100,000 per year (*in second quarter 1980*)

Item V-A, B, C, and D (continued)

dollars), you may submit sales data for those years instead of conducting analyses for the organic toxic pollutants. The production or sales data must be for the facility which is the source of the discharge. The data should not be limited to production or sales for the process or processes which contribute to the discharge, unless those are the only processes at your facility. For sales data, in situations involving intracorporate transfer of goods and services, the transfer price per unit should approximate market prices for those goods and services as closely as possible. Sales figures for years after 1980 should be indexed to the second quarter of 1980 by using the gross national product price deflator (second quarter of 1980=100). This index is available in *National Income and Product Accounts of the United States (Department of Commerce, Bureau of Economic Analysis)*.

Part V-D

List any pollutants in Table 2c-3 that you believe to be present and explain why you believe them to be present. No analysis is required, but if you have analytical data, you must report it.

Note: Under 40 CFR 117.12(a)(2), certain discharges of hazardous substances (listed in Table 2c-4 of these instructions) may be exempted from the requirements of section 311 of CWA, which establishes reporting requirements, civil penalties and liability for cleanup costs for spills of oil and hazardous substances. A discharge of a particular substance may be exempted if the origin, source, and amount of the discharged substances are identified in the NDPEs permit application or in the permit, if the permit contains a requirement for treatment of the discharge, and if the treatment is in place. To apply for an exclusion of the discharge of any hazardous substance from the requirements of section 311, attach additional sheets of paper to your form, setting forth the following information:

1. The substance and the amount of each substance which may be discharged.
2. The origin and source of the discharge of the substance.
3. The treatment which is to be provided for the discharge by:
 - a. An onsite treatment system separate from any treatment system treating your normal discharge;
 - b. A treatment system designed to treat your normal discharge and which is additionally capable of treating the amount of the substance identified under paragraph 1 above; or
 - c. Any combination of the above.

See 40 CFR §117.12(a)(2) and (c) published on August 29, 1979, in 44 FR 50766, or contact your Regional Office (Table 1 on Form 1, Instructions), for further information on exclusions from section 311.

Item VI

This requirement applies to current use or manufacture of a toxic pollutant as an intermediate or final product or byproduct. The Director may waive or modify the requirement if you demonstrate that it would be unduly burdensome to identify each toxic pollutant and the Director has adequate information to issue your permit. You may not claim this information as confidential; however, you do not have to distinguish between use or production of the pollutants or list the amounts.

Item VII

Self explanatory. The permitting authority may ask you to provide additional details after your application is received.

Item IX

The Clean Water Act provides for severe penalties for submitting false information on this application form.

Section 309(c)(2) of the Clean Water Act provides that "Any person who knowingly makes any false statement, representation, or certification in any application... shall upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment for not more than six months, or by both."

40 CFR Part 122.22 requires the certification to be signed as follows:

(A) *For a corporation:* by a responsible corporate official. For purposes of this section, a responsible corporate official means (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25,000,000 (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

Note: EPA does not require specific assignments or delegation of authority to responsible corporate officers identified in §122.22(a)(1)(i). The Agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate position under §122.22(a)(1)(ii) rather than to specific individuals.

(B) *For a partnership or sole proprietorship:* by a general partner or the proprietor, respectively; or

(C) *For a municipality, State, Federal, or other public agency:* by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal Agency includes (i) the chief executive officer of the Agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the Agency (e.g., *Regional Administrators of EPA*). Applications for Group II stormwater dischargers may be signed by a duly authorized representative (as defined in 40 CFR 122.22(b)) of the individuals identified above.

CODES FOR TREATMENT UNITS

PHYSICAL TREATMENT PROCESSES

1-A	Ammonia Stripping	1-M	Grit Removal
1-B	Dialysis	1-N	Microstraining
1-C	Diatomaceous Earth Filtration	1-O	Mixing
1-D	Distillation	1-P	Moving Bed Filters
1-E	Electrodialysis	1-Q	Multimedia Filtration
1-F	Evaporation	1-R	Rapid Sand Filtration
1-G	Flocculation	1-S	Reverse Osmosis (<i>Hyperfiltration</i>)
1-H	Flotation	1-T	Screening
1-I	Foam Fractionation	1-U	Sedimentation (<i>Settling</i>)
1-J	Freezing	1-V	Slow Sand Filtration
1-K	Gas-Phase Separation	1-W	Solvent Extraction
1-L	Grinding (<i>Comminutors</i>)	1-X	Sorption

CHEMICAL TREATMENT PROCESSES

2-A	Carbon Adsorption	2-G	Disinfection (<i>Ozone</i>)
2-B	Chemical Oxidation	2-H	Disinfection (<i>Other</i>)
2-C	Chemical Precipitation	2-I	Electrochemical Treatment
2-D	Coagulation	2-J	Ion Exchange
2-E	Dechlorination	2-K	Neutralization
2-F	Disinfection (<i>Chlorine</i>)	2-L	Reduction

BIOLOGICAL TREATMENT PROCESSES

3-A	Activated Sludge	3-E	Pre-Aeration
3-B	Aerated Lagoons	3-F	Spray Irrigation/Land Application
3-C	Anaerobic Treatment	3-G	Stabilization Ponds
3-D	Nitrification-Denitrification	3-H	Trickling Filtration

OTHER PROCESSES

4-A	Discharge to Surface Water	4-C	Reuse/Recycle of Treated Effluent
4-B	Ocean Discharge Through Outfall	4-D	Underground Injection

SLUDGE TREATMENT AND DISPOSAL PROCESSES

5-A	Aerobic Digestion	5-M	Heat Drying
5-B	Anaerobic Digestion	5-N	Heat Treatment
5-C	Belt Filtration	5-O	Incineration
5-D	Centrifugation	5-P	Land Application
5-E	Chemical Conditioning	5-Q	Landfill
5-F	Chlorine Treatment	5-R	Pressure Filtration
5-G	Composting	5-S	Pyrolysis
5-H	Drying Beds	5-T	Sludge Lagoons
5-I	Elutriation	5-U	Vacuum Filtration
5-J	Flotation Thickening	5-V	Vibration
5-K	Freezing	5-W	Wet Oxidation
5-L	Gravity Thickening		

TESTING REQUIREMENTS FOR ORGANIC TOXIC POLLUTANTS INDUSTRY CATEGORY*

INDUSTRY CATEGORY	GC/MS FRACTION ¹			
	Volatile	Acid	Base/Neutral	Pesticide
Adhesives and sealants	X	X	X	-
Aluminum forming	X	X	X	-
Auto and other laundries	X	X	X	X
Battery manufacturing	X	-	X	-
Coal mining	X	X	X	X
Coil coating	X	X	X	-
Copper forming	X	X	X	-
Electric and electronic compounds	X	X	X	X
Electroplating	X	X	X	-
Explosives manufacturing	-	X	X	-
Foundries	X	X	X	-
Gum and wood chemicals	X	X	X	X
Inorganic chemicals manufacturing	X	X	X	-
Iron and steel manufacturing	X	X	X	-
Leather tanning and finishing	X	X	X	X
Mechanical products manufacturing	X	X	X	-
Nonferrous metals manufacturing	X	X	X	X
Ore mining	X	X	X	X
Organic chemicals manufacturing	X	X	X	X
Paint and ink formulation	X	X	X	X
Pesticides	X	X	X	X
Petroleum refining	X	X	X	X
Pharmaceutical preparations	X	X	X	-
Photographic equipment and supplies	X	X	X	X
Plastic and synthetic materials manufacturing	X	X	X	X
Plastic processing	X	-	-	-
Porcelain enameling	X	-	X	X
Printing and publishing	X	X	X	X
Pulp and paperboard mills	X	X	X	X
Rubber processing	X	X	X	-
Soap and detergent manufacturing	X	X	X	-
Steam electric power plants	X	X	X	-
Textile mills	X	X	X	X
Timber products processing	X	X	X	X

*See note at conclusion of 40 CFR Part 122, Appendix D (1983) for explanation of effect of suspensions on testing requirements for primary industry categories.

¹The pollutants in each fraction are listed in Item V-C.

X = Testing required.

- = Testing not required.

**TOXIC POLLUTANTS AND HAZARDOUS SUBSTANCES
REQUIRED TO BE IDENTIFIED BY APPLICANTS IF EXPECTED TO BE PRESENT**

TOXIC POLLUTANT

Asbestos

HAZARDOUS SUBSTANCES

Acetaldehyde
 Allyl alcohol
 Allyl chloride
 Amyl acetate
 Aniline
 Benzonitrile
 Benzyl chloride
 Butyl acetate
 Butylamine
 Captan
 Carbaryl
 Carbofuran
 Carbon disulfide
 Chlorpyrifos
 Coumaphos
 Cresol
 Crotonaldehyde
 Cyclohexane
 2,4-D (2,4-Dichlorophenoxyacetic acid)
 Diazinon
 Dicamba
 Dichlobenil
 Dichlone
 2,2-Dichloropropionic acid

HAZARDOUS SUBSTANCES

Dichlorvos
 Diethyl amine
 Dimethyl amine
 Dinitrobenzene
 Diquat
 Disulfoton
 Diuron
 Epichlorohydrin
 Ethion
 Ethylene diamine
 Ethylene dibromide
 Formaldehyde
 Furfural
 Guthion
 Isoprene
 Isopropanolamine
 Kelthane
 Kepone
 Malathion
 Mercaptodimethur
 Methoxychlor
 Methyl mercaptan
 Methyl methacrylate
 Methyl parathion
 Mevinphos
 Mexacarbate
 Monoethyl amine
 Monomethyl amine

HAZARDOUS SUBSTANCES

Naled
 Napthenic acid
 Nitrotoluene
 Parathion
 Phenolsulfonate
 Phosgene
 Propargite
 Propylene oxide
 Pyrethrins
 Quinoline
 Resorcinol
 Strontium
 Strychnine
 Styrene
 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)
 TDE (Tetrachlorodiphenyl ethane)
 2,4,5-TP [2-(2,4,5-Trichlorophenoxy) propanoic acid]
 Trichlorofon
 Triethanolamine
 Triethylamine
 Trimethylamine
 Uranium
 Vanadium
 Vinyl acetate
 Xylene
 Xylenol
 Zirconium

