



Charles M. Gates  
SVP, Power Generation Operations  
526 South Church Street  
Charlotte, NC 28202

Office: 704.382.4269  
Cellular: 919.219.1843

March 25, 2014

Mr. Tracy E. Davis, PE, CPM  
Director  
North Carolina Department of Environment  
and Natural Resources  
Division of Energy, Mineral, and Land Resources  
1612 Mail Service Center  
Raleigh, NC 27699-1612

RE: **Notice of Violations**  
Belews Creek Steam Station  
Cliffside Steam Station  
Dan River Steam Station  
Lee Steam Electric Plant  
Roxboro Steam Plant  
Sutton Steam Plant

Dear Mr. Davis:

This letter is in response to the six notices of violation ("NOVs") you sent to Duke Energy Carolinas, LLC and Duke Energy Progress, Inc. (collectively "Duke Energy") regarding the following six plants: Belews Creek, Cliffside, Dan River, H.F. Lee, Roxboro, and Sutton. Your NOV letters allege that Duke Energy has "neither applied for nor obtained coverage under an NPDES Stormwater Permit for stormwater discharges from the site[s]." Duke Energy respectfully disagrees with these allegations and the company believes that the NOVs were issued in error.

As this letter explains, two of these plants (H.F. Lee and Sutton) have no stormwater discharges. Duke Energy understands the term "stormwater discharges" to refer to discharges comprised solely of stormwater, and not discharges that are a combination of industrial wastewater and stormwater. These combined wastewater/stormwater discharges are already addressed in the NPDES permits issued by NCDENR to these Duke Energy plants. The remaining four plants (Belews Creek, Cliffside, Dan River, and Roxboro) have submitted applications for stormwater permits on multiple occasions, and in fact two of those applications are currently before your agency waiting on action by you and your staff.

A complete response to your notices of violation requires some discussion of the history of stormwater permitting in North Carolina. Most of this history occurred prior to the 2012 merger of Duke Energy Corporation and Progress Energy, and much of it occurred when the companies operated under different names, such as Duke Power or Duke Energy for the Duke Energy Carolinas, LLC fleet and Carolina Power & Light/CP&L or Progress Energy for the Duke Energy Progress, Inc. fleet. Even though not technically correct, this letter will use Duke Energy to refer only to the two companies collectively following the July 2012 merger. When referring to the

companies prior to the merger, the terms Duke Power and CP&L will be used, even if the companies used different names for part of that period. Duke Energy Carolinas and Duke Energy Progress will be used when referring to the companies individually following the 2012 merger. Likewise, NCDENR has undergone several name changes and reorganizations over this same period. For simplicity, this letter uses NCDENR to refer to the current and all predecessor agencies.

### **Stormwater Permitting Background & History**

In 1991, CP&L submitted Phase I applications to United States Environmental Protection Agency ("USEPA") for CP&L coal plants, including H.F. Lee and Roxboro. That was followed by Phase II applications for these facilities under "group #286" in September 1992 (March 14, 1991 letter from George Oliver, PhD (CP&L) to Director, Office of Wastewater Enforcement & Compliance, USEPA).

In 1991, Duke Power submitted Phase I applications to USEPA for Duke Power coal plants, including Belews Creek, Cliffside, and Dan River. That was followed up in September 1992 with Phase II applications that included quantitative data under "group #279" (September 28, 1992 letter from Dayna Russell (Duke Power) to Director, Office of Wastewater Enforcement & Compliance, USEPA).

The Phase II applications for both Duke Power and CP&L submitted to USEPA included the Form 2F and all the information necessary for a permit writer to issue an individual stormwater permit. Before USEPA issued a group permit for stormwater, NCDENR asserted primacy for stormwater permitting in North Carolina.

The South Carolina Department of Health & Environmental Control ("SCDHEC") also asserted primacy for stormwater permitting in South Carolina. SCDHEC elected to develop a sector NPDES general permit to cover stormwater. Duke Power and CP&L filed Notices of Intent ("NOIs") to comply with the South Carolina stormwater general permit and obtained coverage under the general permit. Coverage was effective at Robinson Site on August 31, 1992 and at W. S. Lee Steam Station on September 28, 1993.

