

Commonwealth of Kentucky
Division for Air Quality
STATEMENT OF BASIS / SUMMARY

Title V, Operating
Permit: V-26-028

Air Products and Chemicals, Inc.
11631 US Route 23
Catlettsburg, KY 41129

March 18, 2026
Sriram Balaji, Reviewer

SOURCE ID:	21-019-00117
AGENCY INTEREST:	83915
ACTIVITY:	APE20230001, APE20240001

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SECTION 1 – SOURCE DESCRIPTION

SIC Code: 2813

Single Source Det. ☒ Yes ☐ No If Yes, Affiliated Source AI: 339

Source-wide Limit ☒ Yes ☐ No If Yes, See Section 4, Table A

28 Source Category ☒ Yes ☐ No If Yes, Category: Chemical process plants, except ethanol production facilities producing ethanol by natural fermentation under NAICS codes 325193 or 312140

County: Boyd

Nonattainment Area ☒ N/A ☐ PM₁₀ ☐ PM_{2.5} ☐ CO ☐ NO_x ☐ SO₂ ☐ Ozone ☐ Lead

PTE* greater than 100 tpy for any criteria air pollutant ☒ Yes ☐ No

If yes, for what pollutant(s)?

☐ PM₁₀ ☐ PM_{2.5} ☒ CO ☒ NO_x ☐ SO₂ ☐ VOC

PTE* greater than 250 tpy for any criteria air pollutant ☐ Yes ☒ No

If yes, for what pollutant(s)?

☐ PM₁₀ ☐ PM_{2.5} ☐ CO ☐ NO_x ☐ SO₂ ☐ VOC

PTE* greater than 10 tpy for any single hazardous air pollutant (HAP) ☒ Yes ☐ No

If yes, list which pollutant(s): Methanol

PTE* greater than 25 tpy for combined HAP ☐ Yes ☒ No

*PTE does not include self-imposed emission limitations.

Description of Facility:

Air Products and Chemicals, Inc. produces hydrogen using steam methane reforming technology to supply hydrogen to the Marathon Petroleum Company's Catlettsburg petroleum refinery. Natural gas is the methane source. The hydrogen plant uses a flare to burn excess hydrogen product during the refinery hydrogen demand curtailment and also to burn pressure swing adsorption (PSA) feed gas (syngas), PSA purge gas, hydrogen product, natural gas, and relief valve vents from the hydrogen plant during the startup, shutdowns, process upsets, malfunction, maintenance and emergencies.

SECTION 2 – CURRENT APPLICATION

Permit Number: V-26-028 Activity: APE20230001, APE20240001

Received: March 1, 2023, August 8, 2024 Application Complete Date(s): March 3, 2026

Permit Action: ☐ Initial ☒ Renewal ☐ Significant Rev ☒ Minor Rev ☐ Administrative

Construction/Modification Requested? ☐ Yes ☒ No

Previous 502(b)(10) or Off-Permit Changes incorporated with this permit action ☐ Yes ☒ No

Description of Action:

On 3/1/2023 the division received an application to renew Air Products and Chemicals, Inc's operating permit. In addition to renewing the permit the facility requested to update the max hourly/yearly throughput of H₂ gas flared. The facility also informed the division that EU 07 was removed from the facility.

On 8/8/2024 the division received a minor revision application from the facility to update testing language associated with EU02.

V-26-028 Emission Summary		
Pollutant	2024 Actual (tpy)	PTE V-26-028 (tpy)
CO	7.48	98.68
NO _x	57.89	147
PT	4.18	9.99
PM ₁₀	4.18	9.99
PM _{2.5}	4.18	9.99
SO ₂	0.31	0.72
VOC	15.73	34.06
Lead	0	0
Greenhouse Gases (GHGs)		
Carbon Dioxide	151,657	408,978
Methane	2.86	7.71
Nitrous Oxide	0.29	0.77
CO ₂ Equivalent (CO ₂ e) ¹	151,814	409,398
Hazardous Air Pollutants (HAPs)		
Methanol	8.76	19.60
Combined HAPs:	8.76	19.60

¹Using updated GWP values from Table A-1 to Subpart A of Part 98.

SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS

Emission Unit 01 Hydrogen Reformer				
Pollutant	Emission Limit or Standard	Regulatory Basis for Emission Limit or Standard	Emission Factor Used and Basis	Compliance Method
H ₂ S	Not burn (in any fuel combustion device) any fuel gas that contains hydrogen sulfide (H ₂ S) in excess of 230 mg/dscm (0.10 gr/dscf)	40 CFR 60.104(a)(1)	Material Balance	Demonstrated by detector tube monitoring as described in alternative monitoring plan approved in a December 30, 2003 letter from U.S. EPA Region IV (EPA ADI Control No. 0500105)
SO ₂	1.1 tpy	To preclude applicability of 401 KAR 51:017	0.00036 lb/mmBtu, Mass Balance	Calculate for each day, in tons per year, the 365-day rolling sum emissions of SO ₂
PM ₁₀	13.3 tpy	To preclude applicability of 401 KAR 51:017	0.005 lb/mmBtu, Testing	Calculate for each day, in tons per year, the 365-day rolling sum emissions of PM ₁₀
Initial Construction and Modification Date: 06/2002; 09/2013 Process Description: The steam methane reforming (SMR) process includes a reformer, which contains catalyst filled tubes. Natural gas is the process feed. The reforming reactions that produce hydrogen occur in the catalyst-filled tubes. The reformer combusts fuels to generate the necessary heat of reaction. Pressure swing adsorption (PSA) purge gas, natural gas, and reformer synthesis gas (syngas) are possible fuels. Emissions go out through the hydrogen reformer flue gas stack. The unit has a continuous oxygen trim system that maintains an optimum air to fuel ratio. Applicable Regulations: 401 KAR 60:005, Section 2(2)(n), 40 C.F.R. 60.100 through 60.109 (Subpart J), <i>Standards of Performance for Petroleum Refineries</i>. Fuels burned in the hydrogen reformer include process gas streams from the Hydrogen Plant. These gases are not refinery fuel gas, but satisfy the definition of fuel gas promulgated at 40 CFR 60.101 and are subject to the requirement as per 40 CFR 60.104(a)(1). 401 KAR 63:002, Section 2(4)(iii), 40 C.F.R. 63.7480 through 63.7575, Tables 1 through 15 (Subpart DDDDD), <i>National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters</i>. This affected facility is an industrial, commercial, or institutional boiler or process heater as defined in 40 CFR 63.7575 that is located at, or is part of, a major source of Hazardous Air Pollutant (HAP) as defined in 40 CFR 63.2 or 40 CFR 63.761, except as specified in 40 CFR 63.7491. Precluded Regulations: 401 KAR 51:017, <i>Prevention of significant deterioration of air quality</i> 401 KAR 51:052, <i>Review of new sources in or impacting upon non-attainment areas</i>.				

Emission Unit 01 Hydrogen Reformer

Comments:

Natural gas process feed and recycled hydrogen product are compressed, and then directed to the hydrogenator/desulfurizer beds, where hydrogenation and desulfurization occur to remove sulfur from the natural gas in order to prevent poisoning of the reformer catalyst. The beds contain zinc oxide catalyst to adsorb any sulfur compound to form zinc sulfide. When the catalyst becomes spent, it is removed and replaced. Steam is mixed with the desulfurized gas and the mix is directed to the reformer. The reformer contains catalyst filled tubes in which reactions occur. The mixed feed is converted into hydrogen and a mixture of carbon oxides. The syngas effluent from the reformer tubes is cooled and enters the high temperature shift reactor where any CO in the gas is converted to CO₂ and additional hydrogen.

The approval letter for alternate monitoring plan using detective tube monitoring for compliance with H₂S emission limit pursuant 40 CFR 60, Subpart J was addressed to John Lyons, Director KY Division for Air Quality dated December 30, 2003 by Beverly H. Banister, Director Air, Pesticides and Toxics Management Division US EPA Region IV. See EPA ADI Control No. 0500105. These requirements were removed from the permit in V-26-028. Per 40 CFR 60.105(a)(4), sources may monitor H₂S in lieu of SO₂ as required by 40 CFR 60.105(a)(3). Furthermore, the permittee of a fuel gas stream combusted in a fuel gas combustion device that is inherently low in sulfur content is not required to comply with 40 CFR 60.105(a)(3) or (4) per 40 CFR 60.105(a)(4)(iv). The fuel gas stream meets the requirement to be considered inherently low in sulfur content under 40 CFR 60.105(a)(4)(iv)(C) for fuel gas streams produced in process units that are intolerant to sulfur contamination, such as fuel gas streams produced in the hydrogen plant.