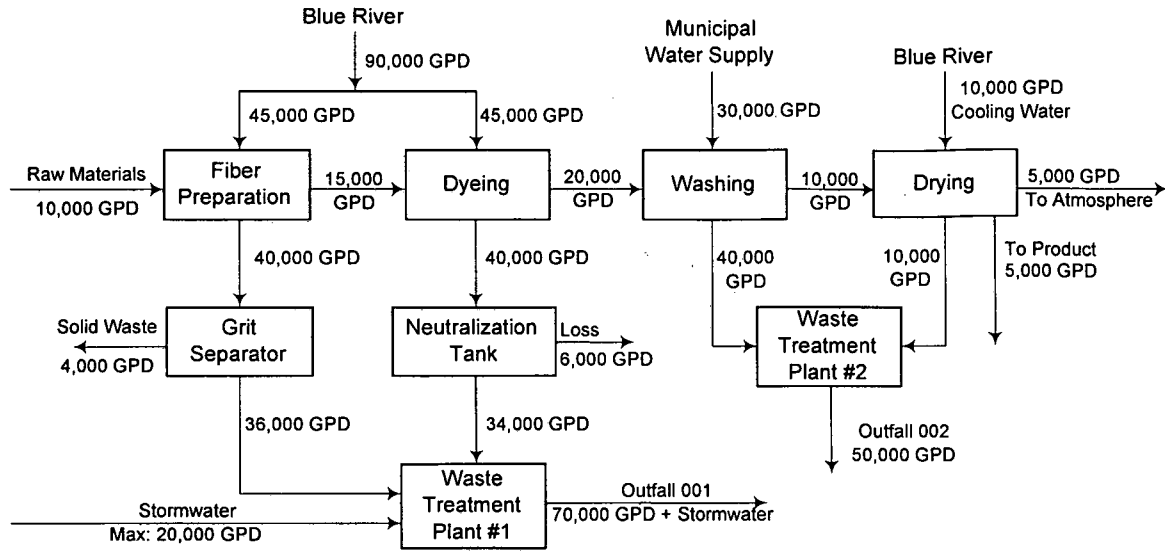
HAZARDOUS SUBSTANCES

1. Acetaldehyde
2. Acetic acid
3. Acetic anhydride
4. Acetone cyanohydrin
5. Acetyl bromide
6. Acetyl chloride
7. Acrolein
8. Acrylonitrile
9. Adipic acid
10. Aldrin
11. Allyl alcohol
12. Allyl chloride
13. Aluminum sulfate
14. Ammonia
15. Ammonium acetate
16. Ammonium benzoate
17. Ammonium bicarbonate
18. Ammonium bichromate
19. Ammonium bifluoride
20. Ammonium bisulfite
21. Ammonium carbamate
22. Ammonium carbonate
23. Ammonium chloride
24. Ammonium chromate
25. Ammonium citrate
26. Ammonium fluoroborate
27. Ammonium fluoride
28. Ammonium hydroxide
29. Ammonium oxalate
30. Ammonium silicofluoride
31. Ammonium sulfamate
32. Ammonium sulfide
33. Ammonium sulfite
34. Ammonium tartrate
35. Ammonium thiocyanate
36. Ammonium thiosulfate
37. Amyl acetate
38. Aniline
39. Antimony pentachloride
40. Antimony potassium tartrate
41. Antimony tribromide
42. Antimony trichloride
43. Antimony trifluoride
44. Antimony trioxide
45. Arsenic disulfide
46. Arsenic pentoxide
47. Arsenic trichloride
48. Arsenic trioxide
49. Arsenic trisulfide
50. Barium cyanide
51. Benzene
52. Benzoic acid
53. Benzoinitrile
54. Benzoyl chloride
55. Benzyl chloride
56. Beryllium chloride
57. Beryllium fluoride
58. Beryllium nitrate
59. Butylacetate
60. n-Butylphthalate
61. Butylamine
62. Butyric acid
63. Cadmium acetate
64. Cadmium bromide
65. Cadmium chloride
66. Calcium arsenate
67. Calcium arsenite
68. Calcium carbide
69. Calcium chromate
70. Calcium cyanide
71. Calcium dodecylbenzenesulfonate
72. Calcium hypochlorite
73. Captan
74. Carbaryl
75. Carbofuran
76. Carbon disulfide
77. Carbon tetrachloride
78. Chlordane
79. Chlorine
80. Chlorobenzene
81. Chloroform
82. Chloropyrifos
83. Chlorosulfonic acid
84. Chromic acetate
85. Chromic acid
86. Chromic sulfate
87. Chromous chloride
88. Cobaltous bromide
89. Cobaltous formate
90. Cobaltous sulfamate
91. Coumaphos
92. Cresol
93. Crotonaldehyde
94. Cupric acetate
95. Cupric acetoarsenite
96. Cupric chloride
97. Cupric nitrate
98. Cupric oxalate
99. Cupric sulfate
100. Cupric sulfate ammoniated
101. Cupric tartrate
102. Cyanogen chloride
103. Cyclohexane
104. 2,4-D acid (2,4- Dichlorophenoxyacetic acid)
105. 2,4-D esters (2,4- Dichlorophenoxyacetic acid esters)
106. DDT
107. Diazinon
108. Dicamba
109. Dichlobenil
110. Dichlone
111. Dichlorobenzene
112. Dichloropropane
113. Dichloropropene
114. Dichloropropene-dichloropropane mix
115. 2,2-Dichloropropionic acid
116. Dichlorvos
117. Dieldrin
118. Diethylamine
119. Dimethylamine
120. Dinitrobenzene
121. Dinitrophenol
122. Dinitrotoluene
123. Diquat
124. Disulfoton
125. Diuron
126. Dodecylbenzenesulfonic acid
127. Endosulfan
128. Endrin
129. Epichlorohydrin
130. Ethion
131. Ethylbenzene
132. Ethylenediamine
133. Ethylene dibromide
134. Ethylene dichloride
135. Ethylene diaminetetracetic acid (EDTA)
136. Ferric ammonium citrate
137. Ferric ammonium oxalate
138. Ferric chloride
139. Ferric fluoride
140. Ferric nitrate
141. Ferric sulfate
142. Ferrous ammonium sulfate
143. Ferrous chloride
144. Ferrous sulfate
145. Formaldehyde
146. Formic acid
147. Fumaric acid
148. Furfural
149. Guthion
150. Heptachlor
151. Hexachlorocyclopentadiene
152. Hydrochloric acid
153. Hydrofluoric acid
154. Hydrogen cyanide
155. Hydrogen sulfide
156. Isoprene
157. Isopropanolamine dodecylbenzenesulfonate
158. Kelthane
159. Kepone
160. Lead acetate
161. Lead arsenate
162. Lead chloride
163. Lead fluoborate
164. Lead flourite
165. Lead iodide
166. Lead nitrate
167. Lead stearate
168. Lead sulfate
169. Lead sulfide
170. Lead thiocyanate
171. Lindane
172. Lithium chromate
173. Malathion
174. Maleic acid
175. Maleic anhydride
176. Mercaptodimethur
177. Mercuric cyanide
178. Mercuric nitrate
179. Mercuric sulfate
180. Mercuric thiocyanate
181. Mercurous nitrate
182. Methoxychlor
183. Methyl mercaptan
184. Methyl methacrylate
185. Methyl parathion
186. Mevinphos
187. Mexacarbate
188. Monoethylamine
189. Monomethylamine
190. Naled
191. Naphthalene
192. Naphthenic acid
193. Nickel ammonium sulfate
194. Nickel chloride
195. Nickel hydroxide
196. Nickel nitrate
197. Nickel sulfate
198. Nitric acid
199. Nitrobenzene
200. Nitrogen dioxide
201. Nitrophenol
202. Nitrotoluene
203. Paraformaldehyde
204. Parathion
205. Pentachlorophenol
206. Phenol
207. Phosgene
208. Phosphoric acid
209. Phosphorus
210. Phosphorus oxychloride
211. Phosphorus pentasulfide
212. Phosphorus trichloride
213. Polychlorinated biphenyls (PCB)
214. Potassium arsenate
215. Potassium arsenite
216. Potassium bichromate

HAZARDOUS SUBSTANCES

- | | | |
|-------------------------------------|--|-----------------------------------|
| 217. Potassium chromate | 247. Sodium selenite | 270. Trimethylamine |
| 218. Potassium cyanide | 248. Strontium chromate | 271. Uranyl acetate |
| 219. Potassium hydroxide | 249. Strychnine | 272. Uranyl nitrate |
| 220. Potassium permanganate | 250. Styrene | 273. Vanadium penoxide |
| 221. Propargite | 251. Sulfuric acid | 274. Vanadyl sulfate |
| 222. Propionic acid | 252. Sulfur monochloride | 275. Vinyl acetate |
| 223. Propionic anhydride | 253. 2,4,5-T acid (2,4,5-Trichlorophenoxyacetic acid) | 276. Vinylidene chloride |
| 224. Propylene oxide | 254. 2,4,5-T amines (2,4,5-Trichlorophenoxy acetic acid amines) | 277. Xylene |
| 225. Pyrethrins | 255. 2,4,5-T esters (2,4,5-Trichlorophenoxy acetic acid esters) | 278. Xylenol |
| 226. Quinoline | 256. 2,4,5-T salts (2,4,5-Trichlorophenoxy acetic acid salts) | 279. Zinc acetate |
| 227. Resorcinol | 257. 2,4,5-TP acid (2,4,5-Trichlorophenoxy propanoic acid) | 280. Zinc ammonium chloride |
| 228. Selenium oxide | 258. 2,4,5-TP acid esters (2,4,5-Trichlorophenoxy propanoic acid esters) | 281. Zinc borate |
| 229. Silver nitrate | 259. TDE (Tetrachlorodiphenyl ethane) | 282. Zinc bromide |
| 230. Sodium | 260. Tetraethyl lead | 283. Zinc carbonate |
| 231. Sodium arsenate | 261. Tetraethyl pyrophosphate | 284. Zinc chloride |
| 232. Sodium arsenite | 262. Thallium sulfate | 285. Zinc cyanide |
| 233. Sodium bichromate | 263. Toluene | 286. Zinc fluoride |
| 234. Sodium bifluoride | 264. Toxaphene | 287. Zinc formate |
| 235. Sodium bisulfite | 265. Trichlorofon | 288. Zinc hydrosulfite |
| 236. Sodium chromate | 266. Trichloroethylene | 289. Zinc nitrate |
| 237. Sodium cyanide | 267. Trichlorophenol | 290. Zinc phenolsulfonate |
| 238. Sodium dodecylbenzenesulfonate | 268. Triethanolamine | 291. Zinc phosphide |
| 239. Sodium fluoride | 269. dodecylbenzenesulfonate | 292. Zinc silicofluoride |
| 240. Sodium hydrosulfide | 269. Triethylamine | 293. Zinc sulfate |
| 241. Sodium hydroxide | | 294. Zirconium nitrate |
| 242. Sodium hypochlorite | | 295. Zirconium potassium flouride |
| 243. Sodium methylate | | 296. Zirconium sulfate |
| 244. Sodium nitrite | | 297. Zirconium tetrachloride |
| 245. Sodium phosphate (dibasic) | | |
| 246. Sodium phosphate (tribasic) | | |

LINE DRAWING



Schematic of Water Flow
Brown Mills, Inc.
City, County, State

Figure 2C-1

EPA I.D. NUMBER (copy from Item 1 of Form 1)
 ARD035466648

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

Please print or type in the unshaded areas only.

FORM
2C
 NPDES



U.S. ENVIRONMENTAL PROTECTION AGENCY
 APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER
 EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURE OPERATIONS
 Consolidated Permits Program

I. OUTFALL LOCATION

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

A. OUTFALL NUMBER (list)	B. LATITUDE			C. LONGITUDE			D. RECEIVING WATER (name)
	1. DEG.	2. MIN.	3. SEC.	1. DEG.	2. MIN.	3. SEC.	
001	33.00	6.00	45.00	92.00	2.00	17.00	Ouachita River via Outfall 002
002	33.00	2.00	0.00	92.00	4.00	24.00	Ouachita River

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

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

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

1. OUTFALL NO. (list)	2. OPERATION(S) CONTRIBUTING FLOW		3. TREATMENT		
	a. OPERATION (list)	b. AVERAGE FLOW (include units)	a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1	
001 & 002	1) Paper Operations:	45.5 MGD	Screening	1T	
	-#1 & 2 Paper Machines		Primary Clarifier	1U	
	-#3 Board Machine		Settling for ash removal	1U	
	#4,5,6,7 & 8 Tissue Machines		Equalization		
	-Pulp Mill		Periodic pH adjustment	2K	
	-Bleach Plant		Aerated lagoon with solids settling and dredged	3B	1U
	-Recovery Area		solids basin	5T	
	-Utilities Area		Sludge Dewatering (Dewatered sludge is mixed	5R	5Q
	-Mill Sanitary		with ash, sand and grit and used as fill		
	-Landfill Leachate		material in an ADEQ approved sludge pond		
	2) Building Products	1.6 MGD	closure) (formerly ADPC&E 1995)		
	Plywood				
	Studmill				
	Offsite GP Building Products				
3) Chemical Plant	0.4 MGD				
Urea & Phenol Formaldehyde Resins					
Formaldehyde Production					
Tall Oil Fractionization					
Offsite GP Chemical plants					
4) Site Stormwater	Seasonal				
5) City of Crossett (POTW)	1.0 MGD				
6) Product Stewardship Wastewater					

OFFICIAL USE ONLY (effluent guidelines sub-categories)

CONTINUED FROM THE FRONT

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?
 YES (complete the following table) NO (go to Section III)

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

III. PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?
 YES (complete Item III-B) NO (go to Section IV)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measure of operation)?
 YES (complete Item III-C) NO (go to Section IV)

C. If you answered "yes" to Item III-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

1. AVERAGE DAILY PRODUCTION			2. AFFECTED OUTFALLS (list outfall numbers)
a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. (specify)	
653	Machine Dried TPD	1) Bleached Papergrade Kraft (40CFR430.20) Fine Paper Paperboard Tissue 2) Plywood (40CFR429.40) 3) Studmill (40CFR429.120) 4) Chemical Plant (40CFR414.50, 414.60, 454.40)	001 & 002
596	Machine Dried TPD		
751	Machine Dried TPD		
.6	mm sqft/day 3/8" basis		
133,000	Board Ft/day		
18.8	Tons/Day	Spray Dry Resin	
70.5	Tons/Day	Formaldehyde, 50%	
18.1	Tons/Day	Urea-Formaldehyde Concentrate	
326.8	Tons/Day	Tall Oil Fractionation	
79.3	Tons/Day	Rosin Size/Derivatives	
181	Tons/Day	Phenol Formaldehyde Resin	
15	Tons/Day	Urea Formaldehyde Resin	
270	Tons/Day	Wet Strength Resin	

IV. IMPROVEMENTS

A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operations of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.
 YES (complete the following table) NO (go to Item IV-B)

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

OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction.
 MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED

CONTINUED FROM PAGE 2

V. INTAKE AND EFFLUENT CHARACTERISTICS

B, & C: See instructions before proceeding - Complete one set of tables for each outfall - Annotate the outfall number in the space provided.
NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9.
D. Use the space below to list any of the pollutants listed in Table 2c-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE
Methyl Mercaptan	Reduced sulfur compounds may be present due to water scrubbing of air emission streams, losses of pulping liquor or conversion of sulfate to a reduced sulfur compound in the wastewater.		
Formaldehyde	Resin Manufacturing		
Epichlorohydrin	Wet Strength Production		
	*No aqueous data for these pollutants		

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

Is any pollutant listed in Item V-C a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?
 YES (list all such pollutants below) NO (go to Item VI-B)

CONTINUED FROM THE FRONT

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

YES (identify the test(s) and describe their purposes below)

NO (go to Section VIII)

Chronic and acute toxicity testing is conducted quarterly as required by the current NPDES permit # AR0001210.

