# West Virginia Department of Environmental Protection Division of Air Quality

# **Fact Sheet**



# For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-07300022-2025**Application Received: **November 5, 2024**Plant Identification Number: **03-54-073-00022** 

Permittee: Pleasants Energy, LLC

Mailing Address: 10319 South Pleasants Highway, St. Marys, WV 26170

Physical Location: Waverly, Pleasants County, West Virginia

UTM Coordinates: 468.629 km Easting • 4353.573 km Northing • Zone 17

Directions: Site is located on the eastern side of State Route 2 in Pleasants County,

approximately 1 mile east of Waverly

#### **Facility Description**

The facility is a 300 MW simple cycle electric generating peaking station operating under SIC 4911. The Pleasants Energy Station includes two General Electric (GE) 7FA class simple cycle combustion turbines, each nominally rated at 167.8 MW (while firing natural gas at an ambient temperature of 59° F and 60% relative humidity) including generator, exciter, and associated auxiliary mechanical and electrical systems. The primary fuel is natural gas. Low sulfur distillate fuel oil is utilized as a backup fuel.

Each gas turbine includes an advanced firing combustion turbine air compressor section, gas combustion system with advanced dry low  $NO_x$  control, power turbine, and a 60-Hz, 18 (kV) generator.

#### **Emissions Summary**

Plantwide	Emissions	Summary	[Tons per	Vearl
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Regulated Pollutants	<b>Potential Emissions</b>	2024 Actual Emissions
Carbon Monoxide (CO)	471.08	48.23
Nitrogen Oxides (NO <sub>X</sub> )	474.00	341.59
Particulate Matter (PM <sub>2.5</sub> )	83.33	43.1
Particulate Matter (PM <sub>10</sub> )	83.33	43.1
Total Particulate Matter (TSP)	83.33	43.1
Sulfur Dioxide (SO <sub>2</sub> )	13.76	6.98
Volatile Organic Compounds (VOC)	30.00	18.22

 $PM_{10}$  is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2024 Actual Emissions
Total HAPs (All individual HAPs have a PTE < 10 tpy)	8.73	5.68

Some of the above HAPs may be counted as PM or VOCs.

## Title V Program Applicability Basis

This facility has the potential to emit 474.00 tons per year of  $NO_x$  and 471.08 tons per year of CO. Due to this facility's potential to emit over 100 tons per year of a criteria pollutant, Pleasants Energy, LLC is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

#### **Legal and Factual Basis for Permit Conditions**

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	
45CSR6	Open burning prohibited.
45CSR11	Standby plans for emergency episodes.
45CSR13	Permits for Construction, Modification, Relocation and Operation
	of Stationary Sources of Air Pollutants, Notification Requirements,
	Administrative Updates, Temporary Permits, General Permits, and
	Procedures for Evaluation
45CSR14	Permits for Construction and Major Modification of Major
	Stationary Sources of Air Pollution for the Prevention of
	Significant Deterioration
45CSR16	Standards of Performance for New Stationary Sources Pursuant to
	40CFR60.
WV Code § 22-5-4 (a) (15)	The Secretary can request any pertinent information such as annual
	emission inventory reporting.
45CSR30	Operating permit requirement.

45CSR33	Acid Rain Provisions and Permits
45CSR34	Emission Standards for Hazardous Air Pollutants Pursuant to 40
	C.F.R. Part 63
45CSR43	Cross-State Air Pollution Rule
40 C.F.R. 60, Subpart IIII	Standards of Performance for Stationary Compression Ignition
	Internal Combustion Engines
40 C.F.R. 60 Subpart KKKK	Standards of Performance for Stationary Combustion Turbines.
40 C.F.R. Part 61, Subpart M	Asbestos inspection and removal
40 C.F.R. 63, Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for
	Stationary Reciprocating Internal Combustion Engines (RICE)
40 C.F.R. Part 72	Permits Regulation
40 C.F.R. Part 73	Sulfur Dioxide Allowance System Permits Regulation
40 C.F.R. Part 74	Sulfur Dioxide Opt-ins
40 C.F.R. Part 75	Continuous Emissions Monitoring
40 C.F.R. Part 76	Nitrogen Oxides Reduction Program
40 C.F.R. Part 77	Excess Emissions
40 C.F.R. Part 78	Appeals Procedure for Acid Rain Program
40 C.F.R. Part 82, Subpart F	Ozone depleting substances
40 C.F.R. Part 97, Subpart AAAAA	CSAPR NO <sub>X</sub> Annual Trading Program
40 C.F.R. Part 97, Subpart CCCCC	CSAPR SO <sub>2</sub> Group 1 Trading Program
40 C.F.R. Part 97, Subpart EEEEE	CSAPR NO <sub>X</sub> Ozone Season Group 2 Trading Program

State Only:

45CSR4 No objectionable odors.