In September 2013, the facility replaced a complete set of 56 burners in the existing hydrogen reformer (Emission Unit 01) as a result of burner tip deterioration. The new low NO_x burners have the same rated heat input capacity and emissions as the original burners. In addition, the unit is equipped with a continuous oxygen trim system that maintains an optimum air to fuel ratio.

Pursuant to 40 CFR 98, Subpart P, the facility is obligated to calculate greenhouse gas emissions from the hydrogen production units using a mass balance method.

Pursuant to 40 CFR 63, Subpart DDDDD, the facility had already fulfilled its obligation in having an energy assessment performed, under 40 CFR 63.7530(e). This assessment was performed by Joshua Llewellyn on November 30, 2015 and is located under APE20230001.

Pursuant to 40 CFR 63.7500(e), units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or 11 through 13 of 40 CFR 63, Subpart DDDDD, or the operating limits in Table 4 of 40 CFR 63, Subpart DDDDD.

The emission factor are from the 2013 stack test for PM₁₀ and VOC emissions are taken from AP-42 1.4. NO_x and CO emission factor were determined based on worst-case operating/design conditions.

**The hydrogen reformer is subject to both a sourcewide and unit specific emissions cap, these limitations are exempted from consideration as an emission limitation by 40 CFR 64, Section 64.2(b)(1)(v).

401 KAR 59:015 is not applicable as the reformer is not an indirect heat exchanger as defined in 401 KAR 59:015, Section 1(5) because a heat transfer medium is not used.

Emission Unit 02 Condensate Stripper

Initial Construction Date: 06/2002

Process Description:

Condensate stripper strips off any dissolved CO₂ and potential steam impurities by using stripping steam; the gases are vented to the atmosphere through the vent system. The capacity is the vent gas flow based on 34 mmscf hydrogen production per day (nominal).

Applicable Regulation:

401 KAR 63:020, *Potentially hazardous matter or toxic substances*. [STATE-ORIGIN REQUIREMENT] is applicable to each affected facility which emits or may emit potentially hazardous matter or toxic substances, provided such emissions are not elsewhere subject to the provisions of the administrative regulations of the Division for Air Quality.

Comments:

Potential emissions of CO, VOC and Methanol from EP-02, Condensate Stripper Vent, were calculated based on worst case emission factors of 1.238, 2.454 and 2.087 lb/mmscf of hydrogen produced, respectively, as submitted in the application leading to the permit VF-02-001. CO emission was adjusted to account for the catalyst degradation. Based on the 2013 stack test (CMN20130003), the emission factor for VOC and Methanol was updated to 3.06 and 2.77 lb/mmscf, respectively, to determine a new PTE.

****The condensate stripper is subject to both a sourcewide and unit specific emissions cap, these limitations are exempted from consideration as an emission limitation by 40 CFR 64, Section 64.2(b)(1)(v).**

Emission Unit 03 Flare

Initial Construction Date: 01/2003

Process Description:

The hydrogen plant uses an unassisted flare equipped with natural gas-fired pilot burners to burn excess hydrogen product during refinery hydrogen demand curtailment and also to burn PSA feed gas (syngas), PSA purge gas, hydrogen product, natural gas, and relief valve vents from the hydrogen plant during startup, shutdown and malfunction, process upsets, maintenance, and emergencies.

Applicable Regulation:

401 KAR 63:015, *Flare*.

Comments:

Potential emissions of CO, NO_x, VOC and methanol from EP-03 (Flare) are based on engineering estimates of worst case design scenarios of each flare event (hourly operating rate of each gas being flared updated in this renewal) and the Texas Commission on Environmental Guidance (TCEQ) guideline for flare combustion of simple hydrocarbons, using 98% control efficiency for CO and 99% control efficiency for VOC. The flare pilot emission factors are from AP 42 1.4 and incorporate a 98% control efficiency. The flare does not have a natural gas meter and so the emissions in the KYEIS for pilot flame are based on the hours of operation of the flare.