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

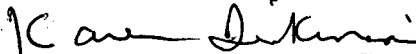
YES (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)

NO (go to Section IX)

A. NAME	B. ADDRESS	C. TELEPHONE (area code & no.)	D. POLLUTANTS ANALYZED (list)
Ana-Lab Corp.	P.O. Box 9000 Kilgore, TX 75663	(903) 984-5914	All in Item V Parts B & C except Dioxin and Ammonia (as N) in Part A.
Analytical Perspectives	2714 Exchange Dr Wilmington, NC 28405	(910) 794-1613	Dioxin

IX. CERTIFICATION

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

A. NAME & OFFICIAL TITLE (type or print) Karen R. Dickinson, Vice President	B. PHONE NO. (area code & no.) (870) 567-8310
C. SIGNATURE 	D. DATE SIGNED 2/24/09

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

A I.D. NUMBER (copy from Item 1 of Form 1)
ARD035466648

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)	OUTFALL NO. 001
--	--------------------

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

1. POLLUTANT	2. EFFLUENT						3. UNITS <i>(specify if blank)</i>		4. INTAKE <i>(optional)</i>			
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE <i>(if available)</i>		c. LONG TERM AVRG. VALUE <i>(if available)</i>		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand (BOD)	91.3	36,703	60.3	22,908	36.3	13,924	469	mg/L	lb/d			
b. Chemical Oxygen Demand (COD)	300	114,091	N/A	N/A	N/A	N/A	1	mg/L	lb/d			
c. Total Organic Carbon (TOC)	380.5	135,186	N/A	N/A	105.8	40,542	1074	mg/L	lb/d			
d. Total Suspended Solids (TSS)	116	53,978	81	30,127	43.5	16,669	469	mg/L	lb/d			
e. Ammonia (as N)	2.09	795	N/A	N/A	N/A	N/A	1	mg/L	lb/d			
f. Flow	VALUE 100.3		VALUE 58.5		VALUE 46.3		1095		MGD	VALUE		
g. Temperature (winter)	VALUE Ambient		VALUE Ambient		VALUE N/A				°C	VALUE		
h. Temperature (summer)	VALUE Ambient		VALUE Ambient		VALUE N/A				°C	VALUE		
i. pH	MINIMUM 7.2	MAXIMUM 8.3	MINIMUM 7.7	MAXIMUM 8.0			469	STANDARD UNITS				

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

1. POLLUTANT AND CAS NO. <i>(if available)</i>	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE <i>(optional)</i>			
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE <i>(if available)</i>		c. LONG TERM AVRG. VALUE <i>(if available)</i>		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)	X		ND					1	mg/L					
b. Chlorine, Total Residual	X		ND					1	mg/L					
c. Color	X		2200					320	Unit	N/A				
d. Fecal Coliform	X		ND					1	mg/L					
e. Fluoride (16984-48-8)	X		ND					1	mg/L					
f. Nitrate-Nitrite (as N)	X		0.18	68.5				1	mg/L	lb/d				

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS			5. INTAKE (optional)		
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
g. Nitrogen, Total Organic (as N)	X		3.4	1,293					1	mg/L	1b/d			
h. Oil and Grease	X		ND						1	mg/L				
i. Phosphorus (as P), Total (7723-14-0)	X		1.98	753					1	mg/L	1b/d			
j. Radioactivity														
(1) Alpha, Total		X												
(2) Beta, Total		X												
(3) Radium, Total		X												
(4) Radium 226, Total		X												
k. Sulfate (as SO ₄) (14808-79-8)	X		234	88,991					1	mg/L	1b/d			
l. Sulfide (as S)	X		0.08	30.4					1	mg/L	1b/d			
m. Sulfite (as SO ₃) (14265-45-3)	X		ND						1	mg/L				
n. Surfactants	X		ND						1	mg/L				
o. Aluminum, Total (7429-90-5)	X		0.0157	5.97					1	mg/L	1b/d			
p. Barium, Total (7440-39-3)	X		313	119					1	ug/L	1b/d			
q. Boron, Total (7440-42-8)	X		87.2	33.2					1	ug/L	1b/d			
r. Cobalt, Total (7440-48-4)	X		2.83	1.08					1	ug/L	1b/d			
s. Iron, Total (7439-89-6)	X		0.108	41.1					1	mg/L	1b/d			
t. Magnesium, Total (7439-95-4)	X		10.7	4,069					1	mg/L	1b/d			
u. Molybdenum, Total (7439-98-7)	X		7.35	2.80					1	ug/L	1b/d			
v. Manganese, Total (7439-96-5)	X		1760	669					1	ug/L	1b/d			
w. Tin, Total (7440-31-5)	X		ND						1	mg/L				
x. Titanium, Total (7440-32-6)	X		ND						1	mg/L				

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

OUTFALL NUMBER

ARD035466648

001

CONTINUED FROM PAGE 3 OF FORM 2-C

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

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)	X		X	ND						1	ug/L				
2M. Arsenic, Total (7440-38-2)	X	X		3.56	1.35					1	ug/L	1b/d			
3M. Beryllium, Total (7440-41-7)	X		X	ND						1	ug/L				
4M. Cadmium, Total (7440-43-9)	X	X		ND						1	ug/L				
5M. Chromium, Total (7440-47-3)	X	X		4.30	1.34					1	ug/L	1b/d			
6M. Copper, Total (7440-50-8)	X	X		6.79	2.58					1	ug/L	1b/d			
7M. Lead, Total (7439-92-1)	X	X		2.37	0.901					1	ug/L	1b/d			
8M. Mercury, Total (7439-97-6)	X	X		0.00833	0.003					1	ug/L	1b/d			
9M. Nickel, Total (7440-02-0)	X	X		7.07	2.69					1	ug/L	1b/d			
10M. Selenium, Total (7782-49-2)	X	X		2.22	0.844					1	ug/L	1b/d			
11M. Silver, Total (7440-22-4)	X	X		3.58	1.36					1	ug/L	1b/d			
12M. Thallium, Total (7440-28-0)	X	X		2.96	1.13					1	ug/L	1b/d			
13M. Zinc, Total (7440-66-6)	X	X		373	142					1	ug/L	1b/d			
14M. Cyanide, Total (57-12-5)	X		X	ND						1	mg/L				
15M. Phenols, Total	X	X		0.0445	16.9					1	mg/L				
DIOXIN															
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)	X		X	DESCRIBE RESULTS											
				ND											

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

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)															
22V. Methylene Chloride (75-09-2)	X	X		183	69.6					1	ug/L	1b/d			
23V. 1,1,2,2-Tetrachloroethane (79-34-5)	X		X	ND						1	ug/L				
24V. Tetrachloroethylene (127-18-4)	X		X	ND						1	ug/L				
25V. Toluene (108-88-3)	X		X	ND						1	ug/L				
26V. 1,2-Trans-Dichloroethylene (156-60-5)	X		X	ND						1	ug/L				
27V. 1,1,1-Trichloroethane (71-55-6)	X		X	ND						1	ug/L				
28V. 1,1,2-Trichloroethane (79-00-5)	X		X	ND						1	ug/L				
29V Trichloroethylene (79-01-6)	X		X	ND						1	ug/L				
30V. Trichlorofluoromethane (75-69-4)	X		X	ND						1	ug/L				
31V. Vinyl Chloride (75-01-4)	X		X	ND						1	ug/L				
GC/MS FRACTION - ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)	X		X	ND						1	ug/L				
2A. 2,4-Dichlorophenol (120-83-2)	X		X	ND						1	ug/L				
3A. 2,4-Dimethylphenol (105-67-9)	X		X	ND						1	ug/L				
4A. 4,6-Dinitro-O-Cresol (534-52-1)	X		X	ND						1	ug/L				
5A. 2,4-Dinitrophenol (51-28-5)	X		X	ND						1	ug/L				
6A. 2-Nitrophenol (88-75-5)	X		X	ND						1	ug/L				
7A. 4-Nitrophenol (100-02-7)	X		X	ND						1	ug/L				
8A. P-Chloro-M-Cresol (59-50-7)	X		X	ND						1	ug/L				
9A. Pentachlorophenol (87-86-5)	X		X	ND						1	ug/L				
10A. Phenol (108-95-2)	X	X		ND						1	ug/L				
11A. 2,4,6-Trichlorophenol (88-05-2)	X		X	ND						1	ug/L				

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)	X		X	ND						1	ug/L				
2B. Acenaphthylene (208-96-8)	X		X	ND						1	ug/L				
3B. Anthracene (120-12-7)	X		X	ND						1	ug/L				
4B. Benzidine (92-87-5)	X		X	ND						1	ug/L				
5B. Benzo (a) Anthracene (56-55-3)	X		X	ND						1	ug/L				
6B. Benzo (a) Pyrene (50-32-8)	X		X	ND						1	ug/L				
7B. 3,4-Benzo-fluoranthene (205-99-2)	X		X	ND						1	ug/L				
8B. Benzo (ghi) Perylene (191-24-2)	X		X	ND						1	ug/L				
9B. Benzo (k) Fluoranthene (207-08-9)	X		X	ND						1	ug/L				
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	X		X	ND						1	ug/L				
11B. Bis (2-Chloroethyl) Ether (111-44-4)	X		X	ND						1	ug/L				
12B. Bis (2-Chloroisopropyl) Ether (102-80-1)	X		X	ND						1	ug/L				
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	X	X		13.3	5.06					1	ug/L	1b/d			
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	X		X	ND						1	ug/L				
15B. Butyl Benzyl Phthalate (85-68-7)	X		X	ND						1	ug/L				
16B. 2-Chloronaphthalene (91-58-7)	X		X	ND						1	ug/L				
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	X		X	ND						1	ug/L				
18B. Chrysene (218-01-9)	X		X	ND						1	ug/L				
19B. Dibenzo (a,h) Anthracene (53-70-3)	X		X	ND						1	ug/L				
20B. 1,2-Dichlorobenzene (95-50-1)	X		X	ND						1	ug/L				
21B. 1,3-Di-chlorobenzene (541-73-1)	X		X	ND						1	ug/L				

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
22B. 1,4-Dichlorobenzene (106-46-7)	X		X	ND						1	ug/L				
23B. 3,3-Dichlorobenzidine (91-94-1)	X		X	ND						1	ug/L				
24B. Diethyl Phthalate (84-66-2)	X		X	ND						1	ug/L				
25B. Dimethyl Phthalate (131-11-3)	X		X	ND						1	ug/L				
26B. Di-N-Butyl Phthalate (84-74-2)	X		X	ND						1	ug/L				
27B. 2,4-Dinitrotoluene (121-14-2)	X		X	ND						1	ug/L				
28B. 2,6-Dinitrotoluene (606-20-2)	X		X	ND						1	ug/L				
29B. Di-N-Octyl Phthalate (117-84-0)	X		X	ND						1	ug/L				
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	X		X	ND						1	ug/L				
31B. Fluoranthene (206-44-0)	X		X	ND						1	ug/L				
32B. Fluorene (86-73-7)	X		X	ND						1	ug/L				
33B. Hexachlorobenzene (118-74-1)	X		X	ND						1	ug/L				
34B. Hexachlorobutadiene (87-68-3)	X		X	ND						1	ug/L				
35B. Hexachlorocyclopentadiene (77-47-4)	X		X	ND						1	ug/L				
36B Hexachloroethane (67-72-1)	X		X	ND						1	ug/L				
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)	X		X	ND						1	ug/L				
38B. Isophorone (78-59-1)	X		X	ND						1	ug/L				
39B. Naphthalene (91-20-3)	X		X	ND						1	ug/L				
40B. Nitrobenzene (98-95-3)	X		X	ND						1	ug/L				
41B. N-Nitrosodimethylamine (62-75-9)	X		X	ND						1	ug/L				
42B. N-Nitrosodi-N-Propylamine (621-64-7)	X		X	ND						1	ug/L				

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
43B. N-Nitrosodiphenylamine (86-30-6)	X		X	ND						1	ug/L				
44B. Phenanthrene (85-01-8)	X		X	ND						1	ug/L				
45B. Pyrene (129-00-0)	X		X	ND						1	ug/L				
46B. 1,2,4-Trichlorobenzene (120-82-1)	X		X	ND						1	ug/L				
GC/MS FRACTION - PESTICIDES															
1P. Aldrin (309-00-2)	X		X	ND						1	ug/L				
2P. α-BHC (319-84-6)	X	X		0.0501	0.0191					1	ug/L	lb/d			
3P. β-BHC (319-85-7)	X		X	ND						1	ug/L				
4P. γ-BHC (58-89-9)	X	X		0.0642	0.0244					1	ug/L	lb/d			
5P. δ-BHC (319-86-8)	X	X		0.0688	0.0262					1	ug/L	lb/d			
6P. Chlordane (57-74-9)	X		X	ND						1	ug/L				
7P. 4,4'-DDT (50-29-3)	X		X	ND						1	ug/L				
8P. 4,4'-DDE (72-55-9)	X		X	ND						1	ug/L				
9P. 4,4'-DDD (72-54-8)	X		X	ND						1	ug/L				
10P. Dieldrin (60-57-1)	X	X		ND						1	ug/L				
11P. α-Endosulfan (115-29-7)	X	X		ND						1	ug/L				
12P. β-Endosulfan (115-29-7)	X		X	ND						1	ug/L				
13P. Endosulfan Sulfate (1031-07-8)	X	X		0.0662	0.0252					1	ug/L	lb/d			
14P. Endrin (72-20-8)	X		X	ND						1	ug/L				
15P. Endrin Aldehyde (7421-93-4)	X	X		0.269	0.102					1	ug/L	lb/d			
16P. Heptachlor (76-44-8)	X		X	ND						1	ug/L				

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

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CONTINUED FROM PAGE V-8

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

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

A.I.D. NUMBER (copy from Item 1 of Form 1)
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V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)	OUTFALL NO. 002
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PART A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)			
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand (BOD)	47.7	10328	41.5	7964	17.6	5257	278	mg/L	lb/d			
b. Chemical Oxygen Demand (COD)	310	125,909	N/A	N/A	N/A	N/A	1	mg/L	lb/d			
c. Total Organic Carbon (TOC)	132.2	47,714	N/A	N/A	86.5	27,694	267	mg/L	lb/d			
d. Total Suspended Solids (TSS)	93	18658	60	10888	20.5	6046	278	mg/L	lb/d			
e. Ammonia (as N)	5.0	2031	N/A	N/A	N/A	N/A	1	mg/L	lb/d			
f. Flow	VALUE 107.4		VALUE 75.7		VALUE 40.1		626		MGD	VALUE		
g. Temperature (winter)	VALUE Ambient		VALUE Ambient		VALUE Ambient			°C		VALUE		
h. Temperature (summer)	VALUE Ambient		VALUE Ambient		VALUE Ambient			°C		VALUE		
i. pH	MINIMUM 7.3	MAXIMUM 8.4	MINIMUM 7.5	MAXIMUM 8.2			278	STANDARD UNITS				