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

### **Active Permits/Consent Orders**

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (if any)
R33-55349-2025-5	December 22, 2020	
R14-0034D	January 17, 2025	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

#### **Determinations and Justifications**

This is the facility's fourth Title V renewal permit. There were no physical changes to the existing emission units and control devices. Therefore, there were no changes to CAM applicability.

Minor modification application R30-07300022-2020 (MM01) was submitted on November 1, 2024 to incorporate changes from Class II administrative update permit R14-0034D, which removed the natural gas usage limitations and increased certain emission rates. These changes have been included in this Title V renewal and are summarized below.

The following changes have occurred since the most recent Title V permit was issued:

#### **Title V Permit Boilerplate changes:**

- ➤ Condition 2.1.3. This condition was updated to delete the word "such" which was removed from 45CSR30 effective March 31, 2023. The citation was changed from "45CSR§30-2.12" to "45CSR§30-2.39" because the definition of "Secretary" was renumbered from a previous version of 45CSR30.
- ➤ Condition 2.11.4 The citation was changed from "45CSR§30-2.39" to "45CSR§30-2.40" because it was renumbered from a previous version of 45CSR30.
- ➤ Conditions 2.17., 3.5.7. and 3.5.8.a.1. These conditions were deleted and replaced with "Reserved" because the emergency provisions under 45CSR§30-5.7 were removed from 45CSR30 effective March 31, 2023.
- > Condition 2.22.1 "45CSR38" was removed from the citation because this rule has been repealed.
- > Conditions 3.1.6. and 3.3.1. The citation was revised to refer to the current version of the WV Code.
- ➤ Condition 3.3.1.b. This condition was updated to include the following additional language: "If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit shall be revised in accordance with 45CSR§30-6.4 or 45CSR§30-6.5 as applicable."
- ➤ Condition 3.5.3. This condition was updated to include the current EPA mailing address.
- ➤ Condition 3.5.4. This condition was updated because the requirement to submit a certified emissions statement was removed from 45CSR30 effective March 31, 2023.
- ➤ Condition 3.5.8.a.2. This condition was updated to replace the word "telefax" with "email" according to the change in 45CSR30 effective March 31, 2023.

#### Changes from Minor Modification R30-07300022-2020 (MM01) / Permit R14-0034D:

- > Condition 4.1.1. This condition was updated to increase the annual emission limits for NO<sub>X</sub> and VOCs.
- **Condition 4.1.3.** This condition was updated to remove the natural gas usage limitation.
- ➤ Condition 4.1.8. This condition was updated to increase the annual emission limits for Acetaldehyde, Acrolein, Benzene, Ethyl Benzene, Formaldehyde, Toluene, Xylene and total Hazardous Air Pollutants.
- > Condition 4.2.1. This condition was updated to remove the requirement to monitor natural gas usage.
- **Condition 4.4.8.** This condition was updated to require only the recording of fuel oil usage amounts.

#### **Other Title V Permit Changes:**

- > Conditions 4.1.21. and 4.1.23. These conditions were revised due to changes to 40 C.F.R. 60 Subpart IIII.
- ➤ **Appendix B** Included the current Phase II Acid Rain Permit.

