

# Iowa Department of Natural Resources

## Draft Title V Operating Permit Fact Sheet

This document has been prepared to fulfill the public participation requirements of 40 CFR Part 70 and 567 Iowa Administrative Code (IAC) 22.107(6). 40 CFR Part 70 contains operating permit regulations pursuant to Title V of the Clean Air Act.

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The Iowa Department of Natural Resources (DNR) finds that:

1. Green Plains Ethanol Storage, LLC (GP Shenandoah), located at 4124 Airport Road, Shenandoah, IA has applied to renew their Title V Operating Permit. The designated responsible official of this facility is Mr. Jeremy DuMond.
2. Green Plains Ethanol Storage, LLC (GP Shenandoah) is an industrial organic chemicals/ethanol production facility. This facility consists of 106 emission units with potential emissions of:

Pollutant	Abbreviation	Potential Emissions (Tons per Year)
Particulate Matter ( $\leq 2.5 \mu\text{m}$ )	PM <sub>2.5</sub>	93.66
Particulate Matter ( $\leq 10 \mu\text{m}$ )	PM <sub>10</sub>	93.66
Particulate Matter	PM	111.96
Sulfur Dioxide	SO <sub>2</sub>	70.53
Nitrogen Oxides	NO <sub>x</sub>	126.66
Volatile Organic Compounds	VOC	209.86
Carbon Monoxide	CO	129.99
Lead	Lead	0.00
Hazardous Air Pollutants <sup>(1)</sup>	HAP	21.71

<sup>(1)</sup> May include the following: See application.

3. Green Plains Ethanol Storage, LLC (GP Shenandoah) submitted a Title V Operating Permit renewal application on July 3, 2023. Based on the information provided in these documents, DNR has made an initial determination that the facility meets all the applicable criteria for the issuance of an operating permit specified in 567 IAC 22.107.
4. DNR has complied with the procedures set forth in 567 IAC 22.107, including those regarding public notice, opportunity for public hearing, and notification of EPA and surrounding state and local air pollution programs.

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DNR procedures for reaching a final decision on the draft permit:

1. The public comment period for the draft permit will run from March 7, 2024 through April 6, 2024. During the public comment period, anyone may submit written comments on the permit. Mail signed comments to Derek Wedemeier at the DNR address shown below. The beginning date of this public comment period also serves as the beginning of the U.S. Environmental Protection Agency's (EPA) 45-day review period, provided the EPA does not seek a separate review period.
2. Written requests for a public hearing concerning the permit may also be submitted during the comment period. Any hearing request must state the person's interest in the subject matter, and the nature of the issues proposed to be raised at the hearing. DNR will hold a public hearing upon finding, on the basis of requests, a significant degree of relevant public interest in a draft permit. Mail hearing requests to Derek Wedemeier at the DNR address shown below.
3. DNR will keep a record of the issues raised during the public participation process, and will prepare written responses to all comments received. The comments and responses will be compiled into a responsiveness summary document. After the close of the public comment period, DNR will make a final decision on the renewal application. The responsiveness summary and the final permit will be available to the public upon request.

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DNR concludes that:

1. DNR has authority under 455B.133 Code of Iowa to promulgate rules contained in 567 IAC Chapters 20-35, including, but not limited to, rules containing emission limits, providing for compliance schedules, compliance determination methods and issuance of permits.
2. DNR has the authority to issue operating permits for air contaminant sources and to include conditions in such permits under 455B.134 Code of Iowa.
3. The emission limits included in this permit are authorized by 455B.133 Code of Iowa and 567 IAC Chapters 20-35.
4. DNR is required to comply with 567 IAC Chapter 22 in conjunction with issuing a Title V Operating Permit.
5. The issuance of this permit does not preclude the DNR from pursuing enforcement action for any violation.

## Title V Application Review Notes

Applicant:	<b>Green Plains Ethanol Storage, LLC (GP Shenandoah)</b>
SIC Code:	2869
City:	Shenandoah
County:	Page
EIQ#:	92-6961
Facility#:	36-10-001
Permit #:	13-TV-004R2
Reviewer:	Derek Wedemeier
Date:	<b>**DATE**</b>

### **Facility Identification**

Facility Name:	<b>Green Plains Ethanol Storage, LLC (GP Shenandoah)</b>
Facility Location:	4124 Airport Road, Shenandoah, IA
Responsible Official:	Jeremy DuMond
Phone:	(402) 952-4850

### **Background**

Green Plains Ethanol Storage, LLC (GP Shenandoah) has applied to renew their Part 70 Title V Operating Permit. Green Plains Ethanol Storage, LLC (GP Shenandoah) consists of 106 significant units. The facility is considered an Industrial Organic Chemicals (Ethanol Production) facility (SIC 2869).

