

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION**

February 4, 2015

**PERMIT TO INSTALL  
178-14**

**ISSUED TO**  
DTE Electric Company – Trenton Channel Power Plant

**LOCATED AT**  
4695 Jefferson Avenue West  
Trenton, Michigan

**IN THE COUNTY OF**  
Wayne

**STATE REGISTRATION NUMBER**  
B2811

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. 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: <b>October 28, 2014</b>	
DATE PERMIT TO INSTALL APPROVED: <b>February 4, 2015</b>	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

**PERMIT TO INSTALL**

**Table of Contents**

<b>Section</b>	<b>Page</b>
Alphabetical Listing of Common Abbreviations / Acronyms .....	2
General Conditions .....	3
Special Conditions .....	5
Emission Unit Summary Table.....	5
Flexible Group Summary Table .....	5
Special Conditions for FG-DSI/ACI.....	6
Special Conditions for FG-ISLAND.....	10

### Common Abbreviations / Acronyms

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	BTU	British Thermal Unit
BACT	Best Available Control Technology	°C	Degrees Celsius
CAA	Clean Air Act	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	dscf	Dry standard cubic foot
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter
CO <sub>2</sub> e	Carbon Dioxide Equivalent	°F	Degrees Fahrenheit
COM	Continuous Opacity Monitoring	gr	Grains
EPA	Environmental Protection Agency	Hg	Mercury
EU	Emission Unit	hr	Hour
FG	Flexible Group	H <sub>2</sub> S	Hydrogen Sulfide
GACS	Gallon of Applied Coating Solids	hp	Horsepower
GC	General Condition	lb	Pound
GHGs	Greenhouse Gases	kW	Kilowatt
HAP	Hazardous Air Pollutant	m	Meter
HVLP	High Volume Low Pressure *	mg	Milligram
ID	Identification	mm	Millimeter
LAER	Lowest Achievable Emission Rate	MM	Million
MACT	Maximum Achievable Control Technology	MW	Megawatts
MAERS	Michigan Air Emissions Reporting System	ng	Nanogram
MAP	Malfunction Abatement Plan	NO <sub>x</sub>	Oxides of Nitrogen
MDEQ	Michigan Department of Environmental Quality (Department)	PM	Particulate Matter
MSDS	Material Safety Data Sheet	PM10	PM with aerodynamic diameter ≤10 microns
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	PM with aerodynamic diameter ≤ 2.5 microns
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	psia	Pounds per square inch absolute
PTI	Permit to Install	psig	Pounds per square inch gauge
RACT	Reasonably Available Control Technology	scf	Standard cubic feet
ROP	Renewable Operating Permit	sec	Seconds
SC	Special Condition	SO <sub>2</sub>	Sulfur Dioxide
SCR	Selective Catalytic Reduction	THC	Total Hydrocarbons
SRN	State Registration Number	tpy	Tons per year
TAC	Toxic Air Contaminant	µg	Microgram
TEQ	Toxicity Equivalence Quotient	VOC	Volatile Organic Compound
VE	Visible Emissions	yr	Year

\* For High Volume Low Pressure (HVLP) applicators, the pressure measured at the HVLP gun air cap shall not exceed ten (10) pounds per square inch gauge (psig).

### 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 Environmental Quality, 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 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 R 336.1219 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 R 336.1219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. **(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 conditions or malfunction has been corrected, or within 30 days of discovery of 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 R 336.1301, 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 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 R 336.1370(2). **(R 336.1370)**
13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. **(R 336.2001)**