NCDENR opted not to develop an NPDES general permit. Instead, NCDENR adopted a "combined permit" strategy for stormwater. In instances where stormwater and wastewater were found to be combined in conveyances and treatment systems on a site, the combined discharge was viewed as "wastewater" and a permittee was requested to submit only Form 1 and Form 2C with an NPDES permit renewal application (February 4, 1994 letter from Coleen Sullins (NCDENR) to George Oliver (CP&L)). Alternatively, where wastewater and stormwater streams were not combined, Form 2F was also required as part of an application for the discharge of stormwater only.

In the early 2000s, Duke Power began developing Storm Water Pollution Prevention Plans ("SWPPPs") for its facilities. The SWPPPs identified substantially identical outfalls for each station. The data in the SWPPPs were eventually used to complete Forms 2F as they were included in NPDES permit renewal applications.

Around 2003 and following meetings between Duke Power and NCDENR representatives, NCDENR instructed Duke Power to begin submitting the Form 2F (stormwater applications) along with our renewal applications for NPDES permits. From this point until mid-2011, each NPDES permit renewal application submitted included a Form 2F.

As Duke Power and CP&L completed flue gas desulfurization systems at some of our facilities between 2006 and 2009, SWPPPs were revised and updated to reflect site changes. At this point, NCDENR had not yet chosen to issue specific stormwater-only requirements in the NPDES permits.

On June 20, 2011, Duke Power received a draft individual stormwater permit for Marshall Steam Station. On July 20, 2011, Duke Power responded to the draft permit with substantive comments regarding the lack of environmental protective value, reasonableness, and cost effectiveness of many of the draft permit requirements (letter from George Everett (Duke Power) to Mr. Brian Lowther, NCDWQ Stormwater Permitting Unit, NCDENR).

NCDENR followed quickly with subsequent draft individual stormwater permits for other Duke Power plants and some CP&L plants, all containing provisions similar to those in the Marshall Steam Station draft permit. Both companies shared common concerns about the terms of the draft permits. Duke Power and CP&L representatives met with NCDENR Stormwater Permitting Unit permit writers and two levels of management on November 2, 2011. NCDENR representatives shared their permitting rationale, and Duke Power and CP&L expressed concerns that were generally applicable to all the draft individual stormwater permits for both companies. The companies made a strong case for NCDENR to reconsider these draft permits and the approach NCDENR had taken.

NCDENR subsequently revised several draft individual stormwater permits, but the changes NCDENR made were minor and failed to address the most substantive comments the utilities had offered, and which the companies reiterated during the open comment period. NCDENR never finalized these draft permits.

Duke Power and CP&L representatives met with Matt Matthews (NCDENR Section Chief) on April 24, 2012 to offer a concise but comprehensive overview of both companies' concerns about the draft individual stormwater permits and the general approach being taken by NCDENR. The utility representatives left that meeting with the understanding that NCDENR would consider and clarify their approach for stormwater permitting and communicate that to the companies (May 1, 2012 meeting summary letter from Mark Mc Gary (Duke Power) to Matt Matthews, NCDENR). The utilities expected that NCDENR would be issuing stormwater permits for its plants.

#### **Permitting Status of Plants Named in NOVs**

Both the Sutton and H.F. Lee plants have no discharges consisting of stormwater only, and have therefore not submitted Form 2F applications. At both sites, stormwater is combined with wastewater and permitted under the current NPDES permits. The H.F. Lee Steam Plant applied for categorical stormwater coverage in 1994 by submitting EPA Form 2F. A revised NPDES Wastewater Permit was issued effective January 1, 1995, which required CP&L to develop a SWPPP and to monitor at three separate stormwater outfalls. In October 1995, CP&L requested modification of its NPDES permit to eliminate the stormwater requirements based on

a plan to eliminate these point source stormwater outfalls by rerouting the water to the onsite cooling pond which has an NPDES wastewater outlet. On February 12, 1996, the NCDENR's predecessor issued a modified permit to CP&L which removed all stormwater requirements as the stormwater outfalls had been eliminated. With no stormwater discharges since 1996, submittal of Form 2F is unnecessary.

