

**OFFICE OF ENVIRONMENTAL QUALITY CONTROL
BUREAU OF AIR QUALITY
SYNTHETIC MINOR CONSTRUCTION PERMIT**

BEAUFORT-JASPER WATER & SEWER AUTHORITY – CHERRY POINT WWTF
951 JASPER STATION ROAD
RIDGELAND, SC 29936

Permission is hereby granted to utilize the existing “CPDG1” and “CPDG2” diesel generators for peak-shaving purposes. The equipment designated “CPDG1” is a Cummins Model 2000DQKAB, rated at 2919 HP and 2000 kWe. The equipment designated “CPDG2” is a Caterpillar Model SR4B Set 3500, rated at 1596 HP and 1000 kWe. Maximum sulfur content of the diesel fuel is limited to 0.05% by weight. This facility is subject to South Carolina Regulation 61-62.1, Section II(E) Synthetic Minor Construction Permits by limiting annual NO_x below 250 tons per year. This facility is also subject to a federally-enforceable limit of less than 100 NO_x tons per year to avoid requirements of the Title V permit program.

NOTWITHSTANDING ANY OF THE CONDITIONS LISTED BELOW, NO APPLICABLE LAW, REGULATION, OR STANDARD WILL BE CONTRAVENED.

CONDITIONS

1. All official correspondence, plans, permit application forms, and written statements are an integral part of this permit.
2. The owner/operator shall submit written notification to the Director of the Engineering Services Division of the date construction is commenced, postmarked no later than 30 days after such date, and written notification of the actual date of initial startup of each new or altered source, postmarked within 15 days after such date.
3. Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time frame. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. This request must be made prior to the permit expiration.
4. The owner or operator shall comply with all terms, conditions, and limitations of this permit.

PERMIT NUMBER: 1360-0043-CA
DATE OF ISSUE: DRAFT
FACILITY SIC/NAICS CODES: 4952/221320

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This is pursuant to the provisions of Section 48-1-110, 1976 *Code of Laws of South Carolina*, as amended, and the *South Carolina Air Quality Control Regulation 61-62.1*, Section II.

I. STANDARD CONDITIONS

- A. This permit expressly incorporates all the provisions of *South Carolina Department of Health and Environmental Control Regulation 61-62.1*, Section II, Paragraph J.

II. SPECIAL CONDITIONS

A. EMISSION LIMITATIONS

Air pollutant emissions shall not exceed the following:

ID	Pollutant/Standard	Limit	Reference Method	Regulation	State Only
CA	NO _x	Less than 100 NO _x tons per year (12-month rolling sum)	See Condition	S.C. Reg. 61-62.1 Section II (E)	N
CA	NO _x	Less than 250 NO _x tons per year (12-month rolling sum)	See Condition	S.C. Reg. 61-62.1 Section II (E)	N
CA	Opacity	20% (each)	See Condition	S.C. Reg. 61-62.5 Std 4, Section IX B.	N

The emission limitations listed for each emission unit are based on operation at permitted capacity. Operation at less than permitted capacity must meet emission limits specified in the applicable regulations based on that operating rate. All test methods must be the most recent revisions that are published in the *Code of Federal Regulations*, in accordance with the requirements of SC Regulation 61-62.1, Section IV, Source Test.

