

November 18, 2022

Ms. Kelly Orent EGLE – AQD Grand Rapids District Office 350 Ottawa Avenue NW, Unit 10 Grand Rapids, MI 49503

Subject: Application for ROP Minor Modification for SRN #B2816 Rule 216(2) Minor Modification Change DTE Electric Company – Monroe Power Plant MI-ROP-B2816-2019, Section 1

Dear Ms. Orent,

DTE Electric Company hereby submits a ROP minor modification application under Rule 216(2) to ROP No: MI-ROP-B2816-2019 for Monroe Power Plant located at 3500 E. Front Street in Monroe, Michigan. Enclosed are the M-001 and C-001 forms, as required. This minor modification change affects EU-FlyAshStorage in Section 1 of the ROP.

EGLE granted approval for PTI #114-20 on March 25, 2021 to add new equipment and modify existing plant equipment for the Dry Fly Ash Conversion Project to comply with the U.S. EPA Effluent Limitation Guidelines (ELG) rule finalized on September 30, 2015. DTE Electric attaches the AI-001 form and PTI #114-20.

Should you have any questions regarding this ROP minor modification application, please contact Alexis Thomas at alexis.thomas@dteenergy.com or (248) 794-9390.

Sincerely,

Alexís Thomas /s/

Alexis Thomas Staff Environmental Engineer Environmental Management & Safety – Emissions Quality DTE Electric Company

Enclosures: M-001 Form – ROP Rule 216 Modification Application Form C-001 Form – ROP Application Certification Form AI-001 Form – Additional Information Form AI-PTI PTI #114-20

Cc (electronic): Caryn Owens, EGLE-AQD Brian Carley, EGLE-AQD Scott Miller, EGLE-AQD Michael Twomley, DTE Electric Company

App #202200216

Elise Ciak, DTE Energy Stefanie Zanke, DTE Energy Barry Marietta, DTE Energy Ignatius A. Fadanelli, DTE Energy

### RENEWABLE OPERATING PERMIT M-001: RULE 215 CHANGE NOTIFICATION RULE 216 AMENDMENT/MODIFICATION APPLICATION

This information is required by Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment.

1. SRN B2816	2. ROP Number MI-ROP-B2816-2019 Section 1	3. County Monroe				
4. Stationary Source Name DTE Electric Company – Monroe Power Plant						
5. Location Address	6. City Monroe					
	nittal must meet the criteria for the box checke ges for applications for Rule 216 changes.	ed below. Check only one box. Attach a man				
Rule 215(1) Notification	Rule 215(1) Notification of change. Complete Items 8 – 10 and 14					
Rule 215(2) Notification	of change. Complete Items 8 – 10 and 14					
Rule 215(3) Notification	of change. Complete Items 8 – 11 and 14					
Rule 215(5) Notification	of change. Complete Items 8 – 10 and 14					
Rule 216(1)(a)(i)-(iv) Ad	ministrative Amendment. Complete Items 8 – 10	0 and 14				
Rule 216(1)(a)(v) Admir be submitted. See detai	<b>histrative Amendment</b> . Complete Items 8 – 14. <i>H</i> led instructions.	Results of testing, monitoring & recordkeeping mus				
🛛 Rule 216(2) Minor Modi	fication. Complete Items 8 – 12 and 14					
Rule 216(3) Significant	Modification. Complete Items 8 – 12 and 14, and application forms. See detailed in					
Rule 216(4) State-Only	Modification. Complete Items 8 – 12 and 14					
8. Effective date of the change See detailed instructions.	ge. (MM/DD/YYYY) <u>12/18/2022</u>	9. Change in emissions? 🛛 Yes 🗌 No				
	escribe any changes or additions to the ROP, in f additional space is needed, complete an Addit					
Fly Ash Conversion Project 2015. Please see the PTI ap	PTI 114-20 on March 25, 2021 to add new equipme to comply with the U.S. EPA Effluent Limitation Gu oplication for the detailed change of emissions. Wh a transport systems will be permanently retired and	idelines (ELG) rule finalized on September 30, en the new system is installed and operational, the				
11. New Source Review Per	mit(s) to Install (PTI) associated with this appl	ication? 🛛 🖂 Yes 🗌 No				
If Yes, enter the PTI Num	ber(s) <u>114-20</u>					
	12. Compliance Status - A narrative compliance plan, including a schedule for compliance, must be submitted using an AI-001 if any of the following are checked No.					
a. Is the change identifie	a. Is the change identified above in compliance with the associated applicable requirement(s)?					
<ul> <li>b. Will the change identif requirement(s)?</li> </ul>	b. Will the change identified above continue to be in compliance with the associated applicable requirement(s)?					
c. If the change includes	a future applicable requirement(s), will timely	compliance be achieved? $\square$ Yes $\square$ No				
	13. Operator's Additional Information ID - Create an Additional Information (AI) ID for the associated AI-001 form used to provide supplemental information.					
14. Contact Name	Telephone No.	E-mail Address				
Alexis Thomas	(248) 794-9390	Alexis.thomas@dteenergy.com				
15. This submittal also updates the ROP renewal application submitted on / / & / / □ Yes ⊠ N/A (If yes, a mark-up of the affected pages of the ROP must be attached.)						