### **Title V Applicability**

<b>Pollutant</b>	<b>Major for Title V?</b>
PM <sub>10</sub>	<input type="checkbox"/>
SO <sub>2</sub>	<input type="checkbox"/>
NO <sub>x</sub>	<input checked="" type="checkbox"/>
VOC	<input checked="" type="checkbox"/>
CO	<input checked="" type="checkbox"/>
Lead	<input type="checkbox"/>
Individual HAP	<input type="checkbox"/>
Total HAPs	<input type="checkbox"/>

### **Program Applicability:**

- PSD: NO
- 40 CFR Part 60 NSPS: YES
  - Subpart A-General Provisions
  - Subpart Db - Standards of Performances for Industrial-Commercial-Institutional Steam Generating Units

- Subpart Dc- Standards of Performances for Small Industrial, Commercial, Institutional Steam Generating Units
- Subpart Kb-Standards of Performance for Volatile Organic Liquid Storage Vessels for which Construction, Reconstruction or Modification Commenced after July 23, 1984
- Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.
- Subpart VVa-Standards of Performance for equipment leaks of VOC in the synthetic organic chemicals manufacturing industry for which construction, reconstruction, or modification commenced after November 7, 2006
- 40 CFR Part 61 NESHAP: NO
- 40 CFR Part 63 NESHAP: YES
  - Subpart A-General Provisions
  - Subpart ZZZZ- National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines
  - Subpart CCCCCC-National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities
  - Acid Rain and CSAPR: NO
- Stratospheric Ozone Protection: YES
- Prevention of Accidental Release: YES

### **Emission Estimations**

The potential emissions calculations were based off of construction permit limits, AP-42 emission factors, stack test data, mass balance and engineering estimates provided by the facility. The 500ppmv allowable SO<sub>2</sub> SIP limit overestimates the potential emissions. The AP-42 emission factors for SO<sub>2</sub>, if available, were used instead and provide a more realistic potential value when compared to the previous year's emissions inventory.

### **Emission Values**

PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	Lead	Total HAPs*
<b>Potential Emissions</b>								
111.96	93.66	93.66	70.53	126.66	209.86	129.99	0.00	21.71
<b>Actual Emissions 2022*</b>								
42.13	33.39	28.61	6.12	65.97	90.14	27.55	0.00	13.64

\* Acetaldehyde was the single HAP with the greatest PTE and reported emissions. Neither exceed the 10tpy major source threshold.

### **NSPS and NESHAP Applicability Review**

#### **40 CFR 60 Subpart DD**

- Facility is not subject to this subpart
  - Storage capacity at this facility is less than 2.5 million bushels. To be subject to this subpart the permanent grain storage capacity must exceed 2.5 million bushel

**40 CFR 60 Subpart Db**

- This facility is subject to Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
- The affected unit is EP-SV04

**40 CFR 60 Subpart Dc**

This facility is subject to Standards of Performance for Small Industrial – Commercial - Institutional Steam Generating Units

- The affected unit is EP-SV12

**40 CFR 60 Subpart Kb**

- This facility is subject to 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
- The affected units are EP-TK003 through EP-TK005.

**40 CFR 60 Subpart VV Requirements**

- This subpart no longer applies to this facility
  - Construction, Reconstruction, or Modification Commenced After November 7, 2006. Facility is now subject 40 CFR 60 subpart VVa

**40 CFR 60 Subpart VVa Requirements**

- This facility is subject to Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After November 7, 2006.
- The affected unit is EP-FS006, which represents the VOC equipment leaks in the whole facility.

**40 CFR 60 Subpart IIII Requirements**

- This facility is subject to Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
- The affected unit is EP-SV09

**40 CFR 63 Subpart ZZZZ Requirements**

- This facility is subject to National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE NESHAP)
- The affected unit is EP-SV09

**40 CFR 63 Subpart CCCCCC**

- This facility is subject to National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities
- The affected unit is T-EIA01

#### **40 CFR 63 Subpart JJJJJ**

- This subpart does not apply.
  - Per 40 CFR 63.11195, EU-52 meets the definition of a Gas-fired boiler as defined in 40 CFR 63.11237.