B. CONTINUOUS MONITORING REQUIREMENTS

ID	Pollutant
N/A	N/A

N/A = Not Applicable

C. SOURCE TEST SCHEDULE

ID	Pollutant	Frequency	Method
N/A	N/A	N/A	N/A

N/A = Not Applicable

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D. ADDITIONAL CONDITIONS

Condition Number	Conditions
1.	The permittee shall pay fees in accordance with SC Regulation 61-30, SC Environmental Protection Fees.
2.	In accordance with SC Regulation 61-62.1 Section II(J), for all sources not required to have continuous emissions monitors, in the event of any malfunction of air pollution control equipment or system, process upset or other equipment failure which results in discharges of air contaminants lasting for one hour or more and which are greater than those discharges described for normal operation in the permit application shall be reported to the local Environmental Quality Control (EQC) Regional office within twenty-four (24) hours after the beginning of the occurrence. The permittee shall also submit a written report within thirty (30) days of the occurrence. This report shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality (BAQ). The report shall contain as a minimum, the following: the identity of the emission unit and associated equipment where excess emissions occurred, the magnitude of excess emissions, the time and duration of excess emissions, the steps taken to remedy the malfunction and to prevent a recurrence, documentation that control equipment and processes were at all times maintained and operated, to the maximum extent practicable, in a manner that was consistent with good practice for minimizing emissions. Such a report shall in no way serve to excuse, otherwise justify, or in any manner affect any potential liability or enforcement action resulting from the occurrence.
3.	<p>Air dispersion modeling (or other method) has demonstrated that this facility's operation will not interfere with the attainment and maintenance of any state or federal ambient air standard. Any changes in the parameters used in the air dispersion modeling may require a review by the facility to determine continuing compliance with these standards. These potential changes include any decrease in stack height, decrease in stack velocity, increase in stack diameter, decrease in stack exit temperature, increase in building height or building additions, increase in emission rates, decrease in distance between stack and property line, changes in vertical stack orientation, and installation of a rain cap that impedes vertical flow. Parameters that are not required in the determination will not invalidate the demonstration if they are modified. The emission rates used in the determination are listed in Attachment A of this permit. Higher emission rates may be administratively incorporated into Attachment A of this permit provided a demonstration using these higher emission rates shows the attainment and maintenance of any state or federal ambient air quality standard or with any other applicable requirement. Variations from the input parameters in the demonstration shall not constitute a violation unless the maximum allowable ambient concentrations identified in the standard are exceeded.</p> <p>The owner/operator shall maintain this facility at or below the emission rates as listed in Attachment A, not to exceed the pollutant limitations of this construction permit. Should the facility wish to increase the emission rates listed in Attachment A, not to exceed the pollutant limitations in the body of this permit, it may do so by the administrative process specified in this permit condition. This is a State Only enforceable requirement.</p>
4.	These conditions shall not supersede any State or Federal requirements such as National Emission Standards for Hazardous Air Pollutants, unless these conditions would impose a more restrictive limit.
5.	This construction permit was reviewed and issued based on the permit application submitted by the owner/operator. The owner/operator shall obtain any Bureau authorization required under South Carolina Regulation 61-62.1, Section II(A) prior to making modifications not covered under this construction permit.
6.	<p>The owner or operator shall submit a written request to the Director of the Engineering Services Division for a new or revised operating permit to cover any new or altered source postmarked no later than fifteen (15) days after the actual date of initial startup of each new or altered source. The written request for a new or revised operating permit must include, as a minimum, the following information:</p> <ul style="list-style-type: none"> i. A list of sources that were placed into operation. ii. The actual date of initial startup of each new or altered source.

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7.	The owner/operator or professional engineer in charge of the project shall certify that, to the best of his/her knowledge and belief and as a result of periodic observation during construction, the construction under application has been completed in accordance with the specifications agreed upon in the construction permit issued by the Department. If construction is certified as provided above, the permittee may operate the source in compliance with the terms and conditions of the construction permit until the operating permit is issued by the Department. If construction is not built as specified in the permit application and associated construction permit(s), the owner/operator must submit to the Director of the Engineering Services Division a complete description of modifications that are at variance with the documentation of the construction permitting determination prior to commencing operation. Construction variances that would trigger additional requirements that have not been addressed prior to start of operation shall be considered construction without a permit.
8.	Unless elsewhere specified within this permit, all records required to demonstrate compliance with the limits established under this permit shall be maintained on site for a period of at least five (5) years from the date generated and shall be made available to a Department representative upon request.
9.	<p>Unless elsewhere specified within this permit, all reports required under this permit, including all recorded parameters and calculated values, shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality, at the address listed below, postmarked no later than thirty (30) calendar days after the end of the reporting period.</p> <p align="center">SC DHEC - BAQ Technical Management Section 2600 Bull Street Columbia, SC 29201</p>
11.	<p>The CPDG1 and CPDG2 diesel generators are permitted to burn only distillate fuel oil having a maximum sulfur content of 0.05% by weight. Distillate fuel oil containing fuel oil additives is considered to be unused commercial fuel equivalent to “Virgin Fuel” as defined by <i>South Carolina Regulation 61.62.1 Section I (93)</i>. Fuel additives shall have been registered with the USEPA in accordance with 40CFR79. The use of any other substances as fuel is prohibited without prior written approval from the Bureau of Air Quality.</p> <p>Fuel oil supplier certification shall be obtained for each batch of oil received. Acceptable fuel oil certification can be ensured by following Department guidance entitled “Guidance For Fuel Oil Certifications” issued on August 12, 2004 and any subsequent revisions. Fuel oil certifications shall be maintained for a period of 5 years from date of creation and may be stored off-site. Fuel oil certifications shall be made available within a reasonable time if requested by a Department representative. Reports of the recorded sulfur content shall be submitted annually.</p>
12.	This facility is a potential major source for NO _x emissions as defined by SC Regulation 61-62.5, Standard 7, Prevention of Significant Deterioration (PSD). The facility has agreed to federally enforceable operating limitations to limit its potential to emit to less than 250 tons per year for NO _x to avoid PSD.
13.	This facility is a potential major source for NO _x emissions as defined by SC Regulation 61-62.70.2, Title V Operating Permit Program (Title V). The facility has agreed to federally enforceable operating limitations to limit its potential to emit to less than 100 tons per year for NO _x to avoid Title V.

