

West Virginia Department of Environmental Protection

Division of Air Quality

Public Meeting on MSG CNP 1, LLC BECCS Facility

Permit R13-3708

Joe Kessler, P.E., Ed Andrews, P.E.

October 7, 2025



west virginia department of environmental protection

WVDEP/DAQ Staff



WVDEP

- Terry Fletcher, Chief Communications Officer
- Carrie Jones, Public Information Specialist
- Dennis Stottlemeyer, Acting Environmental Advocate

Division of Air Quality

- Laura Crowder, Director
- James Robertson, Deputy Director/Compliance & Enforcement
- Joe Kessler, NSR Program Manager
- Ed Andrews, Permit Engineer
- Nicole Ernest, Information Manager

Meeting Purpose



- Provide Information
- Answer Questions
- Accept Official Comments (Statutory Requirement)
 - No decision made this evening. All comments submitted prior to close of the comment period (verbal & written) will be reviewed and considered by staff and you will be notified of the agency's final determination.

Comment Period



- Opened August 19, 2025.
- Closes at 5 p.m., October 8, 2025.
- Email: Edward.S.Andrews@WV.gov with "MGS CNP1 - BECCS Comments" as the subject line, or
- Mail: WVDEP - Air Quality,
Attention: Edward Andrews,
601 57th Street SE,
Charleston, WV 25304

Agenda



- DAQ Presentation
- Question/Answer Session (Write **questions** on notecards)
- Official Comments (Timed, verbal statements on draft permit for the record)
 - Please keep questions and comments relevant to air quality issues and the draft permit.
 - DAQ has no authority to factor in other important, but non-air quality related issues such as zoning, water quality/quantity, noise/light pollution, economics, etc.

Overview



- Permitting Process
- What Is Being Permitted?
- Permit Requirements
 - Limits/Monitoring/Testing
- Summary

Permitting Process



- Company applies for an air permit and publishes a legal ad, beginning a 30-day public comment period.
- Application is reviewed for completeness and company is notified of any deficiencies.
- Application undergoes a technical review to determine which air quality rules apply, and if the proposal meets those rules.

Permitting Process (cont'd.)



- If proposed project meets all applicable air quality rules, DAQ publishes a legal ad, beginning a second 30-day public comment period.
- At this time, a copy of the evaluation and draft permit is made available for public review.
 - All documents can be found under “Popular Searches” at:
<https://dep.wv.gov/daq/permitting/Pages/NSR-Permit-Applications.aspx>
- After the close of the comment period, all comments received are reviewed and addressed, and DAQ takes final action.

Permitting Process (cont'd.)



- **Minor Source (45CSR13) Permitting Process: What it **does** do:**
 - Determine/enforce compliance with state/federal air quality rules and regulations.
 - Review and verify potential to emit of the facility is reasonable.
 - Develop requirements to enforce compliance with facility's proposed air emissions.
 - Provide framework of public notification/participation.
- **Minor Source (45CSR13) Permitting Process: What it does **not** do:**
 - Not designed to prevent industrial development.
 - Require a full Environmental Impact Statement (EIS) or require a cumulative impact analysis that includes nearby sources.
 - Address Greenhouse Gases (GHGs).
 - Take into consideration any other important but non-air quality benefits/impacts such as jobs, property values, traffic, zoning, national energy issues, economics of project, infrastructure, archaeology, etc.

Permitting Process (cont'd.)



- **Governing Statute for Permit Issuance (§45-13-5.7)**
 - ***“The Secretary shall issue such permit or registration unless he or she determines that the proposed construction, modification, registration or relocation will violate applicable emission standards, will interfere with attainment or maintenance of an applicable ambient air quality standard, cause or contribute to a violation of an applicable air quality increment, or be inconsistent with the intent and purpose of this rule or W. Va. Code § 22-5-1, et seq., in which case the Secretary shall issue an order denying such construction, modification, relocation and operation. The Secretary shall, to the extent possible, give priority to the issuance of any such permit so as to avoid undue delay and hardship.”***

What is Being Permitted?



- Biomass boiler: 944 MMBtu/hr max heat input
- Natural gas generator: 3,000 horsepower (hp)
- Firewater pump: 614 hp
- Cooling tower & wastewater treatment
- Fuel & ash handling systems

Emission Controls for Boiler



- Baghouse Filter → Controls (reduces) Particulate Matter (dust/soot)
- Dry Sorbent Injection → Controls acid gases
- Selective Catalytic Reduction (SCR) → Controls Nitrogen Oxides (NO_x)
- Oxidation Catalyst → Controls Carbon Monoxide (CO) & Volatile Organic Compounds (VOCs)
- Wet scrubber → Controls Sulfur Dioxide (SO₂)

Permit Limits



- Boiler: Can only burn biomass + natural gas (NG max 180 MMBtu/hr).
- Electricity generated by the boiler cannot be sold.
- Carbon Capture Unit limited to 7,937 hrs/year.
- NG generator & fire pump are limited to 100 hrs/year.

Proposed Emissions (tons per year)



Pollutant	Biomass Boiler	Facility Total	Major Source Threshold Levels
NO _x	90.42	90.90	100
CO	45.65	46.48	100
SO ₂	50.78	50.79	100
PM	34.88	59.09	100
PM ₁₀ /PM _{2.5}	67.84	83.95/75.65	100
VOCs	19.04	36.46	100
H ₂ SO ₄	27.87	27.87	N/A
Total HAPs	23.36	24.01	25

Applicable Requirements



- Particulate Matter (PM) Standard: 40 CFR 60 Subpart Db/40 CFR 63 Subpart JJJJJJ
 - 0.030 lb of PM/MMBtu
- Sulfur Dioxide (SO₂) Standard: 40 CFR 60 Subpart Db
 - 0.32 lb of SO₂/MMBtu
- Nitrogen Oxides (NO_x) Standard: 40 CFR 60 Subpart Db
 - 0.20 lb of NO_x/MMBtu
- Visible Emission (Opacity): 45 CSR 2
 - 10% Opacity

Monitoring Requirements



- Continuous NOx monitoring.
- Track temperatures, oxygen, pressure, flow.
- Baghouse leak detector.
- Track type/amount of fuel, heat content & sulfur content.
- Record hours for engines & carbon capture.
- Visible emissions from boiler.

Testing Requirements



- Initial tests for: PM, PM10, PM2.5, CO, SO₂, NO_x, VOCs, HAPs.
 - Demonstrate compliance and establish operating limits.
- Retest at least once every 5 years (reverify operating limits).
- Additional PM tests if baghouse alarms trigger too often.
 - Greater than 5 percent of the operating time in a 30-day period.

Summary



- The draft permit allows this facility to be operated with a potential to emit (with controls) below major source threshold levels, making the facility an area source of HAPs and minor source of criteria pollutants.
- The DAQ will accept public comments until 5 p.m. on October 8, 2025.
- After October 8th, the DAQ will review and respond to all timely, air-quality related comments submitted and take final action on the draft permit.

Comment Period



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Question & Answer



- Submit written questions; Staff will read aloud and provide a response.
 - Raise hand if you need assistance.

Official Comments



- Timed, verbal statements on draft permit for the record.
- Each commenter will have 5 minutes to speak.

5:00

Contact Information



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Thank You!