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

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)	X		ND						1	mg/L	lb/d			
b. Chlorine, Total Residual	X		ND						1	mg/L	lb/d			
c. Color	X		768						12	Unit	N/A			
d. Fecal Coliform	X		30						1	#cfu/mL				
e. Fluoride (16984-48-8)	X		ND						1	mg/L	lb/d			
f. Nitrate-Nitrite (as N)	X		ND						1	mg/L	lb/d			

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
g. Nitrogen, Total Organic (as N)	X		6.04	2,453					1	mg/L	1b/d			
h. Oil and Grease	X		ND						1	mg/L				
i. Phosphorus (as P), Total (7723-14-0)	X		1.71	695					1	mg/L	1b/d			
j. Radioactivity														
(1) Alpha, Total		X												
(2) Beta, Total		X												
(3) Radium, Total		X												
(4) Radium 226, Total		X												
k. Sulfate (as SO ₄) (14808-79-8)	X		333	135,251					1	mg/L	1b/d			
l. Sulfide (as S)	X		0.0987	40.1					1	mg/L	1b/d			
m. Sulfite (as SO ₃) (14265-45-3)	X		ND						1	mg/L				
n. Surfactants	X		0.35	142					1	mg/L	1b/d			
o. Aluminum, Total (7429-90-5)	X		1.46	593					1	mg/L	1b/d			
p. Barium, Total (7440-39-3)	X		257	104					1	ug/L	1b/d			
q. Boron, Total (7440-42-8)	X		90.1	36.6					1	ug/L	1b/d			
r. Cobalt, Total (7440-48-4)	X		4.49	1.82					1	ug/L	1b/d			
s. Iron, Total (7439-89-6)	X		0.677	275					1	mg/L	1b/d			
t. Magnesium, Total (7439-95-4)	X		13.6	5,524					1	mg/L	1b/d			
u. Molybdenum, Total (7439-98-7)	X		3.73	1.51					1	ug/L	1b/d			
v. Manganese, Total (7439-96-5)	X		1740	707					1	ug/L	1b/d			
w. Tin, Total (7440-31-5)	X		ND						1	mg/L				
x. Titanium, Total (7440-32-6)	X		ND						1	mg/L				

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

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ARD035466648

002

CONTINUED FROM PAGE 3 OF FORM 2-C

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

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)	X		X	ND						1	ug/L				
2M. Arsenic, Total (7440-38-2)	X	X		ND						1	ug/L				
3M. Beryllium, Total (7440-41-7)	X		X	ND						1	ug/L				
4M. Cadmium, Total (7440-43-9)	X	X		1.17	0.475					1	ug/L	1b/d			
5M. Chromium, Total (7440-47-3)	X	X		5.66	2.30					1	ug/L	1b/d			
6M. Copper, Total (7440-50-8)	X	X		11.7	4.75					1	ug/L	1b/d			
7M. Lead, Total (7439-92-1)	X	X		3.13	1.27					1	ug/L	1b/d			
8M. Mercury, Total (7439-97-6)	X	X		0.009	0.0037					1	ug/L	1b/d			
9M. Nickel, Total (7440-02-0)	X	X		7.87	3.20					1	ug/L	1b/d			
10M. Selenium, Total (7782-49-2)	X	X		11.3	4.59					1	ug/L	1b/d			
11M. Silver, Total (7440-22-4)	X	X		ND						1	ug/L				
12M. Thallium, Total (7440-28-0)	X	X		ND						1	ug/L				
13M. Zinc, Total (7440-66-6)	X	X		251	102					1	ug/L	1b/d			
14M. Cyanide, Total (57-12-5)	X		X	ND						1	mg/L				
15M. Phenols, Total	X	X		ND						1	mg/L				
DIOXIN															
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)	X		X	DESCRIBE RESULTS											
				ND											

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

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)															
22V. Methylene Chloride (75-09-2)	X	X		ND						1	ug/L				
23V. 1,1,2,2-Tetrachloroethane (79-34-5)	X		X	ND						1	ug/L				
24V. Tetrachloroethylene (127-18-4)	X		X	ND						1	ug/L				
25V. Toluene (108-88-3)	X		X	ND						1	ug/L				
26V. 1,2-Trans-Dichloroethylene (156-60-5)	X		X	ND						1	ug/L				
27V. 1,1,1-Trichloroethane (71-55-6)	X		X	ND						1	ug/L				
28V. 1,1,2-Trichloroethane (79-00-5)	X		X	ND						1	ug/L				
29V. Trichloroethylene (79-01-6)	X		X	ND						1	ug/L				
30V. Trichlorofluoromethane (75-69-4)	X		X	ND						1	ug/L				
31V. Vinyl Chloride (75-01-4)	X		X	ND						1	ug/L				
GC/MS FRACTION - ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)	X		X	ND						1	ug/L				
2A. 2,4-Dichlorophenol (120-83-2)	X		X	ND						1	ug/L				
3A. 2,4-Dimethylphenol (105-67-9)	X		X	ND						1	ug/L				
4A. 4,6-Dinitro-O-Cresol (534-52-1)	X		X	ND						1	ug/L				
5A. 2,4-Dinitrophenol (51-28-5)	X		X	ND						1	ug/L				
6A. 2-Nitrophenol (88-75-5)	X		X	ND						1	ug/L				
7A. 4-Nitrophenol (100-02-7)	X		X	ND						1	ug/L				
8A. P-Chloro-M-Cresol (59-50-7)	X		X	ND						1	ug/L				
9A. Pentachlorophenol (87-86-5)	X		X	ND						1	ug/L				
10A. Phenol (108-95-2)	X	X		ND						1	ug/L				
11A. 2,4,6-Trichlorophenol (88-05-2)	X		X	ND						1	ug/L				

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)	X		X	ND						1	ug/L				
2B. Acenaphthylene (208-96-8)	X		X	ND						1	ug/L				
3B. Anthracene (120-12-7)	X		X	ND						1	ug/L				
4B. Benzidine (92-87-5)	X		X	ND						1	ug/L				
5B. Benzo (a) Anthracene (56-55-3)	X		X	ND						1	ug/L				
6B. Benzo (a) Pyrene (50-32-8)	X		X	ND						1	ug/L				
7B. 3,4-Benzo-fluoranthene (205-99-2)	X		X	ND						1	ug/L				
8B. Benzo (ghi) Perylene (191-24-2)	X		X	ND						1	ug/L				
9B. Benzo (k) Fluoranthene (207-08-9)	X		X	ND						1	ug/L				
10B. Bis (2-Chloro-ethoxy) Methane (111-91-1)	X		X	ND						1	ug/L				
11B. Bis (2-Chloro-ethyl) Ether (111-44-4)	X		X	ND						1	ug/L				
12B. Bis (2-Chloroisopropyl) Ether (102-80-1)	X		X	ND						1	ug/L				
13B. Bis (2-Ethyl-hexyl) Phthalate (117-81-7)	X	X		2.87	1.17					1	ug/L	lb/d			
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	X		X	ND						1	ug/L				
15B. Butyl Benzyl Phthalate (85-68-7)	X		X	ND						1	ug/L				
16B. 2-Chloro-naphthalene (91-58-7)	X		X	ND						1	ug/L				
17B. 4-Chloro-phenyl Phenyl Ether (7005-72-3)	X		X	ND						1	ug/L				
18B. Chrysene (218-01-9)	X		X	ND						1	ug/L				
19B. Dibenzo (a,h) Anthracene (53-70-3)	X		X	ND						1	ug/L				
20B. 1,2-Dichloro-benzene (95-50-1)	X		X	ND						1	ug/L				
21B. 1,3-Di-chloro-benzene (541-73-1)	X		X	ND						1	ug/L				

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
22B. 1,4-Dichlorobenzene (106-46-7)	X		X	ND						1	ug/L				
23B. 3,3-Dichlorobenzidine (91-94-1)	X		X	ND						1	ug/L				
24B. Diethyl Phthalate (84-66-2)	X		X	ND						1	ug/L				
25B. Dimethyl Phthalate (131-11-3)	X		X	ND						1	ug/L				
26B. Di-N-Butyl Phthalate (84-74-2)	X		X	ND						1	ug/L				
27B. 2,4-Dinitrotoluene (121-14-2)	X		X	ND						1	ug/L				
28B. 2,6-Dinitrotoluene (606-20-2)	X		X	ND						1	ug/L				
29B. Di-N-Octyl Phthalate (117-84-0)	X		X	ND						1	ug/L				
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	X		X	ND						1	ug/L				
31B. Fluoranthene (206-44-0)	X		X	ND						1	ug/L				
32B. Fluorene (86-73-7)	X		X	ND						1	ug/L				
33B. Hexachlorobenzene (118-74-1)	X		X	ND						1	ug/L				
34B. Hexachlorobutadiene (87-68-3)	X		X	ND						1	ug/L				
35B. Hexachlorocyclopentadiene (77-47-4)	X		X	ND						1	ug/L				
36B Hexachloroethane (67-72-1)	X		X	ND						1	ug/L				
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)	X		X	ND						1	ug/L				
38B. Isophorone (78-59-1)	X		X	ND						1	ug/L				
39B. Naphthalene (91-20-3)	X		X	ND						1	ug/L				
40B. Nitrobenzene (98-95-3)	X		X	ND						1	ug/L				
41B. N-Nitrosodimethylamine (62-75-9)	X		X	ND						1	ug/L				
42B. N-Nitrosodi-N-Propylamine (621-64-7)	X		X	ND						1	ug/L				

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
43B. N-Nitrosodiphenylamine (86-30-6)	X		X	ND						1	ug/L				
44B. Phenanthrene (85-01-8)	X		X	ND						1	ug/L				
45B. Pyrene (129-00-0)	X		X	ND						1	ug/L				
46B. 1,2,4-Trichlorobenzene (120-82-1)	X		X	ND						1	ug/L				
GC/MS FRACTION - PESTICIDES															
1P. Aldrin (309-00-2)	X		X	ND						1	ug/L				
2P. α -BHC (319-84-6)	X	X		ND						1	ug/L				
3P. β -BHC (319-85-7)	X		X	ND						1	ug/L				
4P. γ -BHC (58-89-9)	X	X		0.0969	0.0394					1	ug/L	1b/d			
5P. δ -BHC (319-86-8)	X	X		0.0407	0.0165					1	ug/L	1b/d			
6P. Chlordane (57-74-9)	X		X	ND						1	ug/L				
7P. 4,4'-DDT (50-29-3)	X		X	ND						1	ug/L				
8P. 4,4'-DDE (72-55-9)	X		X	ND						1	ug/L				
9P. 4,4'-DDD (72-54-8)	X		X	ND						1	ug/L				
10P. Dieldrin (60-57-1)	X	X		0.113	0.0459					1	ug/L	1b/d			
11P. α -Endosulfan (115-29-7)	X	X		0.0211	0.0086					1	ug/L	1b/d			
12P. β -Endosulfan (115-29-7)	X		X	ND						1	ug/L				
13P. Endosulfan Sulfate (1031-07-8)	X	X		ND						1	ug/L				
14P. Endrin (72-20-8)	X		X	ND						1	ug/L				
15P. Endrin Aldehyde (7421-93-4)	X	X		ND						1	ug/L				
16P. Heptachlor (76-44-8)	X		X	ND						1	ug/L				

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

OUTFALL NUMBER

ARD035466648

001 & 002

CONTINUED FROM PAGE V-8

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

FORM 2F

Disclaimer

This is an updated PDF document that allows you to type your information directly into the form, print it, and save the completed form.

Note: This form can be viewed and saved only using Adobe Acrobat Reader version 7.0 or higher, or if you have the full Adobe Professional version.

Instructions:

1. Type in your information
2. Save file (if desired)
3. Print the completed form
4. Sign and date the printed copy
5. Mail it to the directed contact.

Continued from the Front

IV. Narrative Description of Pollutant Sources

A. For each outfall, provide an estimate of the area (include units) of impervious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall.

Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)	Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)
001	250 Acres	5000 acres	002	0	Greater than 10,000 acres

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas, and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

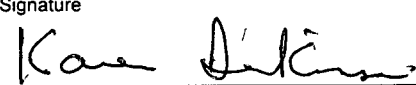
Most chemical storage areas are provided with secondary containment. Additionally, many chemicals are stored inside buildings or warehouses. On the manufacturing facility site chemical storage areas drain to the process sewers and these sewers are comingled with process wastewater discharge. The process sewers are routed to the wastewater treatment system and no sampling of segregated sorm water is possible.

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

Outfall Number	Treatment	List Codes from Table 2F-1
001 & 002	See page 1 of Form 2C	

V. Nonstormwater Discharges

A. I certify under penalty of law hat the outfall(s) covered by this application have been tested or evaluated for the presence of nonstormwater discharges, and that all nonstormwater discharged from these outfall(s) are identified in either an accompanying Form 2C or From 2E application for the outfall.

Name and Official Title (type or print)	Signature	Date Signed
Karen R. Dickinson, Vice President		2/24/00

B. Provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

See Form 2C

VI. Significant Leaks or Spills

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

No significant leaks or spills of toxic or hazardous pollutants in the last three years at the Crossett Complex.

VII. Discharge Information

A, B, C, & D: See instructions before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided.
Table VII-A, VII-B, VII-C are included on separate sheets numbers VII-1 and VII-2.