#### NOTE: A CERTIFICATION FORM (C-001) SIGNED BY A RESPONSIBLE OFFICIAL MUST ACCOMPANY ALL SUBMITTALS For Assistance Contact: 800-662-9278 www.michigan.gov/egle

### EGLE

Michigan Department of Environment, Great Lakes, and Energy - Air Quality Division

### RENEWABLE OPERATING PERMIT APPLICATION C-001: CERTIFICATION

This information is required by Article II, Chapter 1, part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to provide this information may result in civil and/or criminal penalties. Please type or print clearly.

# This form is completed and included as part of Renewable Operating Permit (ROP) initial and renewal applications, notifications of change, amendments, modifications, and additional information.

Form Type <b>C-001</b>				SRN B2816		
Stationary Source Name						
DTE Electric Company - Monroe F City	Power Plant			0		
Monroe				County Monroe		
				Monroe		
SUBMITTAL CERTIFICATION		N				
1. Type of Submittal Check on	ly one box.					
Initial Application (Rule 210)	🖾 No	otification / Administ	rative An	nendment /	Modification (Ru	les 215/216)
Renewal (Rule 210)	🗋 Ot	ther, describe on Al-	-001			
2. If this ROP has more than one	e Section, list the S	Section(s) that this (	Certificati	on applies	to <u>1</u>	<b>4</b>
3. Submittal Media 🛛 🖾	E-mail	FTP		🗌 Disk		Paper
<ol> <li>Operator's Additional Informat on Al-001 regarding a submitter</li> <li>AI PTI</li> </ol>	ion ID - Create an al.	Additional Informati	ion (Al) II	D that is us	ed to provide sup	plemental information
CONTACT INFORMATION						
Contact Name		Ti	tle			
Alexis Thomas			aff Envir	onmental E	Ingineer	
Phone number (248) 794-9390		E-mail address Alexis.thomas@	dteenerg	y.com		
This form must be signed	and dated by a	a Responsible	Official	l.		
Responsible Official Name Michael Twomley					roe Power Plant	
Mailing address DTE Electric Company, 3500 E. Fro	ont Street					
City Monroe	State MI	ZIP Code 48161	Cou Mor	inty 1roe		ountry SA
As a Responsible Official inquiry, the statements an	, I certify that, d information	, based on info in this submitta	ormatic al are ti	on and b rue, acci	elief formed urate and con	after reasonable ıplete.

Signature of Responsible Official

n

11/12/2020 Date



### RENEWABLE OPERATING PERMIT APPLICATION AI-001: ADDITIONAL INFORMATION

This information is required by Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Please type or print clearly. Refer to instructions for additional information to complete this form.

