



SC DEPARTMENT *of* **ENVIRONMENTAL SERVICES**

Bureau of Air Quality Synthetic Minor Construction Permit

**New-Indy Catawba LLC
5300 Cureton Ferry Road
Catawba, South Carolina 29704
York County**

In accordance with the provisions of the Pollution Control Act, Sections 48-1-50(5), 48-1-100(A), and 48-1-110(a), the 1976 Code of Laws of South Carolina, as amended, and South Carolina Regulation 61-62, Air Pollution Control Regulations and Standards, the Bureau of Air Quality authorizes the construction of this facility and the equipment specified herein in accordance with the plans, specifications, and other information submitted in the construction permit application received on March 16, 2023, as amended. All official correspondence, plans, permit applications, and written statements are an integral part of the permit. Any false information or misrepresentation in the application for a construction permit may be grounds for permit revocation.

The construction and subsequent operation of this facility is subject to and conditioned upon the terms, limitations, standards, and schedules contained herein or as specified by this permit and its accompanying attachments.

Permit Number: CP-50000175 v1.0
Agency Air Number: 2440-0005

Issue Date: July 22, 2024



RECORD OF REVISIONS	
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Date	Description of Changes

A. PROJECT DESCRIPTION, EQUIPMENT, AND CONTROL DEVICE(S)

Permission is hereby granted to install and operate new equipment as part of meeting the requirement to discontinue the practice of adding solids to the clarifier, as directed by the federal Consent Decree entered in Civil No. 0:21-cv-02053-SAL, United States of America v. New-Indy Catawba, LLC, dated November 16, 2022 (Consent Decree).

Permission is hereby granted to install a new dry ash handling system consisting of a new ash silo equipped with a fabric filter. The ash collection system will use enclosed conveyors to deliver the collected ash from each combination boiler (TV EU ID 08, equipment IDs 2605 and 3705) to the new ash silo. The new ash silo will discharge into the ash conditioning system where the ash will be moistened using a conditioning agent. The conditioned ash will then be loaded into a container in the ash collection structure. The ash collection structure will protect the conditioned ash from becoming airborne during windy conditions while loading into containers. Once a container is loaded it will be tarped prior to leaving the ash collection structure to minimize dust emissions from the container during transport.

A.1 EQUIPMENT

Equipment ID	Equipment Description	Control Device ID	Emission Point ID
3790	Powerhouse Dry Ash Handling System – 8,900 lb/hr design capacity, consists of 4,200 cubic foot ash silo, enclosed conveyors from each combination boiler to the silo, and ash conditioning system	3790C	3790S

A.2 CONTROL DEVICES

Control Device ID	Control Device Description	Pollutant(s) Controlled	Emission Point ID
3790C	Ash Silo Fabric Filter	PM, PM ₁₀ , PM _{2.5}	3790S

B. LIMITATIONS, MONITORING, AND REPORTING

Condition Number	Conditions
B.1	<p>Equipment ID: 3790 Control Device ID: 3790C</p> <p>(S.C. Regulation 61-62.1, Section II(E)) This project is a potential significant increase for PM, PM₁₀, and PM_{2.5} emissions. The facility has requested federal enforceable emissions limitations to limit the potential to emit from this source to less than 25.0 tons per year for PM, 15.0 tons per year for PM₁₀, and 10.0 tons per year for PM_{2.5} to avoid a PSD Significant Increase of 25.0 tons per year for PM, 15.0 tons per year for PM₁₀, and 10.0 tons per year for PM_{2.5}.</p>