E. Potential discharges not covered by analysis – is any toxic pollutant listed in table 2F-2, 2F-3, or 2F-4, a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

Yes (list all such pollutants below)

No (go to Section IX)

VIII. Biological Toxicity Testing Data

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

Yes (list all such pollutants below)

No (go to Section IX)

Chronic and acute toxicity testing is conducted quarterly as required by the current NPDES permit # AR0001210.

IX. Contract Analysis Information

Were any of the analyses reported in Item VII performed by a contract laboratory or consulting firm?


Yes (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)

No (go to Section X)

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed
Environ	201 Summit View Dr., Suite 300, Brentwood, TN 37027	(615) 377-4775	Acute & Chronic toxicity analysis

X. Certification

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

A. Name & Official Title (Type Or Print) Karen R. Dickinson, Vice President	B. Area Code and Phone No. (870) 567-8310
C. Signature 	D. Date Signed 2/24/09

Instructions – Form 2F

Application for Permit to Discharge Storm Water Associated with Industrial Activity

Who Must File Form 2F

Form 2F must be completed by operators of facilities which discharge storm water associated with industrial activity or by operators of storm water discharges that EPA is evaluating for designation as a significant contributor of pollutants to waters of the United States, or as contributing to a violation of a water quality standard.

Operators of discharges which are composed entirely of storm water must complete Form 2F (EPA Form 3510-2F) in conjunction with Form 1 (EPA Form 3510-1).

Operators of discharges of storm water which are combined with process wastewater (process wastewater is water that comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, waste product, or wastewater) must complete and submit Form 2F, Form 1, and Form 2C (EPA Form 3510-2C).

Operators of discharges of storm water which are combined with nonprocess wastewater (nonprocess wastewater includes noncontact cooling water and sanitary wastes which are not regulated by effluent guidelines or a new source performance standard, except discharges by educational, medical, or commercial chemical laboratories) must complete Form 1, Form 2F, and Form 2E (EPA Form 3510 2E).

Operators of new sources or new discharges of storm water associated with industrial activity which will be combined with other nonstormwater new sources or new discharges must submit Form 1, Form 2F, and Form 2D (EPA Form 3510-2D).

Where to File Applications

The application forms should be sent to the EPA Regional Office which covers the State in which the facility is located. Form 2F must be used only when applying for permits in States where the NPDES permits program is administered by EPA. For facilities located in States which are approved to administer the NPDES permits program, the State environmental agency should be contacted for proper permit application forms and instructions.

Information on whether a particular program is administered by EPA or by a State agency can be obtained from your EPA Regional Office. Form 1, Table 1 of the "General Instructions" lists the addresses of EPA Regional Offices and the States within the jurisdiction of each Office.

Completeness

Your application will not be considered complete unless you answer every question on this form and on Form 1. If an item does not apply to you, enter "NA" (for not applicable) to show that you considered the question.

Public Availability of Submitted Information

You may not claim as confidential any information required by this form or Form 1, whether the information is reported on the forms or in an attachment. Section 402(j) of the Clean Water Act requires that all permit applications will be available to the public. This information will be made available to the public upon request.

Any information you submit to EPA which goes beyond that required by this form, Form 1, or Form 2C you may claim as confidential, but claims for information which are effluent data will be denied.

If you do not assert a claim of confidentiality at the time of submitting the information, EPA may make the information public without further notice to you. Claims of confidentiality will be handled in accordance with EPA's business confidentiality regulations at 40 CFR Part 2.

Definitions

All significant terms used in these instructions and in the form are defined in the glossary found in the General Instructions which accompany Form 1.

EPA ID Number

Fill in your EPA Identification Number at the top of each odd numbered page of Form 2F. You may copy this number directly from item I of Form 1.

Item I

You may use the map you provided for item XI of Form 1 to determine the latitude and longitude of each of your outfalls and the name of the receiving water.

Item 11-A

If you check "yes" to this question, complete all parts of the chart, or attach a copy of any previous submission you have made to EPA containing the same information.

Item 11-B

You are not required to submit a description of future pollution control projects if you do not wish to or if none is planned.

Item III

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map is unavailable) depicting the facility including:

each of its drainage and discharge structures;

the drainage area of each storm water outfall;

paved areas and building within the drainage area of each storm water outfall, each known past or present areas used for outdoor storage or disposal of significant materials, each existing structural control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied;

each of its hazardous waste treatment, storage or disposal facilities (including each area not required to have a RCRA permit which is used for accumulating hazardous waste for less than 90 days under 40 CFR 262.34);

each well where fluids from the facility are injected underground; and

springs, and other surface water bodies which receive storm water discharges from the facility;

Item IV-A

For each outfall, provide an estimate of the area drained by the outfall which is covered by impervious surfaces. For the purpose of this application, impervious surfaces are surfaces where storm water runs off at rates that are significantly higher than background rates (e.g., predevelopment levels) and include paved areas, building roofs, parking lots, and roadways. Include an estimate of the total area (including all impervious and pervious areas) drained by each outfall. The site map required under item III can be used to estimate the total area drained by each outfall.

Item IV-B

Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored, or disposed in a manner to allow exposure to storm water; method of treatment, storage or disposal of these materials; past and present materials management practices employed, in the last three years, to minimize contact by these materials with storm water runoff; materials loading and access areas; and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied. Significant materials should be identified by chemical name, form (e.g., powder, liquid, etc.), and type of container or treatment unit. Indicate any materials treated, stored, or disposed of together. "Significant materials" includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101 (14) of CERCLA; any chemical the facility is required to report pursuant to Section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.

Item IV-C

For each outfall, structural controls include structures which enclose material handling or storage areas, covering materials, berms, dikes, or diversion ditches around manufacturing, production, storage or treatment units, retention ponds, etc. Nonstructural controls include practices such as spill prevention plans, employee training, visual inspections, preventive maintenance, and housekeeping measures that are used to prevent or minimize the potential for releases of pollutants.

Item V

Provide a certification that all outfalls that should contain storm water discharges associated with industrial activity have been tested or evaluated for the presence of non-storm water discharges which are not covered by an NPDES permit. Tests for such non-storm water discharges may include smoke tests, fluorometric dye tests, analysis of accurate schematics, as well as other appropriate tests. Part B must include a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test. All non-storm water discharges must be identified in a Form 2C or Form 2E which must accompany this application (see beginning of instructions under section titled "Who Must File Form 2F" for a description of when Form 2C and Form 2E must be submitted).

Item VI

Provide a description of existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years.

Item VII-A, B, and C

These items require you to collect and report data on the pollutants discharged for each of your outfalls. Each part of this item addresses a different set of pollutants and must be completed in accordance with the specific instructions for that part. The following general instructions apply to the entire item.

General Instructions

Part A requires you to report at least one analysis for each pollutant listed. Parts B and C require you to report analytical data in two ways. For some pollutants addressed in Parts B and C, if you know or have reason to know that the pollutant is present in your discharge, you may be required to list the pollutant and test (sample and analyze) and report the levels of the pollutants in your discharge. For all other pollutants addressed in Parts B and C, you must list the pollutant if you know or have reason to know that the pollutant is present in the discharge, and either report quantitative data for the pollutant or briefly describe the reasons the pollutant is expected to be discharged. (See specific instructions on the form and below for Parts A through C.) Base your determination that a pollutant is present in or absent from your discharge on your knowledge of your raw materials, material management practices, maintenance chemicals, history of spills and releases, intermediate and final products and byproducts, and any previous analyses known to you of your effluent or similar effluent.

A. Sampling: The collection of the samples for the reported analyses should be supervised by a person experienced in performing sampling of industrial wastewater or storm water discharges. You may contact EPA or your State permitting authority for detailed guidance on sampling techniques and for answers to specific questions. Any specific requirements contained in the applicable analytical methods should be followed for sample containers, sample preservation, holding times, the collection of duplicate samples, etc. The time when you sample should be representative, to the extent feasible, of your treatment system operating properly with no system upsets. Samples should be collected from the center of the flow channel, where turbulence is at a maximum, at a site specified in your present permit, or at any site adequate for the collection of a representative sample.

For pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, and fecal coliform, grab samples taken during the first 30 minutes (or as soon thereafter as practicable) of the discharge must be used (you are not required to analyze a flow-weighted composite for these parameters). For all other pollutants both a grab sample collected during the first 30 minutes (or as soon thereafter as practicable) of the discharge and a flow-weighted composite sample must be analyzed. However, a minimum of one grab sample may be taken for effluents from holding ponds or other impoundments with a retention period of greater than 24 hours.

All samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches and at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where feasible, the variance in the duration of the event and the total rainfall of the event should not exceed 50 percent from the average or median rainfall event in that area.

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

Grab and composite samples are defined as follows:

Grab sample: An individual sample of at least 100 milliliters collected during the first thirty minutes (or as soon thereafter as practicable) of the discharge. This sample is to be analyzed separately from the composite sample.

Flow-weighted Composite sample: A flow-weighted composite sample may be taken with a continuous sampler that proportions the amount of sample collected with the flow rate or as a combination of a minimum of three sample aliquots taken in each hour of discharge for the entire event or for the first three hours of the event, with each aliquot being at least 100 milliliters and collected with a minimum period of fifteen minutes between aliquot collections. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically. Where GC/MS Volatile Organic Analysis (VOA) is required, aliquots must be combined in the laboratory immediately before analysis. Only one analysis for the composite sample is required.

Data from samples taken in the past may be used, provided that:

All data requirements are met;

Sampling was done no more than three years before submission; and

All data are representative of the present discharge.

Among the factors which would cause the data to be unrepresentative are significant changes in production level, changes in raw materials, processes, or final products, and changes in storm water treatment. When the Agency promulgates new analytical methods in 40 CFR Part 136, EPA will provide information as to when you should use the new methods to generate data on your discharges. Of course, the Director may request additional information, including current quantitative data, if they determine it to be necessary to assess your discharges. The Director may allow or establish appropriate site-specific sampling procedures or requirements including sampling locations, the season in which the sampling takes place, the minimum duration between the previous measurable storm event and the storm event sampled, the minimum or maximum level of precipitation required for an appropriate storm event, the form of precipitation sampled (snow melt or rainfall), protocols for collecting samples under 40 CFR Part 136, and additional time for submitting data on a case-by-case basis.

- B. Reporting:** All levels must be reported as concentration and mass (note: grab samples are reported in terms of concentration). You may report some or all of the required data by attaching separate sheets of paper instead of filling out pages VII-1 and VII-2 if the separate sheets contain all the required information in a format which is constant with pages VII-1 and VII-2 in spacing and identification of pollutants and columns. Use the following abbreviations in the columns headed "Units."

Concentration		Mass	
ppm	parts per million	lbs	pounds
mg/l	milligrams per liter	ton	tons (English tons)
ppb	parts per billion	mg	milligrams
ug/l	micrograms per liter	g	grams
kg	kilograms	T	tonnes (metric tons)

All reporting of values for metals must be in terms of "total recoverable metal," unless:

- (1) An applicable, promulgated effluent limitation or standard specifies the limitation for the metal in dissolved, valent, or total form; or
- (2) All approved analytical methods for the metal inherently measure only its dissolved form (e.g., hexavalent chromium); or
- (3) The permitting authority has determined that in establishing case-by-case limitations it is necessary to express the limitations on the metal in dissolved, valent, or total form to carry out the provisions of the CWA. If you measure only one grab sample and one flow-weighted composite

sample for a given outfall, complete only the "Maximum Values" columns and insert "1" into the "Number of Storm Events Sampled" column. The permitting authority may require you to conduct additional analyses to further characterize your discharges.

If you measure more than one value for a grab sample or a flow-weighted composite sample for a given outfall and those values are representative of your discharge, you must report them. You must describe your method of testing and data analysis. You also must determine the average of all values within the last year and report the concentration and mass under the "Average Values" columns, and the total number of storm events sampled under the "Number of Storm Events Sampled" columns.

- C. Analysis:** You must use test methods promulgated in 40 CFR Part 136; however, if none has been promulgated for a particular pollutant, you may use any suitable method for measuring the level of the pollutant in your discharge provided that you submit a description of the method or a reference to a published method. Your description should include the sample holding time, preservation techniques, and the quality control measures which you used. If you have two or more substantially identical outfalls, you may request permission from your permitting authority to sample and analyze only one outfall and submit the results of the analysis for other substantially identical outfalls. If your request is granted by the permitting authority, on a separate sheet attached to the application form, identify which outfall you did test, and describe why the outfalls which you did not test are substantially identical to the outfall which you did test.

Part VII-A

Part VII-A must be completed by all applicants for all outfalls who must complete Form 2F.

Analyze a grab sample collected during the first thirty minutes (or as soon thereafter as practicable) of the discharge and flow-weighted composite samples for all pollutants in this Part, and report the results except use only grab samples for pH and oil and grease. See discussion in General Instructions to Item VII for definitions of grab sample collected during the first thirty minutes of discharge and flow-weighted composite sample. The "Average Values" column is not compulsory but should be filled out if data are available.

Part VII B

List all pollutants that are limited in an effluent guideline which the facility is subject to (see 40 CFR Subchapter N to determine which pollutants are limited in effluent guidelines) or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See discussion in General instructions to item VII for definitions of grab sample collected during the first thirty minutes (or as soon thereafter as practicable) of discharge and flow-weighted composite sample. The "Average Values" column is not compulsory but should be filled out if data are available.

Analyze a grab sample collected during the first thirty minutes of the discharge and flow-weighted composite samples for all pollutants in this Part, and report the results, except as provided in the General Instructions.