#### **40 CFR 63 Subpart VVVVVV**

- This subpart does not apply.
  - On June 25, 2013, the Department determined that the acetaldehyde concentration in fermentation and distillation vapor streams at dry-mill corn ethanol production facilities in Iowa are below the applicability threshold (0.1 percent by weight) for Subpart VVVVVV

#### **Emission Point Information**

PTE calculations are based on Construction Permit limits, AP42, TANKS, and manufacturer's data provided by the facility unless otherwise noted.

**EP-SV01** contains 11 emission units related to grain handling operations. Including truck and rail receiving, grain bins, and conveyors. DNR Construction Permit 06-A-340-S4 provides limits for opacity, PM, and PM10. Emissions are controlled with Baghouse CE-01. The operational conditions meet the requirements of a Facility O&M plan. Facility has a limit of 35.1 million bushels of corn that can be received in a 12-month rolling. CAM does not apply because pre-control emissions do not exceed the major source threshold of 100tpy for PM.

**EP-SV02** contains 3 hammermills and a grinder bucket elevator all controlled by baghouse CE-02. A Facility O&M is required for the baghouse. Construction Permit 06-A-341-S3 provides limits for opacity, PM and PM10. CAM does not apply because pre-control emissions do not exceed the major source threshold of 100tpy for particulate matter per emission unit. Periodic monitoring guidance suggests one stack test for PM, PM10, and PM2.5. The operational conditions meet the requirements of a Facility O&M plan.

**EP-SV03** contains 6 fermenters and a beer well all controlled by a packed bed scrubber CE-03. Construction Permit provides Opacity, PM, VOC, Acetaldehyde, Single HAP, and Total HAP limits. Construction Permit provides specific operating, monitoring, and recordkeeping requirements for the packed bed scrubber that satisfy the requirement for a CAM plan. Requirements include monitoring the pressure drop, liquid flow rate, and additive addition rate. Stack tests for VOC and HAP are required every 36-months.

**EP-SV04** consists of 33 emission units in the current state. Construction project 22-322 and the S11 version of the construction permit were issued on May 3, 2023 which included 54 emission units for the distillation, drying process, and CST process. At the time of issuing the Title V permit, construction of the CST Project has begun but the project is not yet complete and operation of the new equipment has not started. Therefore, emission limits and operational, recordkeeping, and monitoring requirements of the S10 permit and S11 permits have been included separately. These are identified in the Applicable Requirements as "Current State, Pre-change" and "Future State, Post Change" and include the appropriate authority for requirement (construction permit version). The equipment list for EP-SV04 also identify which equipment is

currently present and what has been permitted to be constructed.

Centrifugal collectors CE-09 and CE-10 control the dryers EU-35 and EU-36. Vortex Scrubber CE-15 control the Protein Dryer, EU-60. A thermal oxidizer CE-04 controls all other units connected to SV04. Construction Permit provides Opacity, PM, SO<sub>2</sub>, NO<sub>x</sub>, VOC, Single HAP (acrolein, acetaldehyde, formaldehyde, and methanol), and Total HAP limits. Construction Permit provides specific operating, monitoring, and recordkeeping requirements for the thermal oxidizer that satisfy the requirement for a CAM plan by monitoring the combustions temperature.

CAM is not applicable for the centrifugal collectors or vortex scrubber because none of the individual pollutant specific emission units exhibit pre-controlled emission greater than the major source threshold of 100tpy for PM or PM<sub>10</sub>. Operating conditions require a facility operation and maintenance plan.

A required CEM system is in place to measure NO<sub>x</sub> and O<sub>2</sub>. Emissions from the Dryers (EU-35 and EU-36) are initially sent to the Centrifugal Collectors (CE-09 and CE-10) to remove PM and VOC emissions before reaching the Thermal Oxidizer. Per the Periodic Monitoring Guidance (PMG) Table, an agency approved Operating and Maintenance plan is required for the Centrifugal Collectors (CE-09 and CE-10). The collectors act more like an inherent process equipment than control, therefore, Facility O&M plan is required instead of an Agency O&M. The operating conditions listed within the construction permit meet the requirements of a Facility O&M plan so no additional plan will be required. Per the PMG table, stack testing for PM emissions is also required. PM & PM<sub>10</sub> testing was completed on 7/15/2020. Test results were 37% of emission limit when reviewing the test averages. Based on this data, PM testing will not be required during this renewal.