B. LIMITATIONS, MONITORING, AND REPORTING	
Condition Number	Conditions
	<p>The owner or operator shall maintain records of the total tons of dry ash collected from the Combination Boilers on a monthly basis and any other records necessary to determine PM, PM₁₀, and PM_{2.5} emissions from the Dry Ash Handling System. Monthly tons of dry ash collected will be calculated from the monthly number of trucks loaded multiplied by constant factors developed for the amount of conditioning agent applied to the dry ash material and the total weight of conditioned ash per truck. PM, PM₁₀, and PM_{2.5} emissions shall be calculated on a monthly basis, and a twelve month rolling sum shall be calculated for total PM, PM₁₀, and PM_{2.5} emissions. Emissions from malfunctions are required to be quantified and included in the calculations. The twelve month rolling sum shall be less than 25.0 tons for PM, 15.0 tons for PM₁₀, and 10.0 tons for PM_{2.5}. Reports of the calculated values and the twelve-month rolling sum, calculated for each month in the reporting period, shall be submitted semiannually.</p> <p>The owner or operator shall calculate monthly PM, PM₁₀, and PM_{2.5} emissions from the dry ash handling system using the following algorithm:</p> $POL_n = (ASH_n \times EF_{POL} \div 2000 \text{ lb/ton}) + MAL_n$ <p>Where:</p> <ul style="list-style-type: none"> POL = Monthly emission rate of the pollutant (PM, PM₁₀, PM_{2.5}) (ton) n = Month ASH_n = Monthly total of dry ash collected from both boilers (tons) EF_{POL} = PM and PM₁₀ emission factor (EF) as given in AP-42, Ch. 11, Table 11.12-8 – Concrete Batch Plant Metal emission factors, cement supplement (fly ash) silo filling w/fabric filter. Note: PM_{2.5} emissions assumed equal to PM₁₀ emissions. MAL_n = emissions from malfunctions (tons) <p>The owner or operator shall calculate the twelve month rolling sum for PM, PM₁₀, and PM_{2.5} emissions from the dry ash handling system using the following algorithm:</p> $DAHS_{POL}_{rs} = \sum_{n=1}^{12} POL_n$ <p>Where:</p> <ul style="list-style-type: none"> DAHS_{POL}_{rs} = twelve month rolling sum for POL, current month plus eleven preceding months (ton) POL = Monthly emission rate of the pollutant (PM, PM₁₀, PM_{2.5}) (ton) n = Month
B.2	<p>Equipment ID: 3790 Control Device ID: 3790C</p>

B. LIMITATIONS, MONITORING, AND REPORTING	
Condition Number	Conditions
	<p>(S.C. Regulation 61-62.5, Standard No. 4, Section IX) Where construction or modification began after December 31, 1985, emissions from this source. (including fugitive emissions) shall not exhibit an opacity greater than 20%.</p> <p>(S.C. Regulation 61-62.1, Section II(J)(2)) The owner or operator shall perform a visual inspection on a semiannual basis of sources subject to opacity limits. The inspection shall occur during normal source operation. Logs shall be kept to record all visual inspections, noting color, duration, density (heavy or light), cause, and corrective action taken for any abnormal emissions. If a source did not operate during the required visual inspection time frame, the log shall indicate such. The owner or operator shall submit semiannual reports. The report shall include records of abnormal emissions, if any, and corrective actions taken. If the unit did not operate during the semiannual period, the report shall state so.</p> <p>Visual inspection means a qualitative observation of opacity during daylight hours. The observer does not need to be certified to conduct valid visual inspections. However, at a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, and observer position relative to lighting, wind, and the presence of uncombined water.</p>
B.3	<p>Equipment ID: 3790 Control Device ID: 3790C</p> <p>(S.C. Regulation 61-62.5, Standard No. 4, Section VIII) Particulate matter emissions shall be limited to the rate specified by use of the following equations:</p> <p style="padding-left: 40px;">For process weight rates less than or equal to 30 tons per hour $E = (F) 4.10P^{0.67}$</p> <p style="padding-left: 40px;">For process weight rates greater than 30 tons per hour $E = (F) (55.0P^{0.11} - 40)$</p> <p style="padding-left: 40px;">Where E = the allowable emission rate in pounds per hour P = process weight rate in tons per hour F = effect factor from Table B in S.C. Regulation 61-62.5, Standard No. 4</p> <p>For the purposes of compliance with this condition, the process boundaries are defined as follows:</p> <ul style="list-style-type: none"> • Powerhouse Dry Ash Handling System - Max Process Weight Rate 4.45 ton/hr <p>(S.C. Regulation 61-62.1, Section II(J)(2)) The owner or operator shall install, operate, and maintain pressure drop gauge(s) on the ash silo fabric filter. Pressure drop readings shall be recorded daily during source operation. Facilities with automated data collection may collect monitoring data on a more frequent basis and calculate the daily average. Readings collected when the source is shutdown or not operating may not be used in the calculation. The owner or operator must get approval from the Department for an increased frequency/averaging plan prior to using averaging for parametric monitoring. The owner or operator shall continue to record daily, the calculated monitoring averages</p>