Part VII-C

Part VII-C must be completed by all applicants for all outfalls which discharge storm water associated with industrial activity, or that EPA is evaluating for designation as a significant contributor of pollutants to waters of the United States, or as contributing to a violation of a water quality standard. Use both a grab sample and a composite sample for all pollutants you analyze for in this part except use grab samples for residual chlorine and fecal coliform. The "Average Values" column is not compulsory but should be filled out if data are available. Part C requires you to address the pollutants in Table 2F-2, 2F-3, and 2F-4 for each outfall. Pollutants in each of these Tables are addressed differently.

Table 2F-2: For each outfall, list all pollutants in Table 2F-2 that you know or have reason to believe are discharged (except pollutants previously listed in Part VII-B). If a pollutant is limited in an effluent guideline limitation which the facility is subject to, the pollutant must be analyzed and reported in Part VII-B. If a pollutant in Table 2F-2 is indirectly limited by an effluent guideline limitation through an indicator (e.g., use of TSS as an indicator to control the discharge of iron and aluminum), you must analyze for it and report the data in Part VII-B. For other pollutants listed in Table 2F-2 (those not limited directly or indirectly by an effluent limitation guideline), that you know or have reason to believe are discharged, you must either report quantitative data or briefly describe the reasons the pollutant is expected to be discharged.

Table 2F-3: For each outfall, list all pollutants in Table 2F-3 that you know or have reason to believe are discharged. For every pollutant in Table 2F-3 expected to be discharged in concentrations of 10 ppb or greater, you must submit quantitative data. For acrolein, acrylonitrile, 2,4 dinitrophenol, and 2-methyl-4,6 dinitrophenol, you must submit quantitative data if any of these four pollutants is expected to be discharged in concentrations of 100 ppb or greater. For every pollutant expected to be discharged in concentrations less than 10 ppb (or 100 ppb for the four pollutants listed above), then you must either submit quantitative data or briefly describe the reasons the pollutant is expected to be discharged.

Small Business Exemption - If you are a "small business," you are exempt from the reporting requirements for the organic toxic pollutants listed in Table 2F-3. There are two ways in which you can qualify as a small business". If your facility is a coal mine, and if your probable total annual production is less than 100,000 tons per year, you may submit past production data or estimated future production (such as a schedule of estimated total production under 30 CFR 795.14(c)) instead of conducting analyses for the organic toxic pollutants. If your facility is not a coal mine, and if your gross total annual sales for the most recent three years average less than \$100,000 per year (in second quarter 1980 dollars), you may submit sales data for those years instead of conducting analyses for the organic toxic pollutants. The production or sales data must be for the facility which is the source of the discharge. The data should not be limited to production or sales for the process or processes which contribute to the discharge, unless those are the only processes at your facility. For sales data, in situations involving intracorporate transfer of goods and services, the transfer price per unit should approximate market prices for those goods and services as closely as possible. Sales figures for years after 1980 should be indexed to the second quarter of 1980 by using the gross national product price deflator (second quarter of 1980=100). This index is available in National Income and Product Accounts of the United States (Department of Commerce, Bureau of Economic Analysis).

Table 2F-4: For each outfall, list any pollutant in Table 2F-4 that you know or believe to be present in the discharge and explain why you believe it to be present. No analysis is required, but if you have analytical data, you must report them. Note: Under 40 CFR 117.12(a)(2), certain discharges of hazardous substances (listed at 40 CFR 177.21 or 40 CFR 302.4) may be exempted from the requirements of section 311 of CWA, which establishes reporting requirements, civil penalties, and liability for cleanup costs for spills of oil and hazardous substances. A discharge of a particular substance may be exempted if the origin, source, and amount of the discharged substances are identified in the NPDES permit application or in the permit, if the permit contains a requirement for treatment of the discharge, and if the treatment is in place. To apply for an exclusion of the discharge of any hazardous substance from the requirements of section 311, attach additional sheets of paper to your form, setting forth the following information:

1. The substance and the amount of each substance which may be discharged.
2. The origin and source of the discharge of the substance.
3. The treatment which is to be provided for the discharge by;
 - a. An onsite treatment system separate from any treatment system treating your normal discharge;
 - b. A treatment system designed to treat your normal discharge and which is additionally capable of treating the amount of the substance identified under paragraph 1 above; or
 - c. Any combination of the above.

See 40 CFR 117.12(a)(2) and (c), published on August 29, 1979, in 44 FR 50766, or contact your Regional Office (Table I on Form 1, Instructions), for further information on exclusions from section 311.

Part VII-D

If sampling is conducted during more than one storm event, you only need to report the information requested in Part VII-D for the storm event(s) which resulted in any maximum pollutant concentration reported in Part VII-A, VII-B, or VII-C.

Provide flow measurements or estimates of the flow rate, and the total amount of discharge for the storm event(s) sampled, the method of flow measurement, or estimation. Provide the data and duration of the storm event(s) sampled, rainfall measurements, or estimates of the storm event which generated the sampled runoff and the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event.

Part VII-E

List any toxic pollutant listed in Tables 2F-2, 2F-3, or 2F-4 which you currently use or manufacture as an intermediate or final product or byproduct. In addition, if you know or have reason to believe that 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) is discharged or if you use or manufacture 2,4,5-trichlorophenoxy acetic acid (2,4,5,-T); 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5,-TP); 2-(2,4,5-trichlorophenoxy) ethyl, 2,2-dichloropropionate (Erbon); 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel); 2,4,5-trichlorophenol (TCP); or hexachlorophene (HCP); then list TCDD. The Director may waive or modify the requirement if you demonstrate that it would be unduly burdensome to identify each toxic pollutant and the Director has adequate information to issue your permit. You may not claim this information as confidential; however, you do not have to distinguish between use or production of the pollutants or list the amounts.

Item VIII

Self explanatory. The permitting authority may ask you to provide additional details after your application is received.

Item X

The Clean Water Act provides for severe penalties for submitting false information on this application form.

Section 309(c)(4) of the Clean Water Act provides that "Any person who knowingly makes any false material statement, representation, or certification in any application, . . . shall upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment for not more than 2 years, or by both. If a conviction of such person is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or by both." 40 CFR Part 122.22 requires the certification to be signed as follows:

(A) For a corporation: by a responsible corporate official. For purposes of this section, a responsible corporate official means (i) a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25,000,000 (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

Note: EPA does not require specific assignments or delegation of authority to responsible corporate officers identified in 122.22(a)(1)(i) The Agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the Director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate position under 122.22(a)(1)(ii) rather than to specific individuals.

(B) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

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

**Table 2F-1
Codes for Treatment Units**

Physical Treatment Processes

1-A	Ammonia Stripping	1-M	Grit Removal
1-B	Dialysis	1-N	Microstraining
1-C	Diatomaceous Earth Filtration	1-O	Mixing
1-D	Distillation	1-P	Moving Bed Filters
1-E	Electrodialysis	1-Q	Multimedia Filtration
1-F	Evaporation	1-R	Rapid Sand Filtration
1-G	Flocculation	1-S	Reverse Osmosis (Hyperfiltration)
1-H	Flotation	1-T	Screening
1-I	Foam Fractionation	1-U	Sedimentation (Setting)
1-J	Freezing	1-V	Slow Sand Filtration
1-K	Gas-Phase Separation	1-W	Solvent Extraction
1-L	Grinding (Comminutors)	1-X	Sorption

Chemical Treatment Processes

2-A	Carbon Adsorption	2-G	Disinfection (Ozone)
2-B	Chemical Oxidation	2-H	Disinfection (Other)
2-C	Chemical Precipitation	2-I	Electrochemical Treatment
2-D	Coagulation	2-J	Ion Exchange
2-E	Dechlorination	2-K	Neutralization
2-F	Disinfection (Chlorine)	2-L	Reduction

Biological Treatment Processes

3-A	Activated Sludge	3-E	Pre-Aeration
3-B	Aerated Lagoons	3-F	Spray Irrigation/Land Application
3-C	Anaerobic Treatment	3-G	Stabilization Ponds
3-D	Nitrification-Denitrification	3-H	Trickling Filtration

Other Processes

4-A	Discharge to Surface Water	4-C	Reuse/Recycle of Treated Effluent
4-B	Ocean Discharge Through Outfall	4-D	Underground Injection

Sludge Treatment and Disposal Processes

5-A	Aerobic Digestion	5-M	Heat Drying
5-B	Anaerobic Digestion	5-N	Heat Treatment
5-C	Belt Filtration	5-O	Incineration
5-D	Centrifugation	5-P	Land Application
5-E	Chemical Conditioning	5-Q	Landfill
5-F	Chlorine Treatment	5-R	Pressure Filtration
5-G	Composting	5-S	Pyrolysis
5-H	Drying Beds	5-T	Sludge Lagoons
5-I	Elutriation	5-U	Vacuum Filtration
5-J	Flotation Thickening	5-V	Vibration
5-K	Freezing	5-W	Wet Oxidation
5-L	Gravity Thickening		

Table 2F-2

Conventional and Nonconventional Pollutants

Bromide
Chlorine, Total Residual
Color
Fecal Coliform
Fluoride
Nitrate-Nitrite
Nitrogen, Total Organic
Oil and Grease
Phosphorus, Total
Radioactivity
Sulfate
Sulfite
Surfactants
Aluminum, Total
Barium, Total
Boron, Total
Cobalt Total
Iron, Total
Magnesium, Total
Molybdenum, Total
Manganese, Total
Tin, Total
Titanium, Total

Table 2F-3

Toxic Pollutants

Toxic Pollutants and Total Phenol

Antimony, Total
Arsenic, Total
Beryllium, Total
Cadmium, Total
Chromium, Total

Copper, Total
Lead, Total
Mercury, Total
Nickel, Total
Selenium, Total

Silver, Total
Thallium, Total
Zinc, Total
Cyanide, Total
Phenols, Total

GC/MS Fraction Volatiles Compounds

Acrolein
Acrylonitrile
Benzene
Bromoform
Carbon Tetrachloride
Chlorobenzene
Chlorodibromomethane
Chloroethane
2-Chloroethylvinyl Ether
Chloroform

Dichlorobromomethane
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethylene
1,2-Dichloropropane
1,3-Dichloropropylene
Ethylbenzene
Methyl Bromide
Methyl Chloride
Methylene Chloride

1,1,2,2-Tetrachloroethane
Tetrachloroethylene
Toluene
1,2-Trans-Dichloroethylene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethylene
Vinyl Chloride

Acid Compounds

2-Chlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
4,6-Dinitro-O-Cresol

2,4-Dinitrophenol
2-Nitrophenol
4-Nitrophenol
p-Chloro-M-Cresol

Pentachlorophenol
Phenol
2,4,6-Trichlorophenol
2-methyl-4,6 dinitrophenol

Base/Neutral

Acenaphthene
Acenaphthylene
Anthracene
Benzidine
Benzo(a)anthracene
Benzo(a)pyrene
3,4-Benzofluoranthene
Benzo(ghi)perylene
Benzo(k)fluoranthene
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
Bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl)phthalate
4-Bromophenyl Phenyl Ether
Butylbenzyl Phthalate

2-Chloronaphthalene
4-Chlorophenyl Phenyl Ether
Chrysene
Dibenzo(a,h)anthracene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
3,3'-Dichlorobenzidine
Diethyl Phthalate
Dimethyl Phthalate
Di-N-Butyl Phthalate
2,4-Dinitrotoluene
2,6-Dinitrotoluene
Di-N-Octylphthalate
1,2-Diphenylhydrazine (as Azobenzene)

Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachloroethane
Indeno(1,2,3-cd)pyrene
Isophorone
Naphthalene
Nitrobenzene
N-Nitrosodimethylamine
N-Nitrosodi-N-Propylamine
N-Nitrosodiphenylamine
Phenanthrene
Pyrene
1,2,4-Trichlorobenzene

Pesticides

Aldrin
Alpha-BHC
Beta-BHC
Gamma-BHC
Delta-BHC
Chlordane
4,4'-DDT
4,4'-DDE
4,4'-DDD

Dieldrin
Alpha-Endosulfan
Beta-Endosulfan
Endosulfan Sulfate
Endrin
Endrin Aldehyde
Heptachlor
Heptachlor Epoxide
PCB-1242

PCB-1254
PCB-1221
PCB-1232
PCB-1248
PGB-1260
PCB-1016
Toxaphene

Table 2F-4

Hazardous Substances

Toxic Pollutant

Asbestos

Hazardous Substances

Acetaldehyde
 Allyl alcohol
 Allyl chloride
 Amyl acetate
 Aniline
 Benzonitrile
 Benzyl chloride
 Butyl acetate
 Butylamine
 Carbaryl
 Carbofuran
 Carbon disulfide
 Chlorpyrifos
 Coumaphos

Cresol
 Crotonaldehyde

Cyclohexane
 2,4-D (2,4-Dichlorophenoxyacetic acid)
 Diazinon
 Dicamba
 Dichlobenil
 Dichlone
 2,2-Dichloropropionic acid
 Dichlorvos
 Diethyl amine
 Dimethyl amine

Dinitrobenzene
 Diquat
 Disulfoton
 Diuron
 Epichlorohydrin
 Ethion
 Ethylene diamine
 Ethylene dibromide
 Formaldehyde
 Furfural
 Guthion
 Isoprene
 Isopropanolamine
 Kelthane

Kepone
 Malathion

Mercaptodimethur
 Methoxychlor

Methyl mercaptan
 Methyl methacrylate
 Methyl parathion
 Mevinphos
 Mexacarbate
 Monoethyl amine
 Monomethyl amine
 Naled