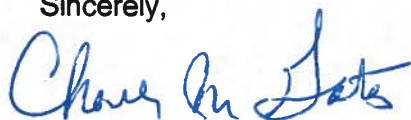
Both the Cliffside and Roxboro plants have Form 2F applications currently pending before NCDENR, having been submitted January 29, 2010 and September 27, 2011 respectively.<sup>1</sup> Duke Power did not submit a Form 2F with the most recent NPDES permit renewal applications for Belews Creek (submitted August 29, 2011) and for Dan River (submitted October 26, 2011), because both had previously submitted Form 2F applications with their prior renewals, (submitted respectively on August 29, 2006 and October 30, 2006) and Duke Power was expecting that NCDENR would be issuing draft stormwater permits for these two plants, as it had done in the summer of 2011 for Marshall Steam Station. The information contained in the 2006 Form 2F applications is valid and appropriate to form the basis for issuing stormwater permits. As a courtesy, copies of these applications are included with this letter as Exhibits B and C. If NCDENR requires Duke Energy to submit new Form 2F applications for Belews Creek and Dan River, Duke Energy will require additional time to complete the stormwater sampling required as part of the application process, as data are needed from qualifying storm events.

Please find attached as Exhibit A a table that summarizes the stormwater permitting history for these six plants.

### **Conclusion**

Duke Energy respectfully requests that NCDENR rescind the NOVs for Belews Creek, Cliffside, Dan River, H.F. Lee, Roxboro, and Sutton. As outlined previously in this letter, H.F. Lee and Sutton have no separate stormwater discharges, and the remaining four plants (Belews Creek, Cliffside, Dan River, and Roxboro) previously had submitted the information necessary for permit writers to act. We look forward to working with you to quickly resolve any outstanding issues, and if additional information is required to complete the permitting process, please contact John Velte at 980-373-7308.

Sincerely,



Charles M. Gates  
SVP, Power Generation Operations

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<sup>1</sup> Roxboro also originally submitted Form 2F for "new" SW outfalls on October 2, 2006 with no action being taken by NCDENR. The Form 2F submittal dated September 27, 2011 is for the same outfalls submitted in 2006.

Mr. Tracy E. Davis, PE, CPM  
March 25, 2014  
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cc: Cari P. Boyce  
Erin B. Culbert  
Mitchell C. Griggs  
John Elnitsky  
Michael R. Olive  
Paige H. Sheehan  
John S. Velte  
James R. Wells

# EXHIBIT A

## Summary of Stormwater Permitting

Facility <sup>a</sup>	Date EPA Phase I Permit Application Submitted	Date EPA Phase II Permit Application Submitted	Dates Form 2F Submitted with NPDES Permit Applications	Date Facility Eliminated SW Point Source Outfalls	Comments
Belews Creek	3/14/1991	9/28/1992	8/29/2006 – YES 8/29/2011 – NO	NA	Form 2F was not provided with the most recent NPDES Permit application based on expectation that DENR would soon be issuing an individual SW Permit (as per permitting process underway 2011 to present).
Cliffside	3/14/1991	9/28/1992	1/27/2003 – NO 1/29/2010 – YES	NA	Form 2F was provided with the last NPDES Permit application.
Dan River	3/14/1991	9/28/1992	10/30/2006 – YES 10/26/2011 – NO	NA	Form 2F was not provided with the most recent NPDES Permit application based on expectation that DENR would soon be issuing an individual SW Permit (as per permitting process underway 2011 to present).
H.F. Lee	3/14/1991	9/28/1992	1/1/1995 (effective date of NPDES WW permit to CP&L requiring SWPPPs)	2/12/1996	NPDES Permit Mod. Issued by DENR in 1996 to reflect completion of pre-approved modifications routing all SW to cooling pond (i.e., permitted WW outfall).
Roxboro	3/14/1991	9/28/1992	10/2/2006 - YES 9/27/2011 - YES	NA	All SW was routed through permitted wastewater (WW) outfalls up to 2005. Changes on site led to potential for point source SW discharge so Form 2F was provided from 2006 on.
Sutton	3/14/1991	9/28/1992	NA	Sutton never had SW point source discharges	Coal plant sent SW to retention basin and then ash pond.

SW = Stormwater; WW = Wastewater; SWPPP = Stormwater Pollution Prevention Plan

<sup>a</sup> These facilities are (or were originally) coal fired steam electric generating facilities. Presently, Dan River, H.F. Lee, and Sutton coal units are retired and those three sites have recently constructed combined cycle combustion turbine facilities.