****The flare is subject to a sourcewide emissions cap, this limitation is exempted from consideration as an emission limitation by 40 CFR 64, Section 64.2(b)(1)(v).**

Emission Unit 04 Fugitive Emissions

Initial Construction Date: 06/2002

Process Description:

Source-wide Fugitive Emission from valves, flanges and fittings.

Applicable Regulation:

401 KAR 63:020, *Potentially hazardous matter or toxic substances*. [STATE-ORIGIN REQUIREMENT] is applicable to each affected facility which emits or may emit potentially hazardous matter or toxic substances, provided such emissions are not elsewhere subject to the provisions of the administrative regulations of the Division for Air Quality.

Comments:

Potential emissions of VOC, methanol and CO from EP-04 (Fugitive Equipment Leaks) were calculated based on estimated component counts, design stream compositions and AP-42 SOCMI average emission factors.

Emission Unit 05 Steam Vents

Initial Construction Date: 06/2002

Process Description:

Multiple steam vents of differing VOC composition.

Applicable Regulation:

401 KAR 63:020, *Potentially hazardous matter or toxic substances*. [STATE-ORIGIN REQUIREMENT] is applicable to each affected facility which emits or may emit potentially hazardous matter or toxic substances, provided such emissions are not elsewhere subject to the provisions of the administrative regulations of the Division for Air Quality.

Comments:

Potential emissions of VOC and methanol from EP-05 (Steam Vents) were based on worst case steam venting and worst case concentration scenarios.

SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS (CONTINUED)

Testing Requirements\Results

Emission Unit(s)	Control Device	Parameter	Regulatory Basis ¹	Frequency	Test Method	Permit Limit	Test Result	Thruput and Operating Parameter(s) Established During Test	Activity Graybar	Test Date
01	None	PM ₁₀	Compliance Demonstration	Every 5 yrs	Method 201A/202	N/A	0.005 lb/mmBtu	372.3 mmBtu/hr ²	CMN20130002	11/5/2013
		Method 10			0.00023 lb/mmBtu					
02	None	VOC ³	Compliance Demonstration	Every 5 yrs	BAAQMD Method ST-32; TO-12: 308	14.5 tpy	3.06 lb/mmscf	1.42 mmscf H ₂ produced/hr	CMN20130003	12/19/2013
		4.6 tpy				0.09 lb/mmscf				
01	None	PM ₁₀	Compliance Demonstration	Every 5 yrs	Method 201A/202	13.3 tpy	3.44 tpy	360.43 mmBtu/hr ²	CMN20190002	5/22/2019
		Method 10			70.3 tpy	0.14 tpy	361.3 MMBtu/hr ²			
02	None	VOC ³	Compliance Demonstration	Every 5 yrs	BAAQMD Method ST-32 w/ SW-846 Method TO-12 & Method 8015	14.5 tpy	2.1 tpy	1.417 MMscf H ₂ produced	CMN20190002	
		CO			BAAQMD Method ST-32 w/ASTM D-1945	4.6 tpy	4.2 tpy			
01	None	PM ₁₀	Compliance Demonstration	Every 5 yrs	Method 201A/202	13.3 tpy	14.57 tpy ⁴	380.13 MMBtu/hr ²	CMN20240002	5/8/2024
		Method 10			70.3 tpy	0.15 tpy				
02	None	VOC ³	Compliance Demonstration	Every 5 yrs	BAAQMD Method ST-32; TO-12: 308	14.5 tpy	45.27 tpy ⁴	34 MMscf/day (1.42 MMscf/hr)	CMN20240002	
		CO				4.6 tpy	19.98 tpy ⁴			
01	None	PM ₁₀	Compliance	Every 5 yrs	Method	13.3 tpy	5.11 tpy	352.47	CMN20240003 &	10/1/2025