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14.	<p>In order to comply with the limit of less than 100 NO_x tons per year, operation of the CPDG1 and CPDG2 diesel generators is limited to a maximum of 4,900 combination hours per 12-month rolling sum. A combination hour is achieved whenever the CPDG1 and CPDG2 diesel generators operate for one total hour each, either separately or in combination. Each diesel generator must be equipped with a means of recording actual operating hours such as an integral non-resetting operating hour meter. Each operating hour meter (or other device) shall be readily accessible and easily read by operating personnel and Department personnel (i.e. on ground level or easily accessible roof level).</p> <p>Each month the owner/operator must calculate the 12-month rolling sum of actual operating hours. Records of monthly 12-month rolling sum calculations shall be maintained in logs (written or electronic). Exceedance of the operating hour limit shall be considered a violation of an emission limit of this permit, unless records of the exceedance are also accompanied by other information demonstrating that a violation of an emission limit has not taken place.</p> <p>Reports of 12-month rolling sums of actual hours of operation shall be submitted annually.</p> <p>For purposes of demonstrating compliance with the limit or less than 100 NO_x tons per year, the owner or operator will use the following procedure:</p> <ol style="list-style-type: none"> i. Log the name of the person making the log entry, the full calendar date of the log entry, the monitoring month, the name of the person making the generator operating hour meter readings (if different), and the full calendar date when the generator operating hour meters were read (if different). ii. Log the actual readings from the operating hour meter for each of the two generators. iii. Calculate the difference between the most recent actual generator operating hour meter readings from step (ii) and the actual generator operating hour meter readings from the previous month. iv. Log the results from step (iii) using the following format: $t_{CPDG1} = \frac{\text{actual monitoring month operating hours for generator CPDG1}}{\text{actual monitoring month operating hours for generator CPDG2}}$ v. Enter the following equation in the log, replacing the t_{CPDG1}, t_{CPDG2} variables with corresponding values from step (iv) : $T_{EFF} = (t_{CPDG1} \times 0.66) + (t_{CPDG2} \times 0.34) = \text{_____} \quad (\text{Monthly Actual Combination Hours})$ vi. Calculate the monitoring monthly actual combination operating time (T_{EFF}). vii. Log the result from step (vi). viii. Calculate the 12-month rolling sum of individual monthly actual combination operating hours by summing the monthly T_{EFF} from step (vi) for each of the 11-months immediately preceding the most recent complete operating month. ix. Compare the result in step (viii) with the actual combination hour limit stated above.

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15.	In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section IX - Visible Emissions (Where Not Specified Elsewhere), where construction or modification began after December 31, 1985, emissions (including fugitive emissions) shall not exhibit an opacity greater than 20% (each generator).
16.	In accordance with SC Regulation 62.70, Section 70.5, the owner/operator of this facility must submit a Conditional Major Operating Permit application, within 12 month of starting operation of either of the existing CPDG1, CPDG2 diesel generators for peak shaving.

E. EXEMPT SOURCES

Equip ID	Source Description (Date Listed)	Exemption Basis
CA-ST1	Diesel fuel oil storage tank, 1800 gallon capacity, installed 2004	S.C. Regulation 61-62.1 Section II B.2.h.