**EXHIBIT B**

Please print or type in the unshaded areas

EPA ID Number (copy from item 1 of Form 1)  
**NC0022406**

Form Approved. OMB No. 2040-0086  
Approval expires 5-31-92

Form  
**2F**  
NPDES



United States Environmental Protection Agency  
Washington, DC 20460

### Application for Permit to Discharge Storm Water Discharges Associated with Industrial Activity

**Paperwork Reduction Act Notice**

Public reporting burden for this application is estimated to average 28.6 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of this collection of information or suggestions for improving this form, including suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., SW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

**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)
SW006	36	16	79	80	3	47	Belews Lake
SW015	36	16	76	80	3	68	BelewsLake
<b>Note: For monitoring purposes the above outfalls represent the remaining outfalls.</b>							

**II. Improvements**

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation 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.

Identification of Conditions, Agreements, Etc.	2. Affected Outfalls		3. Brief Description of Project	4. Final Compliance Date	
	number	source of discharge		a. req.	b. proj.
NA					

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

**III. Site Drainage Map**

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 intake and discharge structures; the drainage area of each storm water outfall; paved areas and buildings 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 structure 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 units (including each are not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which receive storm water discharges from the facility.



Continued from the Front

**V. 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)
SW001 thru SW018	See attached supplemental information.				

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.

See attached supplemental information.

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
SW001 thru SW018	See attached supplemental information.	

**V. Non Stormwater Discharges**

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

Name of Official Title (type or print) Thomas J. Guthrie, General Manager, Belews Creek Steam Station	Signature <i>Thomas J. Guthrie</i>	Date Signed 8/29/06
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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.

Visual inspections were performed during August 2006 of the outfalls to verify that either non-stormwater were occurring or that they have been identified on the NPDES application accordingly.

**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.

One reportable spill of oil occurred in the last three years. It occurred on December 10, 2003. A light sheen of approximately 10 feet by 10 feet was formed on Belews Lake at the Belews Creek Steam Station intake area when approximately 0.01 gallons of oil was released from an air compressor.

No other reportable spills or significant leaks of toxic or hazardous pollutants have occurred at this facility in the last three years.

**VII. Discharge Information**

J, C, & D: See instruction before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided. Tables VII-A, VII-B, and VII-C are included on separate sheets numbered 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)

**IX. Contact analysis information**

Were any of the analysis reported in item VII performed by a contact 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
Prism Laboratory	449 Springbrook Road P.O. Box 240543 Charlotte, NC 28224-0543	(704) 529-6364	BOD, COD, Ammonia, Metals, Nitrite+Nitrate, Flouride, Selenium, TKN, P and TSS

**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)

Thomas J. Guthrie, General Manager, Belews Creek Steam Station

B. Area Code and Phone No.

(336) 445-0400

C. Signature

*Thomas J. Guthrie*

D. Date Signed

8/29/06

**II. Discharge Information (Continued from page 3 of Form 2F)**

**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.

Pollutant And CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number Of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
Oil & Grease	< 5.0	N/A	N/A	N/A	1	See Supplemental Information (attached)
Biological Oxygen Demand (BOD5)	< 8.8 mg/L	< 12	N/A	N/A	1	"
Chemical Oxygen Demand (COD)	57 mg/L	67 mg/L	N/A	N/A	1	"
Total Suspended Solids (TSS)	401.0 mg/L	497.0 mg/L	N/A	N/A	1	"
Total Nitrogen	1.27 mg/L	1.28 mg/L	N/A	N/A	1	"
Total Phosphorus	0.378 mg/L	0.326 mg/L	N/A	N/A	1	"
pH	7.21	N/A	N/A	N/A	1	"

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

Pollutant And CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number Of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
Arsenic, Total 01002	6.24 ug/L	6.93 ug/L	N/A	N/A	1	See Supplemental Information (attached)
Copper, Total 01042	0.029 mg/L	0.026 mg/l	N/A	N/A	1	"
Iron, Total 014045	35.243 mg/L	30.872 mg/L	N/A	N/A	1	"
Selenium, total 01147	5.57 ug/L	5.72 ug/L	N/A	N/A	1	"
TKN 00625	0.78 mg/-N/L	0.76 mg-N/L	N/A	N/A	1	"
Nitrite + Nitrate	0.49 mg-N/L	0.52 mg-N/L	N/A	N/A	1	"
Sulfate	9.08 mg/l	10.28 mg/l	N/A	N/A	1	"
Flouride	0.36 mg/l	0.35 mg/l	N/A	N/A	1	"

Continued from the Front SW006

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

Pollutant And CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number Of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
NA						

Part D - Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Total flow from rain event (gallons or specify units)
4/27/06	68	1.05	> 72 hours	36495.2 gallons

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

Theoretical flow calculations were used to estimate total flow from rain event.