SRN: B2816 Sectio

Section Number (if applicable): 1

🗌 Yes 🛛 No

1. Additional Information ID **AI-**PTI

### Additional Information

2. Is This Information Confidential?

Enclosed is PTI #114-20 to add new equipment and modify existing plant equipment for the Dry Fly Ash Conversion Project to comply with the U.S. EPA Effluent Limitation Guidelines (ELG) rule finalized on September 30, 2015. The highlighted sections of the PTI should replace the conditions currently written in EU-FlyAshStorage in the ROP.

Page 1 of 1

### MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY AIR QUALITY DIVISION

FEBRUARY 26, 2021

PERMIT TO INSTALL 114-20

ISSUED TO DTE ELECTRIC COMPANY MONROE POWER PLANT

LOCATED AT 3500 EAST FRONT STREET MONROE, MICHIGAN 48161

> IN THE COUNTY OF MONROE

### STATE REGISTRATION NUMBER B2816

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environment, Great Lakes, and Energy. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203:

### **December 4, 2020**

DATE PERMIT TO INSTALL APPROVED:	SIGNATURE:
February 26, 2021	
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

### PERMIT TO INSTALL

### **Table of Contents**

COMMON ACRONYMS	.2
POLLUTANT / MEASUREMENT ABBREVIATIONS	.3
GENERAL CONDITIONS	.4
EMISSION UNIT SPECIAL CONDITIONS	.6
EMISSION UNIT SUMMARY TABLE	.6
EU-FlyAshStorage	.7

### **COMMON ACRONYMS**

AQD BACT CAA CAM CEMS CFR COMS Department/department/EGLE EU FG GACS GC GHGS HVLP ID IRSL ITSL LAER MACT MAERS MAP MSDS NA NAAQS NESHAP NSPS NSR PS NSR PS SD PTE PTI RACT ROP SC SCR SNCR SRN TBD TEQ USEPA/EPA VE	Air Quality Division Best Available Control Technology Clean Air Act Compliance Assurance Monitoring Continuous Emission Monitoring System Code of Federal Regulations Continuous Opacity Monitoring System Michigan Department of Environment, Great Lakes, and Energy Emission Unit Flexible Group Gallons of Applied Coating Solids General Condition Greenhouse Gases High Volume Low Pressure* Identification Initial Risk Screening Level Lowest Achievable Emission Rate Maximum Achievable Control Technology Michigan Air Emissions Reporting System Malfunction Abatement Plan Material Safety Data Sheet Not Applicable National Ambient Air Quality Standards National Ambient Air Quality Standards National Emission Standard for Hazardous Air Pollutants New Source Performance Standards New Source Review Performance Specification Prevention of Significant Deterioration Permanent Total Enclosure Permit to Install Reasonable Available Control Technology Renewable Operating Permit Special Condition Selective Catalytic Reduction Selective Catalytic Reduction State Registration Number To Be Determined Toxicity Equivalence Quotient United States Environmental Protection Agency Visible Emissions
VE	VISIBLE EMISSIONS

### POLLUTANT / MEASUREMENT ABBREVIATIONS

acfm	Actual cubic feet per minute
BTU	British Thermal Unit
°C	Degrees Celsius
CO	Carbon Monoxide
CO <sub>2</sub> e	Carbon Dioxide Equivalent
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
°F	Degrees Fahrenheit
gr	Grains
HAP	Hazardous Air Pollutant
Hg	Mercury
hr	Hour
HP	Horsepower
H₂S	Hydrogen Sulfide
kW	Kilowatt
lb	Pound
m	Meter
mg	Milligram
mm	Millimeter
MM	Million
MW	Megawatts
NMOC	Non-Methane Organic Compounds
NOx	Oxides of Nitrogen
ng	Nanogram
PM	Particulate Matter
PM10	Particulate Matter equal to or less than 10 microns in diameter
PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
pph	Pounds per hour
ppm	Parts per million
ppmv	Parts per million by volume
ppmw	Parts per million by weight
psia	Pounds per square inch absolute
psig	Pounds per square inch gauge
scf	Standard cubic feet
sec	Seconds
SO <sub>2</sub>	Sulfur Dioxide
TAC	Toxic Air Contaminant
Temp	Temperature
THC	Total Hydrocarbons
tpy	Tons per year
μg	Microgram
μm	Micrometer or Micron
VOC	Volatile Organic Compounds
yr	Year