#### **Non-Applicability Determinations**

The following requirements have been determined not to be applicable to the subject facility due to the following:

- a. **45CSR2** To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers. The natural gas turbines (GT1 & GT2) are subject to 45CSR2. However, the turbines are not indirect heat exchangers and by definition are not fuel burning units. The turbines use the combustion gases to turn the turbine blades.
- b. **40 CFR 60 Subpart Kb** Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. Tank T1 was constructed after July 23, 1984, has a capacity >151 m³, and the fuel oil it stores has a true maximum vapor pressure less than 3.5 kilopascals. Therefore, pursuant to 40 CFR §60.110b(b), tank T1 is exempt from this subpart.
- c. **40 CFR 60 Subpart** GG- *Standards of Performance for Stationary Gas Turbines*. The combustion turbines were modified after February 18, 2005 and are therefore not subject to this rule but are subject to 40 CFR 60 Subpart KKKK.
- d. **40** CFR Part 64 Compliance Assurance Monitoring. The only potential PSEU applicable to turbines GT1 and GT2 is for nitrogen oxide (NO<sub>x</sub>). NO<sub>x</sub> is the only pollutant from the turbines for which there are emission controls. The NO<sub>x</sub> controls for the turbines while burning natural gas are inherent to the design and operation of the turbines. Water injection is used to control NO<sub>x</sub> whenever fuel oil is fired in the turbines. NO<sub>x</sub> continuous emission monitors (CEMS) are specified in the original Title V permit in order to monitor NO<sub>x</sub> emissions thus satisfying the exemption of 40 CFR§64.2(b)(1)(vi). The facility is also subject to the Acid Rain Program requirements and therefore also meets the exemption of 40 CFR§64.2(b)(1)(iii).
- e. **40 CFR 60 Subpart TTTT** Standards of Performance for Greenhouse Gas Emissions for Electric Utility Generating Units (EGUs). This regulation was finalized on October 23, 2015 and applies to new units that commenced construction after January 8, 2014 or modification or reconstruction after June 18, 2014. These combustion turbines commenced construction prior to the applicability date and are not considered a "new" source. Further, these combustion turbines do not meet the definition of "reconstructed" or "modified" per the NSPS, so Subpart TTTT is not applicable to the combustion turbines.

### **Request for Variances or Alternatives**

None.

#### **Insignificant Activities**

Insignificant emission unit(s) and activities are identified in the Title V application.

#### **Comment Period**

Beginning Date: September 10, 2025 Ending Date: October 10, 2025

#### **Point of Contact**

All written comments should be addressed to the following individual and office:

Dan Roberts
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
304/926-0499 ext. 41902
Daniel.p.roberts@wv.gov

#### **Procedure for Requesting Public Hearing**

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

#### **Response to Comments (Statement of Basis)**

No comments were received from the EPA or the public. In an email received October 6, 2025, Rebekah Hay, the company's Regional Environmental Manager, submitted a list of six minor comments on the draft/proposed Title V renewal permit R30-07300022-2025. Four of these comments asked whether permit conditions from NSR permit R14-0034D which included condition 2.6. - Duty to Provide Information, condition 2.14. - Suspension of Activities, condition 2.17. - Transferability (45CSR§13-10.1.) and condition 3.1.5. - Permanent Shutdown (45CSR§13-10.5.) needed to be included in the Title V renewal permit R30-07300022-2025. These four comments referencing conditions from NSR permit R14-0034D are addressed as follows:

- ➤ R14-0034D Condition 2.6. Duty to Provide Information (Confidential Information) This condition is actually in the Title V draft/proposed permit as condition 2.19.1.
- ➤ R14-0034D Condition 2.14. Suspension of Activities This condition is NSR permit boilerplate language and has not previously been included in the existing Title V Operating Permit boilerplate language and is not required to be included in the renewal permit.
- ➤ R14-0034D Condition 2.17. Transferability This condition is NSR permit boilerplate language and has not previously been included in the existing Title V Operating Permit boilerplate language and is not required to be included in the renewal permit.
- ➤ R14-0034D Condition 3.1.5. Permanent Shutdown This condition is NSR permit boilerplate language and has not previously been included in the existing Title V Operating Permit boilerplate language and is not required to be included in the renewal permit.

The other two comments regard a typographical error and a table line entry which was mistakenly erased when trying to correct the table's formatting in draft/proposed renewal permit R30-07300022-2025. These two comments are addressed as follows:

- ➤ Conditions 2.25.2. and 2.25.3. An errant line return in the middle of condition 2.25.2. split this condition into two parts and autonumbering created an extra condition 2.25.3. Condition 2.25.2 was updated to delete the line return, thereby reuniting the sentence and deleting unneeded condition 2.25.3.
- ➤ Condition 4.1.8. The formatting in this table was updated for consistency and the first line entry for Acetaldehyde was omitted during this process. This condition was updated to reinsert the line entry for Acetaldehyde into the first row of the table.