Napthenic acid
 Nitrotoluene
 Parathion
 Phenolsulfonate
 Phosgene
 Propargite
 Propylene oxide
 Pyrethrins
 Quinoline
 Resorcinol
 Stronthium
 Strychnine
 Styrene
 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)
 TDE (Tetrachlorodiphenyl ethane)
 2,4,5-TP [2-(2,4,5-Trichlorophenoxy) propanoic acid]
 Trichlorofan
 Triethylamine
 Trimethylamine
 Uranium
 Vanadium
 Vinyl acetate
 Xylene
 Xylenol
 Zirconium

Georgia-Pacific LLC

9. Officers

Name	Position	Appointment Date
Jones, Wesley	Vice President	07/01/07
Agard, Martin D.	Treasurer	12/31/06
DeLorenzo, Mark V.	Assistant Treasurer	12/31/06
Silverman, Lisa R.	Assistant Treasurer	12/31/06
Stoffel, Diana K.	Assistant Treasurer	12/31/06
Wright, Chad M.	Assistant Treasurer	12/31/06
Alexander, Robert S.	Assistant Secretary	12/31/06
Armstrong, Phillip M.	Assistant Secretary	12/31/06
Boss, Emily K.	Assistant Secretary	12/31/06
Cason, Christine	Assistant Secretary	12/31/06
Luetters, Mark E.	Senior Vice President – Supply and Trading, Fiber and Energy	12/31/06
Park, David	Senior Vice President – Strategy and Business Development	12/31/06
Rehwinkel, Michael T.	Senior Vice President – Wood Products	12/31/03
Robison, Randal K.	Senior Vice President – Chief Information Officer	12/31/06
Woolson, Tyler L.	Senior Vice President and Chief Financial Officer	12/31/06
Mingledorff, Ann F.	Assistant Secretary	12/31/06
Ragsdale, George T.	Assistant Secretary	12/31/06
Box, Stefanie G.	Assistant Secretary	12/31/06
Boles, Kellie	Assistant Secretary	12/31/06
Fitzpatrick, Vandy F.	Assistant Secretary	10/15/07
Hylton, Andre P.	Assistant Secretary	06/15/07
Paugh, Brent H.	Senior Vice President – Gypsum	02/29/08
Brehm, Julie A.	Senior Vice President – Human Resources	12/31/06
Butz, Thomas A.	Senior Vice President – Compliance and Ethics	12/31/06

Name	Position	Appointment Date
Darland, Tye G.	Senior Vice President – General Counsel and Secretary	12/31/06
Hannan, James B.	President and Chief Executive Officer	10/31/07
Waldrep, Marvin L.	Assistant Secretary	12/31/06
Price, Gary L.	Vice President – Taxes	01/08/07
Walters, Kathleen A.	Executive Vice President – Global Consumer Products	04/01/07
Fischer, Christian	Executive Vice President – Packaging	04/01/07

10. Managers

Name	Position	Appointment Date
Hannan, James B.	Manager	12/31/06
Jones, Wesley	Manager	07/01/07
Woolson, Tyler L.	Manager	12/31/06

13. See response to No. 15 below regarding Georgia-Pacific LLC's parent company, which holds 100% of the equity of Georgia-Pacific LLC. Georgia-Pacific LLC's debt is traded on a daily basis, but no one person or legal entity typically owns or controls more than 5% of that debt at any one time.

17. Georgia-Pacific LLC and its affiliated companies employ approximately 45,000 people world-wide. We are committed to conducting all business affairs lawfully and with integrity and have implemented several systems to assist us in meeting this commitment. Three examples of these systems are described in the following paragraph.

First, employees must successfully pass a background check before they are hired. Second, employees are required to acknowledge that they have read and been trained on the company's Code of Conduct. They understand that they have a responsibility to raise concerns about compliance or ethical issues. These concerns can be addressed by talking with their immediate supervisor, a member of management, contacting the local or corporate Human Resources leader, contacting the Compliance and Ethics Department, calling the Law Department, sending an e-mail to an internal ethics "hot line", and/or contacting the GP Guideline. Third, Georgia-Pacific has implemented an Investigation, Reporting and Tracking Compliance Standard. This management system standard ensures that instances of noncompliance with law, our compliance standards or policies are reported and resolved. Currently we are not aware of any noncompliance by an employee, relative, spouse, or other relationship that could be reasonably expected to significantly influence us in a manner which would adversely affect the environment.

18. The U.S. Environmental Protection Agency has regulatory responsibility over Georgia-Pacific LLC. Additionally, because Georgia-Pacific LLC is a global company with over 275 domestic and international subsidiaries, there are numerous other regulatory agencies within and outside the US with responsibility over various GP operations. While it is not feasible to list all such regulatory agencies in this response, Georgia-Pacific will provide specific information relevant to its Crossett Paper Mill operations upon request.

Georgia-Pacific LLC Crossett Complex

This section identifies the processes associated with Georgia-Pacific LLC's manufacturing complex located in Crossett, Arkansas. The complex is made up of three distinct operations; a paper mill, a plywood plant and a chemical plant. All three of these facilities has the potential to operate twenty-four (24) hours per day, seven (7) days per week, and fifty-two (52) weeks per year.

Paper Operations Process Description

Chips are received at the facility by truck and rail. Upon unloading, the chips are pneumatically blown to the distribution tower and are then dropped onto the chip piles. Round logs are also received at the facility. After storage, the logs are transported to the debarking drums for bark removal. The debarked logs are fed to the chipper and the produced chips are then conveyed to the chip piles. The chips from the chip piles are screened prior to entering the chip silos. Rejected chips from the screening are burned in the facility's combination boilers. The removed bark is pneumatically sent to bark piles for storage and eventual use in the facility's boilers.

The chips from the silos are conveyed to the Mill's thirteen batch digesters. The function of the digesters is to cook the chips using white liquor and steam from the boilers. In the digestion process, these raw materials are combined and cooked at a set pressure and temperature until the desired pulp quality is obtained. At the end of each "cook", the blow valves at the bottom of the digesters are opened, with the resulting pressure forcing the pulp mass through a blow line into one of the two blow tanks.

The blow tanks are at atmospheric pressure and the contents of the digesters enter the blow tanks tangentially at the top. When the chips hit the lower pressure in the tank, the liquor and water flash, blowing the chips apart to produce the pulp fibers. The vapors from the blow tanks are sent to the blow heat condensing system, where non-condensable gases (NCGs) are removed. The steam vapors are condensed in the accumulator. The accumulator water is sent to the stripper and returned to the washers as clean condensate. Knots (e.g. undercooked wood chips, irregularly shaped or overly thick pieces of wood, etc.) are removed with the use of vibrating knotters/screens.

The pulp is washed to remove spent cooking chemicals. The Mill has two horizontal washers. In the washers, the wash water and pulp move in counter current directions. The washed pulp is passed through screening and cleaning stages which remove debris from the stock. After screening, the pulp passes through the decker system, which thickens the pulp for storage in high density storage chests.

The unbleached Kraft pulp is taken from the high density storage chests for further processing in the bleach plant. The bleaching process removes the remaining lignin and Kraft color from the unbleached pulp. Bleaching is performed in several stages using chlorine dioxide, caustic soda, oxygen, and hydrogen peroxide.

Recovery describes the set of operations that recovers the spent cooking chemicals for reuse in the digesters. The recovery process utilizes a multi-effect evaporator to concentrate weak black liquor. The concentrated black liquor is burned in the Mill's recovery furnace producing steam and energy. The spent chemicals leave the recovery furnace from the bottom in a molten form and enter the smelt dissolving tanks. The causticizing operation reacts molten inorganic salts from the smelt dissolving tanks with weak wash water to form green liquor. This green liquor is then treated with slaked lime to form white liquor. The white liquor is then ready for use as the main cooking liquor in the digesters.

Paper products are currently manufactured on eight paper machines and two paper extruding machines. The paper machines include one fine paper machine, two board paper machines, and five tissue machines. Each machine has its own stock preparation, head box, wire section, press section, dryer sections, coater section, calendar stacks, reel, and drum winder. The fine paper machine produces a variety of products including bond, envelope, tablet, and copier paper.

Tissue and towel converting includes the operations involved with converting large parent rolls of tissue/towel from the machines into finished product. This includes rewinding onto smaller sized rolls, folding, printing, cutting, packaging, and shipping.

The two extruding machines receive board from the board paper machines and from outside board customers and apply a polymer coating. Rolls of board are loaded onto an unwind stand before passing through a calendar stack, where they are subjected to burners which flame seal the board. An extruded poly sheet is then pressed together with the board.

Crossett Paper Operations utilizes four fossil fuel-fired steam generating units and a recovery furnace to provide steam and power to the pulp and paper manufacturing process. Approximately 40-45 million gallons of water is used daily to operate the mill. The Utilities Department obtains the majority of this water from the Saline River via GP Lake. The balance is made up with groundwater. The water is treated and polished for use within the Paper Mill.

Plywood Facility Process Description

The Plywood Facility receives logs for processing into plywood. This facility consist of two plywood plants under one roof, both of which produce plywood panels. To begin, incoming logs are unloaded in the Logyard debarking area. The log debarkers remove the bark from the logs before the logs are sent to the cutoff saws. The bark is mechanically conveyed to the bark shredder where it is shredded before being conveyed to the fuel bin. The cutoff saws trim the raw debarked logs to the desired length. The logs are sent to either Plant 1 or Plant 2 for processing. The trimmed-off ends of the logs are sent to the lilypad chippers where they are chipped before being sent to the fuel bin for transfer to the boilers. The shaker screen, which is also located between the plants, receives chips from the core chippers, the roundup chippers, and the veneer chippers. Oversized chips are sent to the rechipper and then back to the shaker screen. The green chips are shipped off site via rail car or trucks and the throughs are pneumatically conveyed to the fuel bin. The sized logs proceed to the soaking vats for conditioning. After soaking in the vats, the logs are mechanically conveyed to the green end processes, which include the lathes and the veneer clippers. The Green veneer is then dried in the veneer dryers. Dry veneer is

transferred to the Gluelines where the plywood is laid up and glue is applied to the veneer. After glueing, the panels are pressed at the Presses. After pressing, the panels are finished by the skinner saws, spec saws or sanders.

In the dryers, the veneer is dried using steam that is generated by the wood-fired boilers. The woodfired boilers combust the wood residuals generated by both Plants 1 and 2. Ash associated with the burning of wood fuel is collected by venture scrubbers and sluiced to the process sewer, where it is conveyed to the ash settling basins associated with the G-P Complex wastewater treatment facility.

Studmill Facility Process Description

Cores from offsite sources are unloaded in the wood yard. Low quality cores are shipped offsite. The cores of higher quality proceed to the sawing and sizing process where both ends of the cores are trimmed to the desired length, and the cores are cut according to product specifications. Wood residuals and sawdust from this operation are mechanically conveyed to the chipper, which chips the wood residuals into smaller pieces. These pieces are then conveyed to a shaker screen. The throughs from the screen are shipped offsite while the fines mechanically conveyed to the boiler. The green lumber proceeds to either the conventional kiln, the high temperature kiln, or the conventional kiln. The kilns, which are indirectly heated using steam generated from the boiler at the plywood facility, dry the wood to the desired moisture content. The roughcut dry lumber is planed before being sent to the retrim saw or the rip and chop saws, which trim the wood to customer specifications. The planer shavings generated by the planer are pneumatically conveyed to the dry residuals surge bin via cyclone. The dry residuals in the surge bin are pneumatically conveyed to truck loading via cyclone and then shipped offsite. Some lumber may be sent to edge sealing operations where the ends are spray painted and stenciled with the Georgia-Pacific logo. Studs may be stored prior to being shipped offsite.

Chemical Plant Process Description

The GPRI Chemical Plant reacts methanol with a catalyst(s) to produce a formaldehyde gas that is absorbed into water to produce a 50% formaldehyde solution. This formaldehyde solution can be reacted with urea to produce a urea-formaldehyde concentrate; which is then reacted in low pressure reactors with other chemicals to manufacture Urea-Formaldehyde resins. 50% Formaldehyde solution are also used to manufactured phenol formaldehyde resins and Novalac resins. Wet-Strength Resins are also manufactured at this facility in low to no pressure vessel equipped with cooling and heating coils. Cooling tower water is the cooling medium and steam is the heating medium. The vessel has a top mounted agitator for mixing, and a vacuum condenser with cooling tower water medium for primary cooling of condensed vapors. The vacuum system is normally used for raw material additions, temperature control in heat ups and cool downs, and is used for distillation on batches where needed. Raw material lines enter the vessel from various locations (top and side). Finished products exit out of the bottom.

The #2 Resin Reactor at Crossett is primarily used for the manufacture of Urea Formaldehyde Resins. These resins are used extensively in the particle-board and glass mat industry throughout

the south. The #2 reactor has a 10,000 gallon capacity. It is a low to no pressure vessel equipped with cooling and heating coils. Cooling tower water is the cooling medium and steam is the heating medium. The vessel has a top mounted agitator for mixing, and a vacuum condenser with cooling tower water medium for primary cooling of condensed vapors. The vacuum system is normally used for raw material additions, temperature control in heat ups and cool downs, and is used for distillation on batches where needed. Raw material lines enter the vessel from various locations (top and side). Finished products exit out of the bottom.

These vessels are equipped with two rupture discs for emergency pressure relief. The discharges from the discs are directed into a Reactor Emergency Emission Containment (KEEC) system. The rupture discs are rated for 3.5-5.0 psig @ 72 degrees F. Reactor design pressure is 50 psig/30"Hg. Design temperature is 149 degrees Celsius.