**SPECIAL CONDITIONS**

**EMISSION UNIT SUMMARY TABLE**

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

<b>Emission Unit ID</b>	<b>Emission Unit Description (Process Equipment &amp; Control Devices)</b>	<b>Installation Date / Modification Date</b>	<b>Flexible Group ID</b>
EU-BOILER9A	Boiler No. 9A, tangentially fired boiler, 520 MW nameplate capacity, with dry wire Electrostatic precipitators and Low-NOx burners. Emissions are vented to the ambient air through stack SV0007.	01-01-1965 / 11-21-2000 / 01-27-2012	FG-BLR_9&16-19, FG-DSI/ACI
EU-TCP9A-DSI_SILO1	DSI sorbent delivered by enclosed tanker truck or railcar tanker and conveyed pneumatically to the storage silo. The load-in conveying air discharges through a high efficiency bin vent filter or dust collector on Boiler Unit 9A DSI Silo 1.	02-04-2015	FG-ISLAND
EU-TCP9A-DSI_SILO2	DSI sorbent delivered by enclosed tanker truck or railcar tanker and conveyed pneumatically to the storage silo. The load-in conveying air discharges through a high efficiency bin vent filter or dust collector on the Boiler Unit 9A DSI Silo 2.	02-04-2015	FG-ISLAND
EU-TCP9A-ACI_SILO	ACI sorbent delivered by enclosed dry bulk semi-trailer trucks and conveyed pneumatically to the storage silo. The load-in conveying air discharges through a high efficiency bin vent filter or dust collector on the Boiler Unit 9A ACI Silo.	02-04-2015	FG-ISLAND
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 336.1290.			

**FLEXIBLE GROUP SUMMARY TABLE**

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

<b>Flexible Group ID</b>	<b>Flexible Group Description</b>	<b>Associated Emission Unit IDs</b>
FG-DSI/ACI	Installation of dry sorbent injection (DSI) and activated carbon injection (ACI) systems on Boiler Unit 9A, to control HAP emissions.	EU-BOILER9A
FG-ISLAND	DSI and ACI sorbents delivered and conveyed pneumatically to the appropriate storage silo.	EU-TCP9A-DSI_SILO1, EU-TCP9A-DSI_SILO2, EU-TCP9A-ACI_SILO

**The following conditions apply to: FG-DSI/ACI**

**DESCRIPTION:** MATS Compliance Project (40 CFR Part 63, Subpart UUUUU) for each boiler that is an Electric Generating Unit (EGU) at the Trenton Channel Power Plant. The installation of dry sorbent injection (DSI) and activated carbon injection (ACI) systems on Boiler Unit 9A.

**Emission Units:** EU-BOILER9A

**POLLUTION CONTROL EQUIPMENT:** Boiler Unit 9A is equipped with low NOx burners, ESP, DSI, and ACI.

**I. EMISSION LIMITS**

Pollutant	Limit <sup>a</sup>	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1a. PM	0.03 lb/MMBtu or 0.3 lb/MW hr	Test Protocol shall determine time period	FG-DSI/ACI	SC V.1, SC VI. 1 - 4	40 CFR 63.9991 Table 2, 40 CFR 63.10000(a)
<b>OR</b>					
1b. Total non-Hg HAP metals	0.00005 lb/MMBtu or 0.5 lb/GW hr	Test Protocol shall determine time period	FG-DSI/ACI	SC V.1, SC VI. 1 - 4	40 CFR 63.9991 Table 2, 40 CFR 63.10000(a)
<b>OR</b>					
1c. Individual HAP Metals					
(i). Antimony (Sb)	0.8 lb/TBtu or 0.008 lb/GW hr	Test Protocol shall determine time period	FG-DSI/ACI	SC V.1, SC VI. 1 - 4	40 CFR 63.9991 Table 2, 40 CFR 63.10000(a)
(ii). Arsenic (As)	1.1 lb/TBtu or 0.020 lb/GW hr	Test Protocol shall determine time period	FG-DSI/ACI	SC V.1, SC VI. 1 - 4	40 CFR 63.9991 Table 2, 40 CFR 63.10000(a)
(iii). Beryllium (Be)	0.2 lb/TBtu or 0.002 lb/GW hr	Test Protocol shall determine time period	FG-DSI/ACI	SC V.1, SC VI. 1 - 4	40 CFR 63.9991 Table 2, 40 CFR 63.10000(a)
(iv). Cadmium (Cd)	0.3 lb/TBtu or 0.003 lb/GW hr	Test Protocol shall determine time period	FG-DSI/ACI	SC V.1, SC VI. 1 - 4	40 CFR 63.9991 Table 2, 40 CFR 63.10000(a)
(v). Chromium (Cr)	2.8 lb/TBtu or 0.030 lb/GW hr	Test Protocol shall determine time period	FG-DSI/ACI	SC V.1, SC VI. 1 - 4	40 CFR 63.9991 Table 2, 40 CFR 63.10000(a)
(vi). Cobalt (Co)	0.8 lb/TBtu or 0.008 lb/GW hr	Test Protocol shall determine time period	FG-DSI/ACI	SC V.1, SC VI. 1 - 4	40 CFR 63.9991 Table 2, 40 CFR 63.10000(a)
(vii). Lead (Pb)	1.2 lb/TBtu or 0.020 lb/GW hr	Test Protocol shall determine time period	FG-DSI/ACI	SC V.1, SC VI. 1 - 4	40 CFR 63.9991 Table 2, 40 CFR 63.10000(a)
(viii). Manganese (Mn)	4.0 lb/TBtu or 0.050 lb/GW hr	Test Protocol shall determine time period	FG-DSI/ACI	SC V.1, SC VI. 1 - 4	40 CFR 63.9991 Table 2, 40 CFR 63.10000(a)
(ix). Nickel (Ni)	3.5 lb/TBtu or 0.040 lb/GW hr	Test Protocol shall determine time period	FG-DSI/ACI	SC V.1, SC VI. 1 - 4	40 CFR 63.9991 Table 2, 40 CFR 63.10000(a)