### GENERAL CONDITIONS

- 1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. (R 336.1201(1))
- 2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. (R 336.1201(4))
- 3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to Rule 210 (R 336.1210), operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. (R 336.1201(6)(b))
- 4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. (R 336.1201(8), Section 5510 of Act 451, PA 1994)
- 5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to Rule 219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of Rule 219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy. (R 336.1219)
- 6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. (R 336.1901)
- 7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). (R 336.1912)
- 8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
- 9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
- 10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

- 11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of Rule 301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with Rule 303 (R 336.1303). **(R 336.1301)** 
  - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
  - b) A visible emission limit specified by an applicable federal new source performance standard.
  - c) A visible emission limit specified as a condition of this Permit to Install.
- 12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). (R 336.1370)
- 13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001. **(R 336.2001)**

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## **EMISSION UNIT SPECIAL CONDITIONS**

### EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

		Installation Date /	
Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Modification Date	Flexible Group ID
EU- FlyAshStorage	Prior to the modifications to the dry fly ash system as permitted in PTI 113-20, the dry fly ash collection, transfer, storage, and loading equipment and unloading area of the onsite landfill. A fly ash storage facility. The facility consists of two 75-ton surge silos (Nos. 1 and 2), a 3000-ton storage silo, a 200-ton load-out silo, and associated blowers, pressure pumps, compressors, pipe conveyor lines, and spouts. Particulate emissions from the loading of material into surge silo No. 1 are controlled by two filter receivers (FR-101 and FR-102). Particulate emissions from the loading of material into surge silo No. 2 are controlled by two filter receivers (FR-201 and FR-202). Particulate emissions from the transferring of material out of surge silo No. 2 are controlled by two filter receivers (FR-201 and FR-202). Particulate emissions from the transferring of material out of surge silo No. 2 are controlled by two filter receivers (FR-201 and FR-202). Particulate emissions from the transferring of material out of surge silo No. 2 are controlled by a bin vent filter (BH-201). Particulate emissions from the storage silo will be controlled by a bin vent filter (BH-301). Particulate emissions from the loading of material into and the transfer of material out of (truck or railcar load-out) the load-out silo will be controlled by a bin vent filter (BH-401).	TBD	NA
	After the modifications to the dry fly ash system as permitted in PTI 113-20, EU-FlyAshStorage includes the dry fly ash collection, transfer, storage, and loading equipment and unloading area of the onsite landfill. This emission unit includes the Unit $1 - 4$ electrostatic precipitator hoppers, vacuum blowers and piping for pneumatic transfer, a 3000-ton storage silo, and a 4,000-ton storage silo, and a 200 ton silo. A silo-to-silo transfer system allows transfer of ash from one silo to the other silo. The silos each have dustless loading/unloading spouts for loading tanker trucks under a slight negative pressure in enclosed unloading areas below each silo. The emissions from the silos and eight conveyer exhaust systems are controlled by vent bin filters. Two ash conditioners (pug mills) for treating ash for loading ash into open trucks are in an enclosed unloading floor area below the 4,000-ton silo.		

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1291.

### EU-FlyAshStorage EMISSION UNIT CONDITIONS

### **DESCRIPTION**

Prior to the modifications to the dry fly ash system as permitted in PTI 113-20, the dry fly ash collection, transfer, storage, and loading equipment and unloading area of the onsite landfill. A fly ash storage facility. The facility consists of two 75-ton surge silos (Nos. 1 and 2), a 3000-ton storage silo, a 200-ton load-out silo, and associated blowers, pressure pumps, compressors, pipe conveyor lines, and spouts. Particulate emissions from the loading of material into surge silo No. 1 are controlled by two filter receivers (FR-101 and FR-102). Particulate emissions from the transferring of material out of surge silo No. 1 are controlled by a bin vent filter (BH-101). Particulate emissions from the loading of material into surge silo No. 2 are controlled by two filter receivers (FR-201 and FR-202). Particulate emissions from the transferring of material into surge silo No. 2 are controlled by a bin vent filter (BH-201). Particulate emissions from the transferring of material out of surge silo No. 2 are controlled by a bin vent filter (BH-301). Particulate emissions from the loading of material into and the transfer of surge silo No. 2 are controlled by a bin vent filter (BH-301). Particulate emissions from the loading of material into and the transfer of material out of (truck or railcar load-out) the load-out silo will be controlled by a bin vent filter (BH-301).