Emission Unit(s)	Control Device	Parameter	Regulatory Basis ¹	Frequency	Test Method	Permit Limit	Test Result	Thruput and Operating Parameter(s) Established During Test	Activity Graybar	Test Date
			Demonstration		201A/202			MMBtu/hr	CMN20240004	
		CO			Method 10	70.3 tpy	0.13 tpy			
02	None	VOC ³	Compliance Demonstration	Every 5 yrs	BAAQMD Method ST-32 w/ SW-846 Method TO-12 & Method 8015	14.5 tpy	4.46 tpy	34 MMscf/day (1.42 MMscf/hr)		10/2/2025
		CO			BAAQMD Method ST-32 w/ASTM D-1945	4.6 tpy	4.28 tpy			
01	None	PM ₁₀	Compliance Demonstration	Every 5 yrs	Method 201A/202	13.3 tpy	TBD	TBD	TBD	TBD
		CO			Method 10	70.3 tpy	TBD			
02	None	VOC ³	Compliance Demonstration	Every 5 yrs	BAAQMD Method ST-32 w/ASTM D-1945 or other approved method	14.5 tpy	TBD	TBD	TBD	TBD
		CO				4.6 tpy	TBD			

¹RATA for Nox CEMS associated with EU 01 is performed yearly in order to comply with the QA/QC requirements from the permit (40 CFR 60, Appendix F, Procedure 1).

²Per permit, 1000 Btu/scf used as worst case gross heating value for calculation of production rate based limit set forth in **Section G 5. b.**

³VOC tested by combining results of testing for Ethanol and Methanol.

⁴The 5/8/2024 (CMN20240002) test returned questionable results and EU01 and EU02 were retested on 10/1/2024 and 10/2/2024 respectively.

SECTION 4 – SOURCE INFORMATION AND REQUIREMENTS

Table A - Group Requirements:

Emission and Operating Limit	Regulation	Emission Unit
104.6 tpy of NOx emissions 9.7 tpy of VOC emissions 70.3 tpy of CO emissions	To preclude the applicability of 401 KAR 51:017 To preclude the applicability of 401 KAR 51:052, Review of new sources in or impacting upon nonattainment areas	EU 01 (Hydrogen Reformer)
14.5 tpy of VOC emissions 4.6 tpy of CO emissions	To preclude the applicability of 401 KAR 51:017 To preclude the applicability of 401 KAR 51:052, Review of new sources in or impacting upon nonattainment areas	EU 02 (Condensate Stripper)
Heat input shall not exceed 455 mmBtu/hr, based on a 365-day rolling average	To preclude the applicability of 401 KAR 51:017 To preclude the applicability of 401 KAR 51:052, Review of new sources in or impacting upon nonattainment areas	EU 01 (Hydrogen Reformer)
112.7 tpy of Nox emissions 99.5 tpy of CO emissions 31.1 tpy of VOC emissions	To preclude the applicability of 401 KAR 51:017 To preclude the applicability of 401 KAR 51:052, Review of new sources in or impacting upon nonattainment areas	Source-wide

Table B - Summary of Applicable Regulations:

Applicable Regulations	Emission Unit
401 KAR 60:005, Section 2(2)(n) , 40 C.F.R. 60.100 through 60.109 (Subpart J), <i>Standards of Performance for Petroleum Refineries</i> .	EU 01
401 KAR 63:002, Section 2(4)(iii) , 40 C.F.R. 63.7480 through 63.7575, Tables 1 through 15 (Subpart DDDDD), <i>National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters</i> .	EU 01
401 KAR 63:020 , <i>Potentially hazardous matter or toxic substances</i> .	EU 02, 04, 05, 07
401 KAR 63:015 , <i>Flares</i> .	EU 03

SECTION 4 – SOURCE INFORMATION AND REQUIREMENTS (CONTINUED)

Table C - Summary of Precluded Regulations:

Regulation	Basis of Determination	Emission Unit
401 KAR 51:017 and 401 KAR 51:052	The source has elected to accept permit conditions to preclude the applicability of 401 KAR 51:017, <i>Prevention of significant deterioration of air quality</i> , and 401 KAR 51:052, <i>Review of new sources in or impacting upon non-attainment areas</i> .	EU 01, 02, 03, 04

Table D - Summary of Non Applicable Regulations:

N/A

Air Toxic Analysis

401 KAR 63:020, Potentially Hazardous Matter or Toxic Substances

The Division for Air Quality (Division) has performed AERMOD on June 1, 2026 of potentially hazardous matter or toxic substances (Methanol) that may be emitted by the facility based upon the process rates, material formulations, stack heights and other pertinent information provided by the applicant. Based upon this information, the Division has determined that the conditions outlined in this permit will assure compliance with the requirements of 401 KAR 63:020.