B. LIMITATIONS, MONITORING, AND REPORTING	
Condition Number	Conditions
	<p>using the approved increased frequency/averaging plan unless prior approval is obtained from the Department for changing the plan.</p> <p>Operation and maintenance checks shall be made on at least a weekly basis for ash silo fabric filter cleaning systems, dust collection hoppers, and conveying systems, as applicable, for proper operation. The checks and any corrective actions shall be documented and kept on-site. The ash silo fabric filter shall be in place and operational whenever processes controlled by it are running, except during periods of ash silo fabric filter malfunction or mechanical failure.</p>
B.4	<p>Equipment ID: 3790 Control Device ID: 3790C</p> <p>(S.C. Regulation 61-62.1, Section II(J)(2)) Operational ranges for the monitored parameters shall be established to ensure proper operation of the pollution control equipment. These operational ranges for the monitored parameters shall be derived from stack test data, vendor certification, and/or operational history and visual inspections, which demonstrate the proper operation of the equipment. These ranges and supporting documentation (certification from manufacturer, stack test results, 30 days of normal readings, opacity readings, etc.) shall be submitted to the Department within 180 days of startup. Operating ranges may be updated following submittal to the Department.</p>
B.5	<p>Equipment ID: 3790 Control Device ID: 3790C</p> <p>(S.C. Regulation 61-62.1, Section II(J)(2)) The owner or operator shall inspect, calibrate, adjust, and maintain continuous monitoring systems, monitoring devices, and gauges in accordance with manufacturer's specifications or good engineering practices. The owner or operator shall maintain on file all measurements including continuous monitoring system or monitoring device performance measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required in a permanent form suitable for inspection by Department personnel.</p> <p>(S.C. Regulation 61-62.1, Section II(J)(1)(d)) Sources required to have continuous emission monitors shall submit reports as specified in applicable parts of the permit, law, regulations, or standards.</p>
B.6	<p>Equipment ID: 3790 Control Device ID: 3790C</p> <p>(S.C. Regulation 61-62.1, Section II(J)(2)) All gauges shall be readily accessible and easily read by operating personnel and Department personnel (i.e. on ground level or easily accessible roof level). Monitoring parameter readings (e.g., pressure drop readings, flow rates, etc.) and inspection checks shall be maintained in logs (written or electronic), along with any corrective action taken when deviations occur. Each occurrence of operation outside the operational ranges, including date and time, cause, and corrective action taken, shall be recorded and kept on site. Exceedance of operational range shall not be considered a violation of an emission limit of this permit, unless the</p>

B. LIMITATIONS, MONITORING, AND REPORTING

Condition Number	Conditions
	<p>exceedance is also accompanied by other information demonstrating that a violation of an emission limit has taken place.</p> <p>Reports of these occurrences shall be submitted semiannually. If there were no occurrences during the reporting period, then documentation shall be submitted to indicate such. Any alternative method for monitoring control device performance must be preapproved by the Department and shall be incorporated into the permit as set forth in S.C. Regulation 61-62.70.7.</p>

C. NESHAP (40 CFR 61 AND 40 CFR 63) - RESERVED

D. GENERAL FACILITY WIDE

Condition Number	Conditions
D.1	The owner or operator shall comply with S.C. Regulation 61-62.6, Control of Fugitive Particulate Matter, Section III Control of Fugitive Particulate Matter Statewide.
D.2	The permittee shall pay permit fees to the Department in accordance with the requirements of S.C. Regulation 61-30, Environmental Protection Fees.
D.3	<p>In the event of an emergency, as defined in S.C. Regulation 61-62.1, Section II(L), the owner or operator may document an emergency situation through properly signed, contemporaneous operating logs, and other relevant evidence that verify:</p> <ol style="list-style-type: none"> 1. An emergency occurred, and the owner or operator can identify the cause(s) of the emergency; 2. The permitted source was at the time the emergency occurred being properly operated; 3. During the period of the emergency, the owner or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and 4. The owner or operator gave a verbal notification of the emergency to the Department within twenty-four (24) hours of the time when emission limitations were exceeded, followed by a written report within thirty (30) days. The written report shall include, at a minimum, the information required by S.C. Regulation 61-62.1, Section II(J)(1)(c)(i) through (J)(1)(c)(viii). The written report shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. <p>This provision is in addition to any emergency or upset provision contained in any applicable requirement.</p>

D. GENERAL FACILITY WIDE	
Condition Number	Conditions
D.4	<p>(S.C. Regulation 61-62.1, Section II(O)) Upon presentation of credentials and other documents as may be required by law, the owner or operator shall allow the Department or an authorized representative to perform the following:</p> <ol style="list-style-type: none"> 1. Enter the facility where emissions-related activity is conducted, or where records must be kept under the conditions of the permit. 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. 3. Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit. 4. As authorized by the Federal Clean Air Act and/or the S.C. Pollution Control Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
D.5	<p>(S.C. Regulation 61-62.1, Section II(J)(1)(a)) No applicable law, regulation, or standard will be contravened.</p>
D.6	<p>(S.C. Regulation 61-62.1, Section II(J)(1)(e)) Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to this regulation or with the terms of any approval to construct, or who commences construction after the effective date of these regulations without applying for and receiving approval hereunder, shall be subject to enforcement action.</p>