After the modifications to the dry fly ash system as permitted in PTI 113-20, EU-FlyAshStorage includes the dry fly ash collection, transfer, storage, and loading equipment and unloading area of the onsite landfill. This emission unit includes the Unit 1 - 4 electrostatic precipitator hoppers, vacuum blowers and piping for pneumatic transfer, a 3000-ton storage silo, and a 4,000-ton storage silo, and a 200 ton silo. A silo-to-silo transfer system allows transfer of ash from one silo to the other silo. The silos each have dustless loading/unloading spouts for loading tanker trucks under a slight negative pressure in enclosed unloading areas below each silo. The emissions from the silos and eight conveyer exhaust systems are controlled by vent bin filters. There are two ash conditioners (pug mills) for treating ash prior to loading the ash into open trucks in an enclosed unloading floor area below the 4,000-ton silo.

#### Flexible Group ID: NA

### POLLUTION CONTROL EQUIPMENT

The emissions from the silos and eight conveyer exhaust systems are controlled by vent bin filters. The silos each with have dustless loading spouts for loading tankers under a slight negative pressure. The emissions from the conditioned fly ash truck loadout is controlled by the enclosure. Emissions from the unpaved roads are controlled in accordance with a fugitive emissions control plan.

### I. EMISSION LIMIT(S)

		Time Period / Operating		Monitoring / Testing	Underlying Applicable
Pollutant	Limit	Scenario	Equipment	Method	<b>Requirements</b>
1. PM	0.026 lbs. per 1000 lbs. of exhaust gases calculated on a dry gas basis <sup>3,7</sup>	Hourly	EU-FlyAshStorage	SC VI.1	R 336.1331
2. PM-10	0.3 Pounds Per Hour <sup>4,7</sup>	Hourly	Each filter receiver portion of EU-FlyAshStorage	SC VI.1	R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d)
3. PM-10	0.05 Pounds Per Hour <sup>5,7</sup>	Hourly	The surge silo No. 1 portion and the surge silo No. 2 portion of EU-FlyAshStorage	SC VI.1	R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d)

Dellutert	Lineit	Time Period / Operating	Fasiansat	Monitoring / Testing	Underlying Applicable
Pollutant 4. PM-10	Limit 1.4 Pounds Per Hour <sup>7</sup>	Scenario Hourly	Equipment The storage silo portion of EU-FlyAshStorage	Method SC VI.1	Requirements R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d)
5. PM-10	0.35 Pounds Per Hour <sup>,7</sup>	Hourly	The load-out silo portion of EU-FlyAshStorage	SC VI.1	R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d)
<mark>6. Opacity</mark>	10%	6-minute average	Each exhaust stack portion of EU-FlyAshStorage	SC VI.1	R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d)
7. PM-10	0.11 Pounds Per Hour <sup>6,8,9</sup>	Hourly	Each filter exhaust of EU-FlyAshStorage	SC VI.2, SC VI.3	R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d)
8. PM-10	0.51 Pounds Per Hour <sup>6,8</sup>	Hourly	3,000-ton Silo Bin Vent of EU- FlyAshStorage	SC VI.2, SC VI.3	R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d)
9. PM-10	1.03 Pounds Per Hour <sup>6,8</sup>	Hourly	4,000-ton Silo Bin Vent of EU- FlyAshStorage	SC VI.2, SC VI.3	R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d)
10. PM-10	0.017 Pounds Per Hour <sup>6,8</sup>	Hourly	Silo-to-Silo Transfer of EU- FlyAshStorage	SC VI.2, SC VI.3	R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d)

<sup>3</sup> The 0.026 pounds per 1000 pounds of exhaust gas limit is a concentration limit that applies independently to each of the eight exhaust stacks associated with EU-FlyAshStorage.