Pollutant	Limit <sup>a</sup>	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
(x). Selenium (Se)	5.0 lb/TBtu or 0.060 lb/GW hr	Test Protocol shall determine time period	FG-DSI/ACI	SC V.1, SC VI. 1 - 4	40 CFR 63.9991 Table 2, 40 CFR 63.10000(a)
<b>AND</b>					
2a. Hydrogen Chloride (HCl)	0.002 lb/MMBtu or 0.02 lb/MW hr	Test Protocol shall determine time period	FG-DSI/ACI	SC V.1, SC VI. 1 - 4	40 CFR 63.9991 Table 2, 40 CFR 63.10000(a)
<b>OR</b>					
2b. Sulfur dioxide (SO <sub>2</sub> ) <sup>b</sup>	0.2 lb/MMBtu <sup>b</sup> or 1.5 lb/MW hr <sup>b</sup>	Test Protocol shall determine time period	FG-DSI/ACI	SC V.1, SC VI. 1 - 4	40 CFR 63.9991 Table 2, 40 CFR 63.10000(a)
<b>AND</b>					
3a. Mercury (Hg)	1.2 lb/TBtu or 0.013 lb/GW hr	Test Protocol shall determine time period	FG-DSI/ACI	SC V.1, SC VI. 1 - 4	40 CFR 63.9991 Table 2, 40 CFR 63.10000(a)
<sup>a</sup> These limits apply starting April 16, 2016, applying at all times except during periods of startup and shutdown, as defined by 40 CFR Part 60, Subpart UUUUU.					
<sup>b</sup> Permittee may use the alternate SO <sub>2</sub> limit, consistent with 40 CFR 63.9991(c).					

## II. MATERIAL LIMITS

1. The permittee must comply with initial compliance standards for material limits in accordance with 40 CFR Part 63, Subpart UUUUU for FG-DSI/ACI. **(40 CFR 63.10011)**

## III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee must meet the work practice standards and operating limits for FG-DSI/ACI, according to 40 CFR Part 63, Subpart UUUUU, Tables 3 and 4. **(40 CFR 63.9991, 40 CFR 63.10000, 40 CFR 63.10011)**
2. The permittee shall operate and maintain FG-DSI/ACI, including associated air pollution control equipment and monitoring equipment in satisfactory manner. **(40CFR63.10000)**