Elizabeth J. Basil, Director
Engineering Services Division
Bureau of Air Quality

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ATTACHMENT A

Modeled Emission Rates

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AMBIENT AIR QUALITY STANDARDS - STANDARD 2					
STACK	Modeled Emission Rates (lbs/hr)				
	TSP	PM ₁₀	SO ₂	NO _x	CO
CPDG1	0.074	0.074	0.646	7.69 ¹	0.527
CPDG2	0.257	0.257	0.644	14.88 ¹	1.352

¹Note: The NO_x emission rate is the product of the allowable hours of operation times the maximum hourly emission rate divided by 8,760.

CLASS II PREVENTION OF SIGNIFICANT DETERIORATION - STANDARD 7			
STACK	Modeled Emission Rates (lbs/hr)		
	PM ₁₀	SO ₂	NO _x
CPDG1	0.074	0.646	7.69 ¹
CPDG2	0.257	0.644	14.88 ¹

¹Note: The NO_x emission rate is the product of the allowable hours of operation times the maximum hourly emission rate divided by 8,760.

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BEAUFORT-JASPER WATER & SEWER AUTHORITY – CHERRY POINT WWTF
6 SNAKE ROAD
OKATIE, SC 29909-3937

ATTENTION: Chris Petry

Dear Mr. Petry:

Enclosed is Construction Permit No. 1360-0043-CA. Please note the conditions on this permit by reading it carefully. Pursuant to the South Carolina Administrative Procedures Act, this permit decision may be appealed in accordance with applicable state law. Please see the enclosed Notice of Appeal Procedure, effective July 01, 2006, for guidelines on appeal submittals.

In addition to this permit to construct, a permit to operate is required in accordance with the Air Pollution Control Regulations and Standards for the State of South Carolina. The regulations require a written request for a new or revised operating permit to cover any new, or altered source, postmarked no later than fifteen (15) days after the actual date of initial startup of each new or altered source unless a more stringent time frame is required.

Please examine this new permit carefully for errors or omissions and notify the appropriate staff member, Jerry E. Freck, (803-898-7787) or e-mail at freckje@dhec.sc.gov promptly if any are discovered.

Sincerely,

Elizabeth J. Basil, Director
Engineering Services Division
Bureau of Air Quality

EJB:jef:<TYPIST'S INITIALS>

Enclosures

cc: Roger Stevens, Region 8, Beaufort EQC Office
Permit File: 1360-0043
ec: Susan Land, BP Barber sland@BPBarber.com

Notice of Appeal Procedure

The following procedures are in effect beginning July 1, 2006, pursuant to 2006 Act No. 387:

1. This decision of the S.C. Department of Health and Environmental Control (Department) becomes the final agency decision 15 days after notice of the decision has been mailed to the applicant or respondent, unless a written request for final review is filed with the Department by the applicant, permittee, licensee, or affected person.
2. An applicant, permittee, licensee, or affected person who wishes to appeal this decision must file a written request for final review with the Clerk of the Board at the following address or by facsimile at 803-898-3393.

Clerk of the Board
SC DHEC
2600 Bull Street
Columbia, SC 29201

3. The request for final review should include the following:
 - a. the grounds on which the Department's decision is challenged and the specific changes sought in the decision
 - b. a statement of any significant issues or factors the Board should consider in deciding how to handle the matter
 - c. a copy of the Department's decision or action under review
4. In order to be timely, a request for final review must be received by the Clerk of the Board within 15 days after notice of the decision has been mailed to the applicant or respondent. If the 15th day occurs on a weekend or State holiday, the request is due to be received by the Clerk of the Board on the next working day. The request for final review must be received by the Clerk of the Board by 5:00 p.m. on the date it is due.
5. If a timely request for final review is filed with the Clerk of the Board, the Clerk will provide additional information regarding procedures.
6. The Board of Health and Environmental Control has 60 days from the date of receipt of a request for final review to conduct a final review conference. The conference may be conducted by the Board, its designee, or a committee of three members of the Board appointed by the chair.
7. If a final review conference is not conducted within 60 days, the Department decision becomes the final agency decision, and a party may request a contested case hearing before the Administrative Law Court within 30 days after the deadline for the final review conference.

The above information is provided as a courtesy; parties are responsible for complying with all applicable legal requirements.