Reoccurring stack tests for VOC and HAP are required annually. 06-A-343-S11 states “The facility shall continue annual compliance testing for SV04 as required under permit 06-A-343-S10” in footnote 3 of the compliance demonstration section. 06-A-343-S10 requires testing to be completed in June, July or August.

**EP-SV05** contains a DDGS cooling cyclone with a baghouse (CE-05). DNR Construction permit provides limits for opacity, PM, PM<sub>10</sub>, VOC, single HAP and total HAP. The facility provided CAM applicability determination calculations utilizing an AP42 emission factor of 0.36lb/ton from Ch. 9, Table 9.9.1-2 Animal Feed Mill Pellet Cooler – Cyclone. Based on this emission factor and the rated capacity of the equipment uncontrolled PTE does not exceed the major source threshold. The operational conditions meet the requirements of a Facility O&M plan. Stack testing for PM was completed for this unit on 3/13/2008 and resulted in 0.44 lb/hr, 37% of the emission limit. Based on the level of compliance, no testing will be required during this renewal.

**EP-SV06** DDGS loadout is controlled by a baghouse (CE-06). Construction permit provides limits for Opacity, PM<sub>10</sub>, and PM. Limits for PM<sub>10</sub> and PM apply to DDGS storage and handling, and includes emissions from EP SV06 and uncaptured emissions from DDGS storage building and handling emissions, assuming 20% of emissions are uncaptured.

CAM does not apply because precontrol emissions do not exceed the major source threshold when using the hourly emission limit. The operational conditions of the equipment meet the requirements of a Facility Operations and Maintenance plan. Stack testing was completed for this emission point in 2008. PM results were reported as <0.06 lb/hr, 38% of the emission limit. Based on the level of compliance, stack testing will not be required for PM/PM10 during this renewal.

**EP-SV07** Ethanol Truck & Rail Loadout. Construction permit provides loadout limit of 100.0 million gallons of denatured ethanol per twelve-month rolling period. Construction permit also provides limits for opacity, PM10, PM, SO2, NOx, VOC, and CO. A flare (CE-07) controls emissions during truck loadout. CAM plan is in place to ensure flare is operational during truck loadout operations. Below is the justification provided by in the Title V application:

A. Background:

VOC emissions from Ethanol Loadout to Trucks (EU-42) are controlled by the Ethanol Loadout Flare (CE-07).

B. Rationale for Selection of Performance Indicator:

The use of a flare at ethanol facilities is typically considered best available control technology (BACT) for ethanol loading operations. Since the vapors from the transport vessel are flammable, the presence of a flame in the flare results in combustion of the vapors and the destruction of VOC. Therefore, confirmation that a flame is present during loading operations is recommended to achieve the desired VOC control.

C. Rationale for Selection of Indicator Level:

The indicator was selected to allow a simple and effective procedure for compliance tracking purpose. When an excursion occurs corrective action will be initiated based upon the observed operating parameters. All excursions will be documented and reported.

The selected QIP threshold for flare operations is 6 excursions during the semiannual reporting period. If the QIP threshold is exceeded in a semiannual reporting period, a QIP will be developed and implemented.

**EP-SV09** Emergency Diesel Fire Pump. Construction permit provides limits for opacity, PM10, PM, SO2, NOx, VOC, and CO. Unit is limited to operating a maximum of 500 hours per 12-month rolling period. Engine is subject to NESHAP ZZZZ and NSPS IIII.

**EP-SV10** Liquefaction Tanks 1 and 2. Construction permits provide limits for opacity, PM, VOC, Single HAP, and Total HAP. Permit limits are based on liquefaction tank stack test results from a similar 50 MMGal/yr ethanol plant and scaled to 100 MMGal/yr for this facility.

**EP-SV11** Grain Handling Operations. Emission units include a grain bin and fill conveyor. Construction Permit provides limits for opacity, PM10 and PM. Cartridge filters provide control for PM emissions. The operational conditions meet the requirements of a Facility O&M plan.



Periodic monitoring was determined using AP-42 factors for uncontrolled emission factors. Based on these values, pre-control emission did not exhibit emission greater than the major source threshold for PM and PM10. Stack testing will not be required during this renewal period.