## IV. DESIGN/EQUIPMENT PARAMETERS

1. All air pollution control equipment necessary for compliance with any newly applicable emissions limits which apply as a result of the cessation or commencement or recommencement of operations that cause FG-DSI/ACI to meet the definition of an EGU subject to this subpart must be installed and operational as of the date your source ceases to be or becomes subject to 40 CFR Part 63 Subpart UUUUU. **(40 CFR 63.10000(j))**
2. All monitoring systems necessary for compliance with any newly applicable monitoring requirements which apply as a result of the cessation or commencement or recommencement of operations that FG-DSI/ACI to meet the definition of an EGU subject to 40 CFR Part 63 Subpart UUUUU must be installed and operational as of the date your source ceases to be or becomes subject to 40 CFR Part 63 Subpart UUUUU. **(40 CFR 63.10000(k))**

## **V. TESTING/SAMPLING**

1. For EU-BOILER9A of FG-DSI/ACI, the permittee must demonstrate initial compliance with each applicable emissions limit through performance testing by testing at owner's expense, in accordance with Department requirements, where two emissions limits are specified for a particular pollutant (e.g., a heat input-based limit in lb/MMBtu and an electrical output-based limit in lb/MWh), the permittee may demonstrate compliance with either emission limit. All subsequent performance tests will be required according to 40 CFR 63.10006. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. The permittee must demonstrate initial compliance no later than April 16, 2016. **(40 CFR 63.9984, 40 CFR 63.10000, 40 CFR 63.10005(a), 40 CFR 63.10006, 40 CFR 63.10007, 40 CFR 63.10011)**

## **VI. MONITORING/RECORDKEEPING**

1. The permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record, as applicable according to 40 CFR Part 63, Subpart UUUUU. **(40 CFR 63.10033)**
2. The permittee must develop a site-specific monitoring plan and submit this site-specific monitoring plan, if requested, at least 60 days before your initial performance evaluation (where applicable) of your continuous monitoring system (CMS). **(40 CFR 63.10000(d))**
3. The permittee shall maintain on-site and submit, if requested by the AQD District Supervisor, an annual report containing the information for all periodic tune-ups that are performed for each EGU of FG-DSI/ACI, as specified in 40 CFR 63.10021(e). **(40 CFR 63.10000(e), 40 CFR 63.10021(e))**
4. The permittee shall keep records of the following information for startups, shutdowns, and malfunctions:
  - a) Each occurrence and duration of each startup and/or shutdown;
  - b) The permittee must keep records of the occurrence and duration of each malfunction of an operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment;
  - c) The permittee must keep records of actions taken during periods of malfunction to minimize emissions in accordance with §63.10000(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation;
  - d) The permittee must keep records of the type(s) and amount(s) of fuel used during each startup or shutdown.

The permittee shall keep the records on file at the facility and make them available to the Department upon request. **(40 CFR 63.10032(d))**

## **VII. REPORTING**

1. The permittee must submit all of the notifications required; according to 40 CFR Part 63 Subpart UUUUU. **(40 CFR 63.10030, 40 CFR 63.10031)**
2. The permittee must report each instance in which FG-DSI/ACI did not meet an applicable emission limit or operating limit in Tables 1 through 4 of 40 CFR Part 63 Subpart UUUUU or failed to conduct a required tune-up. These instances are deviations from the requirements of 40 CFR Part 63 Subpart UUUUU. **(40 CFR 63.10021(g), 40 CFR 63.10031)**

**VIII. STACK/VENT RESTRICTIONS**

NA

**IX. OTHER REQUIREMENTS**

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart UUUUU, for Coal and Oil-fired Electric Utility Steam Generating Units, as it applies to FG-DSI/ACI. **(40 CFR Part 63, Subparts A and UUUUU)**

**The following conditions apply to: FG-ISLAND**

**DESCRIPTION:** DSI and ACI sorbents delivered and conveyed pneumatically to the appropriate storage silo. The load-in conveying air discharges through a high efficiency bin vent filter or dust collector on each silo.