<sup>4</sup> The 0.3 pounds per hour limit is a mass limit that applies independently to each of the four filter receivers and shall be determined from stacks SVFR-101, SVFR-102, SVFR-201, and SVBH-202.

<sup>5</sup> The 0.05 pounds per hour limit is a mass limit that applies independently to each of the two surge silos and shall be determined from stacks SVBH-101 and SVBH-201.

<sup>6</sup> Condition applies after the modifications to the dry fly ash system as permitted in PTI 113-20

<sup>7</sup> Condition applies until the modifications to the dry fly ash system as permitted in PTI 113-20

PM2.5 emissions are restricted by the permitted PM10 emission limits

<sup>9</sup> This limit applies to each Stack/Vent FAE-U01, FAE-U02, FAE-U012, FAE-U03, FAE-U04, FAE-U034.

### II. MATERIAL LIMIT(S)

Material	Limit	Time Period /	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
Waterial		<b>Operating Scenario</b>			
1. Conditioned	776,000 tpy	12-month rolling time	EU-FlyAshStorage	SC VI.4	R 336.1205,
(mixed with		period, as determined			R 336.1225,
water) Fly		at the end of each			40 CFR 52.21
Ash		calendar month			(c) and (d)
transported to					
facility landfill <sup>6</sup>					

### III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not operate EU-FlyAshStorage unless a program for continuous fugitive emissions control for all plant roadways, the plant yard, and all material handling operations approved by the AQD District Supervisor has been implemented and is maintained. The fugitive emissions control plan will include the use of a dust suppressant for unpaved roads. The permittee shall update the fugitive emissions control plan within 90 days of completion of any modification to the plant roadways, the plant yard, or material handling operations or upon request by the District Supervisor. (R 336.1225, R 336.1371, R 336.1372, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d), Act 451 324.5524)
- 2. The permittee shall not maintain any outside fly ash storage piles in conjunction with EU-FlyAshStorage. (R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

#### IV. DESIGN/EQUIPMENT PARAMETER(S)

- The permittee shall not load material into the surge silo No. 1 portion of EU-FlyAshStorage unless the two filter receivers (Nos. FR-101 and FR-102) are installed, maintained, and operated in a satisfactory manner.<sup>7</sup> (R 336.1225, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))
- The permittee shall not transfer material out of the surge silo No. 1 portion of EU-FlyAshStorage unless the bin vent filter (BH-101) is installed, maintained, and operated in a satisfactory manner. <sup>7</sup> (R 336.1225, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))
- The permittee shall not load material into the surge silo No. 2 portion of EU-FlyAshStorage unless the two filter receivers (Nos. FR-201 and FR-202) are both installed, maintained, and operated in a satisfactory manner.<sup>7</sup> (R 336.1225, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))
- The permittee shall not transfer material out of the surge silo No. 2 portion of EU-FlyAshStorage unless the bin vent filter (BH-201) is installed, maintained, and operated in a satisfactory manner. <sup>7</sup> (R 336.1225, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))
- The permittee shall not operate the storage silo portion of EU-FlyAshStorage unless the bin vent filter (BH-301) is installed, maintained, and operated in a satisfactory manner.<sup>7</sup> (R 336.1225, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))
- The permittee shall not operate or transfer material out of the load-out silo portion of EU-FlyAshStorage unless the bin vent filter (BH-401) is installed, maintained, and operated in a satisfactory manner.<sup>7</sup> (R 336.1225, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))
- 7. The permittee shall not operate the pneumatic conveyor or storage silos of EU-FlyAshStorage unless the emissions are controlled by bin vent filters with a grain loading rating of no more than 0.005 gr/dscfare installed, maintained, and operated in a satisfactory manner.<sup>6</sup> (R 336.1225, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))
- 8. The permittee shall not load out unconditioned ash in EU-FlyAshStorage unless the dustless spout and the associated bin filter for the silo being unloaded are installed, maintained, and operated in a satisfactory manner.<sup>6</sup> (R 336.1225, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))
- 9. The permittee shall not load out conditioned ash in EU-FlyAshStorage unless the unload area is fully enclosed.<sup>6</sup> (R 336.1225, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