DNR Construction Permit 16-A-170-S1 incorrectly references Baghouse CE01 in the Operating Requirements with Associated Monitoring and Recordkeeping section. This should be updated to read "CE11 Cartridge Filters" in the next construction permit modification.

**EP-SV12** Natural Gas Boiler. Construction permit provides limits for opacity, PM, and SO2. Unit is limited to burning natural gas and is required to maintain monthly fuel recordkeeping per NSPS Dc section 60.48c(g)(2). Section 60.48c(g)(1) requires that the permittee record and maintain records of the amount of each fuel combusted during each day. However, because the unit is restricted to burning only natural gas, in accordance with section 60.48c(g)(2), the fuel recordkeeping is reduced from daily to monthly.

**EP-SV13A** Protein Dryer – Start-up Stack – NG combustion exhaust. This is a natural gas fired start-up stack limited to 250 hours per rolling 12-month period. The facility shall not route protein to the protein dryer when the protein dryer exhaust is venting through EP SV13A.

**EP-SV15** Protein Storage and Loadout System. Construction permit limits for opacity, PM, PM10, VOC, Acetaldehyde, single HAP, and total HAP. PM emissions are controlled by baghouse CE13. Total protein loadout is limited to 52,560 tons per rolling 12-months.

Periodic monitoring was evaluated using application documents and stack testing. Facility provided CAM calculations in the application utilize AP42 factors from Table 9.9.1-1 for storage bins and Table 9.9.1-2 feed shipping. These result in pre-control emission totals less than the major source threshold for PM and PM10. Stack testing for PM was completed on 2/17/2022. 95% CI for this test was 0.21 lb/hr, 43% of the emission limit. Based on the recent test, additional PM testing will not be required in this renewal for SV15. A Facility Operations and Maintenance plan will not be required as the operating conditions listed in 18-A-430-S4 satisfy this condition. CAM does not apply.

**EP-SV16** Protein Cooling System. Construction permit limits for opacity, PM, VOC Acetaldehyde, Single HAP, and Total HAP. The engineering evaluation for construction permit 20-A-112 states "The cooling baghouse (CE 14) functions like a cyclone collector followed by a baghouse." Therefore, facility provided CAM calculations using emission factor 0.36lb/ton from AP42 9.9.1-2 for pellet cooler – cyclone. Based on these values, CAM does not apply because pre-control PTE does not exceed major source threshold for PM. Stack testing will not be required for SV16 during this renewal. The requirements listed in the operating conditions meet the needs of a Facility Operation and Maintenance plan.

**EP-SV19** Cooling Tower. The reference authority for the PM limit incorrectly lists 567 IAC 23.4(7). The correct reference is 23.3(2)"d".

**EP-FS001** Paved and Unpaved Plant Roads. Construction permit provides limits for PM10 and PM. Plant roads are also subject to fugitive dust limit as provided in 567 IAC 23.3(2)"c"(1). Sweeping is required once per month as well as silt load testing. Facility is required to keep 12-month rolling totals for PM10 emissions. AP42 provides PM emission factors that are between 3 to 4 times higher than PM10 emission factors as long as the facility is meeting or below the PM10 emission limit of 6.1 tons per year the PM emission limit of 24.2 tons per year is not likely to be exceeded. Use of unpaved road segment is limited to activities related to moving grain to and from the temporary grain pile. Emissions are calculated using equations in AP42 section 13.2.1 and 13.2.2.

**EP-FS005** Cooling Tower. Construction permit provides limit for PM, unit also subject to default opacity limit. Monthly testing is required for Total Dissolved Solids (TDS), which shall not exceed 2,500 mg/l TDS for any single sampling event.

**EP-FS006** VOC Emissions from Equipment Leaks. Construction Permit 06-A-350-S4 provides limits for VOC, Single HAP, and Total HAP. The emission point represents all units subject to NSPS VVa and the Construction Permit provides specific operating, monitoring, and recordkeeping requirements related to the subpart. Leak detection is required for permit 06-A-350-S4 for VOCs and HAPs.

**EP-TK001** 190 Proof Ethanol Storage Tank (165,000 gallons)

**EP-TK002** 200 Proof Ethanol Storage Tank (165,000 gallons)

Units are internal floating roof tanks. Construction Permits do not provide any specific emission limits or operational, monitoring, or recordkeeping requirements.