Single Source Determination

The hydrogen plant, operated by Air Products, produces hydrogen using steam methane reforming technology to supply hydrogen and steam only to the Marathon Petroleum Company's Catlettsburg petroleum refinery. Marathon Petroleum Company's Catlettsburg refinery is a prevention of significant deterioration of air quality (PSD) major source for regulated pollutants. Air Products' hydrogen plant is within the property limit of Marathon's refinery. Together they are considered by the Division to be a single "major source" as defined in 401 KAR 52:001, Section (1)(45)(b), definition of major source for regulated air pollutants other than hazardous air pollutants (HAPS). Each owner/operator is responsible and liable for their own violations unless there is a joint cause for the violations.

SECTION 5 – COMPLIANCE ASSURANCE MONITORING

40 CFR 64, *Compliance assurance monitoring* (CAM) applies to a pollutant-specific emissions unit at a major source that is required to obtain a part 70 or 71 permit if the unit satisfies all of the following criteria:

- (1) The unit is subject to an emission limitation or standard for the applicable regulated air pollutant (or a surrogate thereof), other than an emission limitation or standard that is exempt under 40 CFR 64.2(b)(1);
- (2) The unit uses a control device to achieve compliance with any such emission limitation or standard; and
- (3) The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.

Emission Unit	Criteria 1 (Y/N)	Criteria 2 (Y/N)	Criteria 3 (Y/N)	Does CAM apply? If Y for criteria 1, 2, AND 3, then Yes, Otherwise, No.
1	N**	N	Y	No
2	N**	N	N	No
3	N**	N	Y	No
4	N	N	N	No
5	N	N	N	No

* If Yes, CAM applies for any of the emission units above, then see further clarification for each listed emission unit in **Section 3**.

See **Section 3. Comments for information about CAM applicability.

SECTION 6 – PERMITTING HISTORY

Permit	Permit Type	Activity #	Complete Date	Issuance Date	Summary of Action	PSD/Syn Minor
V-07-008	Initial	APE20070001	2/21/2007	10/16/2007	Initial Operating Permit	Synthetic Minor
V-07-008 R1	Minor Revision	APE20090001	3/12/2009	7/21/2009	Emission Factor Revision for PM ₁₀ and SO ₂	N/A
V-12-043	Renewal	APE20120001	8/17/2012	7/3/2013	Renewal permit	N/A
V-12-043 R1	Minor Permit Revision	APE20130001	9/13/2013	12/20/2013	Replacement of burners	N/A
V-18-004	Renewal	APE20170001	2/14/2018	9/10/2018	Renewal Permit	N/A
V-18-004 R1	Admin Amendment	APE20220001	8/12/2022	9/2/2022	Change in mailing address and technical contact	N/A

SECTION 7 – PERMIT APPLICATION HISTORY
N/A

APPENDIX A – ABBREVIATIONS AND ACRONYMS

AAQS	– Ambient Air Quality Standards
BACT	– Best Available Control Technology
Btu	– British thermal unit
CAM	– Compliance Assurance Monitoring
CO	– Carbon Monoxide
Division	– Kentucky Division for Air Quality
ESP	– Electrostatic Precipitator
GHG	– Greenhouse Gas
HAP	– Hazardous Air Pollutant
HF	– Hydrogen Fluoride (Gaseous)
MSDS	– Material Safety Data Sheets
mmHg	– Millimeter of mercury column height
NAAQS	– National Ambient Air Quality Standards
NESHAP	– National Emissions Standards for Hazardous Air Pollutants
NO _x	– Nitrogen Oxides
PM	– Particulate Matter
PM ₁₀	– Particulate Matter equal to or smaller than 10 micrometers
PM _{2.5}	– Particulate Matter equal to or smaller than 2.5 micrometers
PSA	– Pressure Swing Adsorption
PSD	– Prevention of Significant Deterioration
PTE	– Potential to Emit
SO ₂	– Sulfur Dioxide
TF	– Total Fluoride (Particulate & Gaseous)
VOC	– Volatile Organic Compounds