**II. Discharge Information (Continued from page 3 of Form 2F)**

**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.

Pollutant And CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number Of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
Oil & Grease	<5 mg/l	N/A	N/A	N/A	1	See Supplemental Information (attached)
Biological Oxygen Demand (BOD5)	16 mg/L	5.7 mg/L	N/A	N/A	1	"
Chemical Oxygen Demand (COD)	190 mg/L	2200 mg/L	N/A	N/A	1	"
Total Suspended Solids (TSS)	1522.0 mg/L	188.0 mg/L	N/A	N/A	1	"
Total Nitrogen	3.88 mg/L	2.56 mg/L	N/A	N/A	1	"
Total Phosphorus	1.284 mg-P/L	0.353 mg-P/L	N/A	N/A	1	"
pH	6.48	N/A	N/A	N/A	1	"

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

Pollutant And CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number Of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
Arsenic, Total 01002	46.04 ug/L	9.74 ug/L	N/A	N/A	1	See Supplemental Information (attached)
Copper, Total 01042	0.110 mg/L	0.03 mg/L	N/A	N/A	1	"
Iron, Total 014045	66.40 mg/L	7.097 mg/L	N/A	N/A	1	"
Selenium, total 01147	37.74 ug/L	11.72 ug/L	N/A	N/A	1	"
TKN 00625	3.5 mg-N/L	1.8 mg-N/L	N/A	N/A	1	"
Nitrite + Nitrate	0.38 mg-N/L	0.76 mg-N/L	N/A	N/A	1	"
Sulfate	28.62 mg/l	53.25 mg/l	N/A	N/A	1	"
Flouride	<0.10 mg/l	0.21 mg/l	N/A	N/A	1	"

Continued from the Front SW015

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

Pollutant And CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number Of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
NA						

Part D - Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Total flow from rain event (gallons or specify units)
6-24-06	36 min	0.3	< 72	93193.1 gallons

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

Theoretical flow calculations were used to estimate total flow from rain event.

**EXHIBIT C**

Please print or type in the unshaded areas

EPA ID Number (copy from Item 1 of Form 1)  
NC0003468

Form Approved. OMB No. 2040-0086  
Approval expires 5-31-92

Form  
2F  
NPDES



United States Environmental Protection Agency  
Washington, DC 20460

# Application for Permit to Discharge Storm Water Discharges Associated with Industrial Activity

### Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 28.6 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of this collection of information or suggestions for improving this form, including suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., SW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

## 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)
	36	29	17	79	43	13	
SW005	36	29	17	79	43	13	Dan River
SW009	36	29	13	79	43	25	Dan River

## II. Improvements

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation 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.

1. Identification of Conditions, Agreements, Etc.	2. Affected Outfalls		3. Brief Description of Project	4. Final Compliance Date	
	number	source of discharge		a. req.	b. proj.
NA					

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

## III. Site Drainage Map

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 intake and discharge structures; the drainage area of each storm water outfall; paved areas and buildings 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 structure 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 units (including each are not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which receive storm water discharges from the facility.



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)
SW001 Thru SW021	See attached supplemental information.				

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.

See attached supplemental information.

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
SW001 thru SW018	See attached supplemental information.	

**V. Non Stormwater Discharges**

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

Name of Official Title (type or print) Gary Taylor, General Manager of Regulated Fossil Stations	Signature 	Date Signed 10/30/06
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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.

Visual inspections were performed during October 2006 of the outfalls to verify that either non-stormwater discharges were not occurring or that they were appropriately identified in the NPDES permit application.