Phenol-Formaldehyde Resole Resin Process Description

The #3 Resin Reactor at Crossett is primarily used for the manufacture of Phenol Formaldehyde Resole and inverted Novolac Resins. These resins are used extensively in the Plywood, Oriented Strand board and powdered resins used in various industrial applications.

The #3 reactor has a 13,000-gallon capacity. This is a low-pressure vessel equipped with cooling and heating coils. Cooling tower water is the cooling medium and steam is the heating medium. The vessel has a top mounted agitator for mixing, and a vacuum condenser with tower water medium for primary cooling of condensed vapors. The vacuum system is normally used for raw material additions and temperature control in heat ups and cool downs.

Raw material lines enter the vessel from various locations (top and side). Finished products exit out of the bottom. The vessel is equipped with two rupture discs for emergency pressure relief. The discharges from the discs are directed into a Reactor Emergency Emission Containment (KEEC) system. The rupture discs are rated for approximately 3.5-5.0 psig @ 72°F.

This vessel is also equipped with an Automatic Acid Quench System. The Acid Quench tank is filled with approximately 60% formic acid that is used to control excessive exotherm. As its name states the Acid Quench System is automatic, but can be operated manually if necessary. The formic acid is pressurized in with 80 to 100 psi. air that is backed up with the plant nitrogen system. The acid Quench system is not used for inverted Novolac resins because they are acid catalyzed.

The #7 reactor is used to produce wet-strength resin.

RCI - Oxide Process Process Description

Narrative - Methanol is pumped from a 400,000 gallon storage tank. This methanol is then metered into the top of the vaporizer. A positive displacement blower (which provide a mixture of recycled gas and fresh air) inject the air supply into the top of the vaporizer. The air flow takes the methanol vapor and air mixture out of the bottom of the vaporizer. From this point, the air flow takes the vaporized methanol into the top of the converter, where it enters the catalyst

tubes. As it passes down the catalyst tube, the vaporized mixture is heated toward reaction temperature by Dowtherm heat transfer liquid that surrounds the catalyst tubes in the converter. While the Dowtherm preheats the air-methanol mixture in the upper part of the tube, it also removes the heat that comes from the reaction in the lower part of the catalyst tube. Dowtherm is operated at its' boiling point, the excess heat is carried away by Dowtherm vapors, which are condensed in the Dowtherm condenser that functions as a waste heat boiler to produce steam for the process.

The air flow then takes the formaldehyde gas mixture through an Aftercooler, where more steam is produced by the removal of heat from the formaldehyde gas mixture. The formaldehyde gas mixture is then taken by the air flow into the bottom of the absorber. While the formaldehyde gas is flowing from the bottom of the absorber, water is being injected into the top of the absorber. While the formaldehyde gas is flowing toward the top of the absorber, the water is flowing toward the bottom of the absorber. As the two meet, the formaldehyde gas is absorbed by the water. While this is taking place, the mixture is also being cooled by the cooling water system of the absorber.

When the mixture is formed, it falls into the base of the absorber where a level is maintained and circulated through a heat exchanger (for temperature control) and back into the absorber. From there, the solution is pumped via a pump connected to the absorber into the storage tanks. The 50% formaldehyde solution is stored until it is converted to urea-formaldehyde, PF-resin or UF resin.

The GPRI Chemical Plant partly consist of a Tall Oil plant operation where purchased tall oil is fractionation into a number of different products for things such as perfumes, medicines, tacifiers etc. Residual bottoms associated with this process are burned in a Pitch boiler to produce steam. For the most part, the only waste water associated with this process is vacuum water associated with the fractionation unit.

Wastewater Treatment

The Mill processes wastewater from Crossett Paper Operations, GP Chemical Operations, GP Plywood & Studmill Operations, and the City of Crossett. Wastewater from the paper machines, pulping operations, recovery & utilities, and woodyard operations is first processed through a primary clarifier to settle a large majority of settable solids. Water then exits the primary clarifier in route to ash settling basins where the waste water is again subject to further settlization / filtration before slowing on to the aeration stabilization basin (ASB). Boiler scrubber water associated with the four Complex power boilers flows directly to the ash settling basins via P3 sewer, where ash is settled and mechanically removed prior to the neutralization basin and aeration stabilization basin. Wastewater exiting the aeration stabilization basin enters an earthen tributary identified as Coffee Creek, flows to a polishing pond identified as Mossy Lake, then flows to the Ouachita River.

The mill wastewater and storm water falling in the process areas of the mill are collected in various sewers in the mill and flow by gravity to the treatment system. In addition to the normal

process and nonprocess wastewaters collected, the mill may discharge wastewaters resulting from essential maintenance, regularly scheduled maintenance, during startup and shutdown, and from incidental spills and releases (whether anticipated or unanticipated) from anywhere in the permitted facility. However, these wastewaters are amenable to treatment as provided in the treatment system, and will not impact effluent limitations.

Landfill

GP transports wastes generated at Crossett Paper Operations to one of two active landfills, the East Landfill and the North Landfill. The East Landfill is permitted to operate as a Class 3N (Non-Commercial) landfill and accepts only construction debris. The North Landfill, which began operation on September 1998, is permitted as an industrial landfill to accept general waste from the three manufacturing entities that make up the GP Crossett complex. . Leachate associated with the North landfill is collected and conveyed to the GP complex waste water treatment plant where it is treated prior to discharging it to the Ouachita River. No municipal waste is disposed of in either landfill.

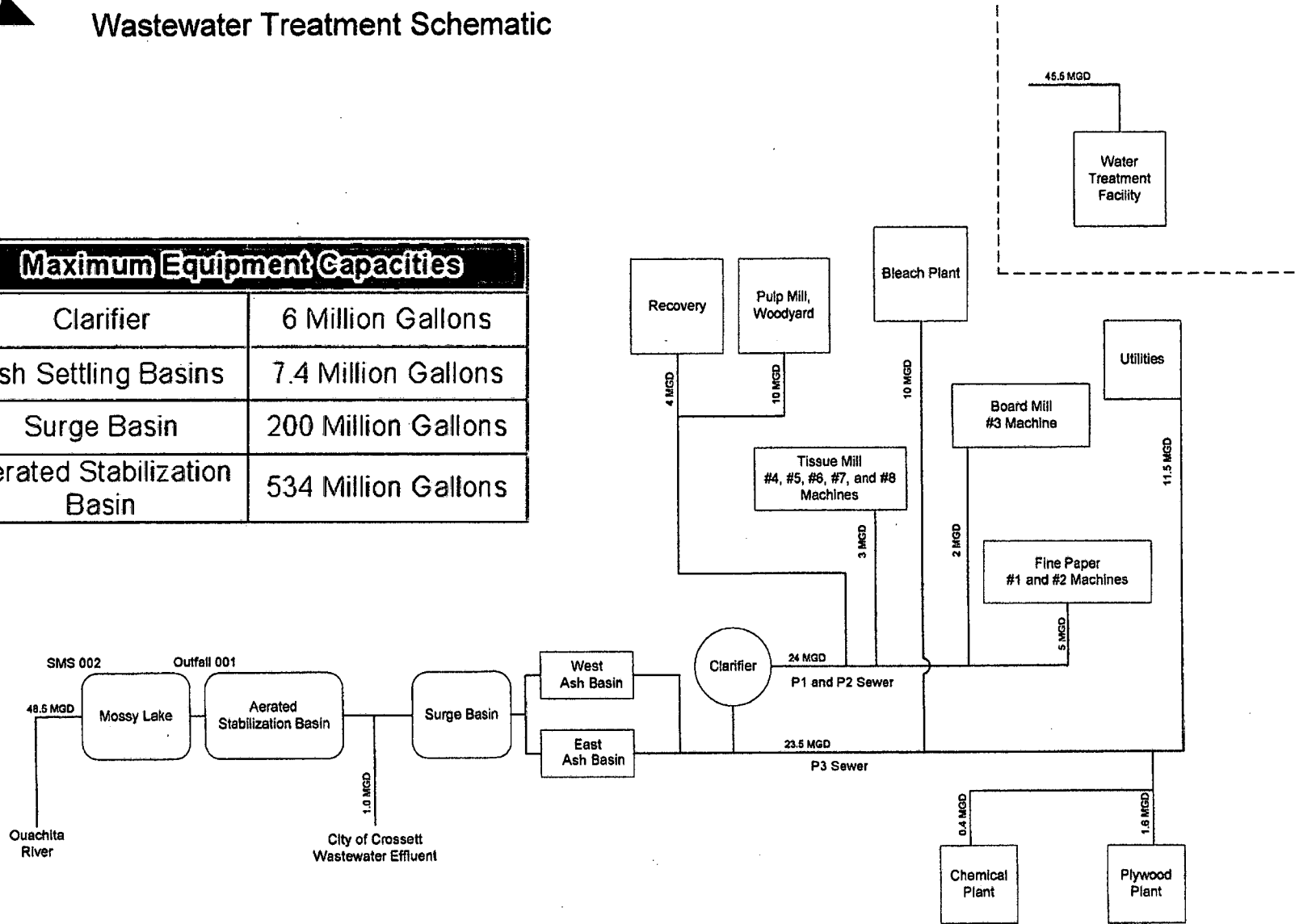
Miscellaneous Activities

Product Stewardship wastewaters, better defined as wash water or contaminated rainwater associated with other GP chemical or building product facilities are routinely shipped to the GP's Crossett complex for treatment in it's WWTP. All waters received are "characteristically like" the waste water already being generated and treated at the GP complex.



Georgia-Pacific Crossett Paper Operations Wastewater Treatment Schematic

Maximum Equipment Capacities	
Clarifier	6 Million Gallons
Ash Settling Basins	7.4 Million Gallons
Surge Basin	200 Million Gallons
Aerated Stabilization Basin	534 Million Gallons



Process Materials and Chemicals
Georgia-Pacific Corporation
Crossett, Arkansas

Process materials

- Pulp/stock
- Black liquor
- White liquor
- Green liquor
- Green liquor dregs
- Lime mud
- Turpentine
- Soap/Tall oil

(Plywood)

Logs
Bark/Hog Fuel
Green wood chips/lumber/sawdust/shavings
Boiler ash/slag

(Chemical)

crude tall oil and fractionates
formaldehyde, urea-formaldehyde concentrate
tall oil rosin size and esters
urea-formaldehyde, phenol-formaldehyde, and polyamide resins

Specific chemicals used at the mill

- sodium hydroxide
- sulfuric acid
- chlorine dioxide
- sodium chlorate
- methanol
- alum
- hydrogen peroxide
- sodium hydrosulfide
- salt cake (sodium sulfate)
- sodium thiosulfate
- sodium bisulfite
- phosphoric acid
- urea ammonia nitrate

(Plywood)

potassium hydroxide

(Chemical)

adipic, formic, fumaric, and toluene sulfonic acids
aliphatic amide
antioxidants
aqueous ammonia
biphenyl, terphenyl, quaterphenyl and diphenyl oxides
diethylenetriamine
epichlorohydrin
ethylene glycol
gamma-aminopropyltriethoxysilane

glycerine
lithium and ferrous iodides
organic salts
pentaerythritol
phenol
potassium hydroxide
maleic anhydride
sodium hypochlorite
urea

Process Materials and Chemicals
Georgia-Pacific Corporation
Crossett, Arkansas

General classes of chemicals used at the mill

- Polymers
- Retention aids
- Slimicides
- Emulsifiers
- Defoamers
- Sizing agents
- Lubricating oils and greases
- Fuels (e.g., gasoline, diesel, No.6 Fuel Oil, coal)
- Inks and dyes

Note:

This is not meant to be an all inclusive list of every chemical used at the mill. However, it does outline the primary chemicals used that may contribute to wastewater loads to the treatment system.

Biocide Certification

In accordance with the requirements of 40 CFR 430, I hereby certify that the Georgia-Pacific, LLC facility, Crossett Paper Operations, does not utilize trichlorophenolic-containing or pentachlorophenolic-containing biocides in our process operations.

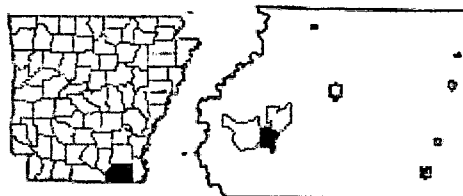
Karen Jenkins
Signature

2/24/09
Date

Title of Responsible Corporate Official

ack/geohack.php?pagename=Crossett,_Arkansas¶ms=33.12473_N_-91.963466_E_type:city_region:US&title=Crossett%2C+Arkansas)

Crossett, Arkansas



Location in Ashley County and the state of Arkansas

Coordinates:

[33°7′29″N 91°57′48″W](http://stable.toolserver.org/geohack/geohack.php?pagename=Crossett,_Arkansas¶ms=33_7) (http://stable.toolserver.org/geohack/geohack.php?pagename=Crossett,_Arkansas¶ms=33_7)

Country	United States
State	Arkansas
County	Ashley
Area	
- Total	6 sq mi (15.5 km ²)
- Land	5.8 sq mi (15.1 km ²)
- Water	0.2 sq mi (0.4 km ²)
Elevation	164 ft (50 m)
Population (2000)	
- Total	6,097
- Density	1,016.2/sq mi (393.4/km ²)
Time zone	Central (CST) (UTC-6)
- Summer (DST)	CDT (UTC-5)
ZIP code	71635
Area code(s)	870
FIPS code	05-16240
GNIS feature ID	0057612

Crossett is the largest city in Ashley County, Arkansas, United States. The population was 6,097 at the 2000 census. Combined with North Crossett and West Crossett, the population is 11,342.

Contents

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