**EP-TK003** Denaturant Storage Tank (165,000 gallons)

**EP-TK004** Denatured Ethanol Storage Tank (750,000 gallons)

**EP-TK005** Denatured Ethanol Storage Tank (750,000 gallons)

Tanks are limited to storing denaturant (EU TK003) and denaturant ethanol (EU TK004 and TK005). Tanks are subject to reporting and recordkeeping requirements of NSPS Subpart Kb, 40 CFR 60.115b through 60.116b.

When DNR construction permits for these tanks were issued the facility was subject to NSPS Subpart VV. Due to changes at the facility they are now subject to NSPS VVa. The current construction permit references to Subpart VV, 40 CFR 60.486 and 40 CFR 60.487 have been removed from the TV permit.

#### **T-EIA01 Gasoline Storage Tank**

Rated capacity of 150 gallons and is subject to NESHAP CCCCCC. The facility has a monthly throughput of less than 10,000 gallons, applicable Subpart CCCCCC requirements are included in the permit.

## Facility Wide HAP Limits

EP	EP Description	Acetaldehyde Limit (lb/hr)*	Acetaldehyde PTE (tpy)	THAP Limit	THAP PTE (tpy)
EP-SV03	Fermenters and Beer Well	0.77	3.37	0.90 tpy	3.94
EP-SV04	Distillation and Dryers	0.76	3.33	2.08 lb/hr	9.11
EP-SV05	DDGS Cooling Cyclone	0.21 <sup>(1)</sup>	0.92	0.69 lb/hr	3.02
EP-SV06	DDGS Storage and Conveyor	0.05	0.22	0.15 lb/hr	0.66
EP-SV07	Ethanol Loadout	-	-	1.42 tpy	1.42
EP-SV10	Liquefaction Tanks	0.10 <sup>(1)</sup>	0.44	0.15 lb/hr	0.66
EP-SV12	Natural Gas Boiler #2	-	-	-	0.61
EP-SV13A	Protein Dryer-Startup Stack	0.011 <sup>(1)</sup>	0.00	0.011 lb/hr	0.00
EP-SV15	Protein Storage & Loadout	0.05	0.22	0.15 lb/hr	0.66
EP-SV16	Protein Cooling	0.13	0.57	0.34 lb/hr	1.49
EP-FS006	Leak Detection and Repair	0.01 tpy <sup>(1)</sup>	0.01	0.04 tpy	0.04
EP-TK003	Denaturant Storage Tank	-	-	-	0.10
	<b>Facility-Wide Max</b>		<b>9.08</b>		<b>21.71</b>

\*Acetaldehyde is the single HAP with the greatest PTE.

<sup>(1)</sup>Single HAP limit

## O&M Plan/CAM/Stack Testing/NESHAP/NSPS

EP	Construction Permit	Control Equipment	Type of O&M Plan	Stack Testing	NESHAP	NSPS
EP-SV01	06-A-340-S4	CE01: Baghouse	Facility*	No		
EP-SV02	06-A-341-S3	CE02: Baghouse	Facility*	PM/PM <sub>10</sub> /PM <sub>2.5</sub>		
EP-SV03	06-A-342-S10	CE03: Packed Bed Scrubber	CAM*	Yes – Required by CP		
EP-SV04	06-A-343-S11	CE04: RTO CE09&CE10: Centrifugal Collectors CE15: Vortex Scrubber	CE04-CAM* CE09-Facility* CE10-Facility* CE15-Facility*	Yes – Required by CP		Db
EP-SV05	06-A-344-S5	CE05: Baghouse	Facility*	No		
EP-SV06	06-A-345-S2	CE06: Baghouse	Facility*	No		
EP-SV07	06-A-346-S4	CE07: Flare	CAM	No		
EP-SV09					ZZZZ	III
EP-SV11	16-A-170-S1	CE11: Cartridge Filter	Facility*	No		
EP-SV12	16-A-341	None	NA			Dc
EP-SV15	18-A-430-S4	CE13: Baghouse	Facility*	No		
EP-SV16	20-A-112	CE14: Baghouse	Facility*	No		
FS006	06-A-350-S4	CE-FS006				VVa
TK003-TK005	06-A-354-S1 06-A-355-S1 06-A-356-S1	CE-TK003, CE-TK004, CE-TK005 Internal Floating Roof	NA			Kb, VVa

\*The requirements described within the operating conditions meet the requirements of the applicable O&M plan.

\*\*\*\*\*End of Notes\*\*\*\*\*