**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.

1. On September 5, 2006 approximately 0.1 gallons of was released to the station intake area on the Dan River. The release was contained by an oil boom and cleaned up.
2. On July 21, 2006 approximately 0.25 gallons of oil was released from a hydraulic motor in the station intake area on the Dan River. The release was contained and cleaned up.
3. On February 27, 2006 approximately 10 gallons of diesel fuel released near Unit 3 onto rip rap. The area was cleaned up.
4. On October 8, 2005 approximately 5 gallons of oil was released to the station intake area on the Dan River when the dredge machine sunk. The oil was contained and cleaned up.

**VII. Discharge Information**

A, B, C, & D: See instruction before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided. Tables VII-A, VII-B, and VII-C are included on separate sheets numbered 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)

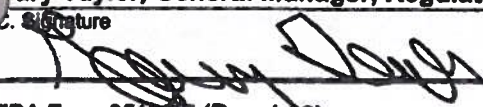
**IX. Contact analysis information**

Were any of the analysis reported in Item VII performed by a contact 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
Prism Laboratory	449 Springbrook Road PO Box 240543 Charlotte, NC 28221-0543	(704) 529-6364	BOD, COD, O&G, Metals, Nitrite+Nitrate, Flouride, Selenium, TKN, P, Sulfate and TSS

**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) Gary Taylor, General Manager, Regulated Fossil Stations	B. Area Code and Phone No. 704 263-3204
C. Signature 	D. Date Signed 10/30/06

**VII. Discharge Information (Continued from page 3 of Form 2F)**

**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.

Pollutant And CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number Of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
Oil & Grease		N/A				
Biological Oxygen Demand (BOD5)	15 mg/L	14 mg/L			1	
Chemical Oxygen Demand (COD)	< 50 mg/L	< 50 mg/L			1	
Total Suspended Solids (TSS)	62 mg/L	38.0 mg/L			1	
Total Organic Nitrogen	NA	NA			1	
Total Phosphorus	0.684 mg-P/L	0.637 mg-P/L			1	
pH	Minimum	Maximum	Minimum	Maximum		

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

Pollutant And CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number Of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
Arsenic, Total 01002	5.12 ug/L	3.44 ug/L			1	
Copper, Total 01042	0.381 mg/L	0.93 mg/L			1	
Iron, Total 014045	4.524 mg/L	3.459 mg/L			1	
Selenium, total 01147	23.55 ug/L	18.53 ug/L			1	
TKN 00625	2.8 mg-N/L	2.2 mg-N/L			1	
Nitrite + Nitrate	2.24 mg-N/L	2.47 mg-N/L			1	
Sulfate	22.58 mg/L	21.93 mg/L			1	

Continued from the Front

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

Pollutant And CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number Of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
NA						

**Part D - Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.**

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Total flow from rain event (gallons or specify units)
5-14-06	5	0.66	155 hours	240151.5 gallons

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

Theoretical flow calculations were used to estimate total flow from rain event.

**VII. Discharge Information (Continued from page 3 of Form 2F)**

**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.

Pollutant And CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number Of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
Oil & Grease	< 6.9	NA			1	
Biological Oxygen Demand (BOD5)	< 2.4 mg/L	14 mg/L			1	
Chemical Oxygen Demand (COD)	69 mg/L	69 mg/L			1	
Total Suspended Solids (TSS)	61.0 mg/L	90.0 mg/L			1	
Total Organic Nitrogen	NA	NA				
Total Phosphorus	00.130 mg-P/L	0.176 mg-P/L			1	
pH	Minimum	Maximum	Minimum	Maximum		

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

Pollutant And CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number Of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
Arsenic, Total 01002	9.57 ug/L	24.56 ug/L			1	
Copper, Total 01042	0.161 mg/L	0.156 mg/L			1	
Iron, Total 014045	5.252 mg/L	3.322 mg/L			1	
Selenium, total 01147	37.77 ug/L	122.50 ug/L			1	
TKN 00625	1.1 mg-N/L	2.1 mg-N/L			1	
Nitrite + Nitrate	0.74 mg-N/L	0.82 mg-N/L			1	
Sulfate	11.65 mg/L	37.42 mg/L			1	

Continued from the Front

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

Pollutant And CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number Of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
NA						

**Part D - Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.**

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Total flow from rain event (gallons or specify units)
4-18-2006	120	.27	192 hours	5865.3

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

Theoretical flow calculations were used to estimate total flow from rain event.