### V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

#### VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall perform and document non-certified visible emissions observations from exhaust stacks associated with EU-FlyAshStorage once per week when the emission unit is operating. If during the observation there are any visible emissions detected from an emission point, a USEPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, USEPA Method 9 observations that are performed, the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. (R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d))
- The permittee shall maintain the manufacturer documentation for the grain loading rating for the bin vent filter. All records shall be maintained on-site and made available to the Department upon request.<sup>6</sup> (R 336.1225, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))
- 3. The permittee shall maintain the manufacturer recommendations for maintenance and replacement for the bin filters controlling emissions from the silos and the ash transfer systems in EU-FlyAshStorage. The permittee shall maintain a record of all maintenance and filter replacements performed. All records shall be maintained on-site and made available to the Department upon request.<sup>6</sup> (R 336.1225, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))
- 4. The permittee shall keep, in a satisfactory manner, a record of the conditioned fly ash transported to the facility landfill on a monthly and 12-month rolling time period basis. The record shall be maintained on-site and made available to the Department upon request.<sup>6</sup> (R 336.1225, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

### VII. <u>REPORTING</u>

 Within 30 days after completion of the modification to the dry fly ash system as authorized by the issuing Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the activity. Completion of the modification is considered to occur not later than commencement of trial operation of the modified system. (R 336.1201(7)(b), R 336.1205, R 336.1225, R 336.1331, R 336.1901, R 336.1910, 40 CFR 52.21(c) and (d))

### VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted with an asterisk (\*) indicating a non-vertical discharge:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVFR-101 <sup>7,*</sup>	8	45	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
2. SVFR-102 <sup>7,*</sup>	8	45	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
3. SVBH-101 <sup>7,*</sup>	6	45	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
4. SVFR-201 <sup>7,*</sup>	8	45	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
5. SVFR-202 <sup>7,*</sup>	8	45	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
6. SVBH-201 <sup>7,*</sup>	6	45	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
7. SVBH-301 <sup>6,7,*</sup>	<mark>32 x 18</mark>	107	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
8. SVBH-401 <sup>6,7,*</sup>	NA	94	R 336.1225, R 336.2803, R 336.2804,
			40 CFR 52.21(c) & (d)
9. SVFAE-U01 <sup>6,*</sup>	14	20	R 336.1225, 40 CFR 52.21(c) & (d)
10. SVFAE-U02 <sup>6,*</sup>	14	20	R 336.1225, 40 CFR 52.21(c) & (d)
11. SVFAE-U12 <sup>6,*</sup>	14	20	R 336.1225, 40 CFR 52.21(c) & (d)
12. SVFAE-U03 <sup>6,*</sup>	14	20	R 336.1225, 40 CFR 52.21(c) & (d)
13. SVFAE-U04 <sup>6,*</sup>	14	20	R 336.1225, 40 CFR 52.21(c) & (d)
14. SVFAE-U34 <sup>6,*</sup>	14	20	R 336.1225, 40 CFR 52.21(c) & (d)
15. SVBH-302 <sup>6,*</sup>	30 x 72	155	R 336.1225, 40 CFR 52.21(c) & (d)
16. SVBH-303 <sup>6,*</sup>	5	33	R 336.1225, 40 CFR 52.21(c) & (d)
*Stacks vent non-vert	ically		

### IX. OTHER REQUIREMENT(S)

NA

#### Footnotes:

<sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>6</sup> - Condition applies after the modifications to the dry fly ash system as permitted in PTI 113-20

<sup>7</sup> - Condition applies until the modifications to the dry fly ash system as permitted in PTI 113-20