**Emission Units:** **DSI:** EU-TCP9A-DSI\_SILO1, EU-TCP9A-DSI\_SILO2; **ACI:** EU-TCP9A-ACI\_SILO

**POLLUTION CONTROL EQUIPMENT:** Bin vent filters or dust collectors on each emission unit.

**I. EMISSION LIMITS**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period/ Operating Scenario</b>	<b>Equipment</b>	<b>Testing / Monitoring Method</b>	<b>Underlying Applicable Requirements</b>
1. Opacity	7 percent	Test Protocol will determine averaging time	Each individual bin vent filter or dust collector for FG-ISLAND	SC V.3	R 336.1301
2. PM	0.004 gr/dscf	Test Protocol will determine averaging time	Each individual bin vent filter or dust collector for FG-ISLAND	SC V.1	R 336.1331
3. PM10	0.034 pph	Test Protocol will determine averaging time	Each individual bin vent filter or dust collector for included in FG-ISLAND	SC V.2	R 336.2803, R 336.2804
4. PM2.5	0.017 pph	Test Protocol will determine averaging time	Each individual bin vent filter or dust collector for included in FG-ISLAND	SC V.2	R 336.2803, R 336.2804

**II. MATERIAL LIMITS**

NA

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate FG-ISLAND unless a program for continuous fugitive dust control for all material handling operations is implemented, updated as necessary, and kept at the facility. If at any time the fugitive dust control program fails to address or inadequately addresses an event, the permittee shall amend the fugitive dust control program within 45 days after such an event occurs. The permittee shall also amend the fugitive dust control program within 45 days, if new equipment is installed or upon request from the AQD District Supervisor. The permittee shall submit the fugitive dust control program and any amendments to the fugitive dust control program to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the fugitive dust control program or amended fugitive dust control program shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1371, R 336.1372, R 336.2803, R 336.2804, 40 CFR 60.672)**

2. The permittee shall not operate FG-ISLAND unless a MAP as described in Rule 911(2), for operation of the process and emission control equipment is implemented, updated as necessary, and kept at the facility. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the AQD District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804)**
3. The permittee shall not operate FG-ISLAND for more than 12 hours per day, as determined on a daily basis. **(R 336.2803, R 336.2804)**

#### **IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall not operate any portion of FG-ISLAND unless the associated enclosures or fabric filters are installed, maintained and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with an approved MAP for FG-ISLAND as required in SC III.2. **(R 336.1910, R 336.1911, R 336.2803, R 336.2804)**

#### **V. TESTING/SAMPLING**

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

1. The permittee shall verify the PM emission rates from each emission unit of FG-ISLAND or a representative emission unit by testing at owner's expense, in accordance with Department requirements, as requested by the AQD District Supervisor. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1301, R 336.1331, R 336.2001, R 336.2003, R 336.2004, R 336.2801)**
2. The permittee shall verify the PM10 and PM2.5 emission rates from each emission unit of FG-ISLAND or a representative emission unit by testing at owner's expense, in accordance with Department requirements, as requested by the AQD District Supervisor. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.2001, R 336.2003, R 336.2004, R 336.2801, R 336.2803, R 336.2804)**
3. Annually, the permittee shall conduct a Reference Method 9 visible emissions readings of each emission unit of FG-ISLAND, at a minimum of once per calendar year, during maximum routine operating conditions. **(R 336.1301, R 336.1910, R 336.1911)**

#### **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 as required in Emission Limit SC I.1 on a daily basis when FG-ISLAND is operating. If during the observation there are any visible emissions detected from an emission point, an EPA Method 9 certified visible emissions observation shall be performed. Records of the non-certified visible emissions observations, EPA 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 336.1910, R 336.1911)**

2. The permittee shall monitor and record, the hours of operation for FG-ISLAND on a daily basis. (R 336.1205, R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1602, R 336.1702, R 336.1901, R 336.1910, R 336.2802, 40 CFR 52.21)

**VII. REPORTING**

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of FG-ISLAND authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of FG-ISLAND. (R 336.1201(7)(a))

**VIII. STACK/VENT RESTRICTIONS**

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter/Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SV-TCP9A-DSI_SILO1*	14 x 14	78	R 336.2803, R 336.2804
2. SV-TCP9A-DSI_SILO2*	14 x 14	78	
3. SV-TCP9A-ACI_SILO*	14 x 14	58	

\*Stack/Vents discharged non-vertically.

**IX. OTHER REQUIREMENTS**

NA