E. EMISSIONS INVENTORY REPORTS - RESERVED
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F. GENERAL RECORD KEEPING AND REPORTING	
Condition Number	Conditions
F.1	<p>(S.C. Regulation 61-62.1, Section II(J)(1)(g)) A copy of the Department issued construction and/or operating permit must be kept readily available at the facility at all times. The owner or operator shall maintain such operational records; make reports; install, use, and maintain monitoring equipment or methods; sample and analyze emissions or discharges in accordance with prescribed methods at locations, intervals, and procedures as the Department shall prescribe; and provide such other information as the Department reasonably may require. 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 the record was generated and shall be made available to a Department representative upon request.</p>

F. GENERAL RECORD KEEPING AND REPORTING	
Condition Number	Conditions
F.2	The owner or operator shall submit reports required in this permit in a timely manner and according to the reporting schedule established through the Department's approved electronic permitting system.
F.3	All reports and notifications required under this permit shall be submitted to the Department.
F.4	(S.C. Regulation 61-62.1, Section II(A)(3)) The owner or operator shall submit written notification to the Department of the date construction is commenced, postmarked within thirty (30) days after such date.
F.5	<p>(S.C. Regulation 61-62.1, Section II(J)(1)(c)) For sources not required to have continuous emission monitors, 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 (1) hour or more and which are greater than those discharges described for normal operation in the permit application, shall be reported to the Department within twenty-four (24) hours after the beginning of the occurrence and a written report shall be submitted to the Department within thirty (30) days. The written report shall include, at a minimum, the following:</p> <ol style="list-style-type: none"> 1. The identity of the stack and/or emission point where the excess emissions occurred; 2. The magnitude of excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the excess emissions; 3. The time and duration of excess emissions; 4. The identity of the equipment causing the excess emissions; 5. The nature and cause of such excess emissions; 6. The steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunction; 7. The steps taken to limit the excess emissions; and, 8. Documentation that the air pollution control equipment, process equipment, or processes were at all times maintained and operated, to the maximum extent practicable, in a manner consistent with good practice for minimizing emissions. <p>The initial twenty-four (24) hour notification should be made to the Department's local Regional Office.</p> <p>The written report should be sent to the Department.</p>

G. PERMIT EXPIRATION AND EXTENSION	
Condition Number	Conditions
G.1	<p>(S.C. Regulation 61-62.1, Section II(A)(4) and (5) and S.C. Regulation 61-62.1, Section II(J)(1)(f)) Approval to construct shall become invalid if construction:</p> <ul style="list-style-type: none"> a. Is not commenced within eighteen (18) months after receipt of such approval; b. Is discontinued for a period of eighteen (18) months or more; or c. Is not completed within a reasonable time as deemed by the Department. <p>The Department may extend the construction permit for an additional eighteen (18) month period upon a satisfactory showing that an extension is justified. This request must be made prior to the permit expiration.</p> <p>This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within eighteen (18) months of the projected and approved commencement date.</p>

H. PERMIT TO OPERATE	
Condition Number	Conditions
H.1	<p>(S.C. Regulation 61-62.1, Section II(F)(3)) When a Department issued construction permit includes engineering and/or construction specifications, the owner or 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 owner or operator 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 or operator must submit to the Department 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.</p>
H.2	<p>(S.C. Regulation 61-62.1, Section II(F)(1)) The owner or operator shall submit written notification to the Department of the actual date of initial startup of each new or altered source, postmarked within fifteen (15) days after such date. Any source that is required to obtain an air quality construction permit issued by the Department must obtain an operating permit when the new or altered source is placed into operation and shall comply with the requirements of this section.</p>
H.3	<p>(S.C. Regulation 61-62.1, Section II(F)(4)(a)) For sources covered by an effective Title V Operating Permit, the modification request required by S.C. Regulation 61-62.70 shall serve as the request to operate for the purposes of S.C. Regulation 61-62.1, Section II(F). The request should be made using</p>

H. PERMIT TO OPERATE	
Condition Number	Conditions
	the appropriate Title V modification form.

I. AMBIENT AIR STANDARDS	
Condition Number	Conditions
I.1	<p>Air dispersion modeling (or other method) has previously 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 this demonstration 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. 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 or operator shall maintain this facility at or below the emission rates used in the most recent air dispersion modeling (or other method) demonstration submitted to and approved by the Department, not to exceed the pollutant limitations of this permit. Should the facility wish to increase the emission rates used in the demonstration, not to exceed the pollutant limitations in the body of this permit, it may do so by submitting a new demonstration for approval. This condition along with the referenced modeling demonstration will also serve to meet the intent of S.C. Regulation 61-62.5, Standard No. 8, Section II(D). This is a State Only enforceable requirement.</p>