# West Virginia Department of Environmental Protection

Harold D. Ward Cabinet Secretary

# Permit to Operate



Pursuant to **Title V**of the Clean Air Act

Issued to:

Kingsford Manufacturing Company Beryl Plant R30-05700003-2023

Laura M. Crowder

Laura M. Crowder Director, Division of Air Quality Permit Number: **R30-05700003-2023**Permittee: **Kingsford Manufacturing Company** 

Facility Name: Beryl Plant

Permittee Mailing Address: 180 Kingsford Lane, Parsons, WV 26287

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location: 3798 Beryl Road, Piedmont, Mineral County, West Virginia

Facility Mailing Address: P.O. Box 188, Westernport, MD, 21562

Telephone Number: (304) 355-2311 Type of Business Entity: Corporation

Facility Description: Wood Char Manufacturing

SIC Codes: 2861

UTM Coordinates: 666.0 km Easting • 4,371.0 km Northing • Zone 17

Permit Writer: Natalya V. Chertkovsky-Veselova

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

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# 1.0 Emission Units and Active R13, R14, and R19 Permits

# 1.1. Emission Units

Emission Unit ID	Emission Point ID	Equipment Description and ID	Year Installed	Design Capacity	Control Device
001-01	S-07	Wood Pile management: wood pile E-01-01	1963, mod. 2019	N/A	None
001-02	S-07	Wood Pile management: mulch pile E-01-02	1984, mod. 2019	N/A	None
001-03	S-07	Wood Chip (Hogfuel) Truck Receipt System E-01-03	2019	N/A	None
002-01	S-07	Transfer to hopper by end loader E-02-01	1963, mod.1994	257,900 TPY	None
002-02	S-07	Hopper reverse chain to ground E-02-02	1963, mod.1994	257,900 TPY	None
002-03	S-07	Hopper to 48" belt E-02-03	1963, mod.1994	257,900 TPY	Full Enclosure
002-04	S-07	48" belt into hog E-02-04	1963, mod.1993	257,900 TPY	Full Enclosure
002-05	S-07	Scrape bottom of 48" belt to ground E-02-05	1993	258 TPY	Partial Enclosure
002-06	S-07	Block conveyor to live bottom bin E-02-06	1963	224,000 TPY	Full Enclosure
002-07	S-07	Mulch chute to ground E-02-07	1996	33,900 TPY	None
002-08	S-07	Wood bypass screw to hopper E-02-08	1998	124 TPY	Partial Enclosure
002-09	S-07	Char to trailer E-02-09	1999	32,000 TPY	Wet Scrubber
002-10	S-07	Bypass Hopper E-02-10	2001	50 TPY	None
002-11	S-07	Bypass Block conveyor E-02-11	2001	50 TPY	Partial enclosure

Emission Unit ID	Emission Point ID	Equipment Description and ID	Year Installed	Design Capacity	Control Device	
003-01	S-02	Rotary Wood Dryer E-03-01 (Heil SD-105-32)	1998	40 tph Wet Wood	After Combustion Chamber	
		Primary Dryer Cyclone C- 05 (Heil)	1963	unknown	(ACC) C-08	
		(2) Secondary Dryer Cyclones C-06 (Fisher- Klosterman XQ 120-41)	1997	22,000 ACFM each		
003-02	S-02	Multi-hearth Retort Furnace E-03-02 (Nichols- Herreshoff)	1962 - installed; 1997 - modified	5.0 tph char 20 tph Dry Wood	After Combustion Chamber (ACC) C-08	
		(2) Furnace Cyclones C-07 (Fisher-Klosterman XQ 120-27-2.75CR)	1997	11,000 ACFM each		
003-02	S-02	(1) Low NOx propane burner to provide heat to ACC during start ups and system interruptions, to maintain temperature during operation	2015/2017	40 MMBtu/hr each	None	
		(1) Low NOx natural gas burner to provide heat to ACC during start ups and system interruptions, to maintain temperature during operation	2017/2020			
		(6) natural gas burners for Retort Furnace start up periods	1998	4 MMBtu/hr each		
004-01	S-07	Paved Roads: End-loader Traffic E-04-01, Vehicle Traffic E-04-02	1990	N/A	None	
005-02	S-05	Diesel oil tank E-05-02 with conservation vent (negligible emissions)	2017	1,300 gal	None	

Emission Unit ID	Emission Point ID	Equipment Description and ID	Year Installed	Design Capacity	Control Device
006-01 / E- 06-01	S-07	Natural Gas Fired Emergency Generator (General Motors Industrial Powertrain, Vortec 8.1 L, 4- Cycle, Turbocharged and Charge Cooled (177.5 kW)	2012	238 HP / 1800 rpm	None
005-03	S-08	Propane Tank	2015	12,000 gal	None
006-02	S-08	Natural Gas Fired Boiler	2013	1.24 MMBtu/hr	None
		Control De	vices		
N/A	S-02	Thermal After Combustion Chamber (ACC) C-08 (self- manufactured)	1997	368,970 ACFM of wood derived gases, destruction efficiency: 99% for CO, VOC	None
N/A	S-07	Wet Scrubber Hosokawa Model 30DS.2	1999	90% of PM	None

# 1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-2117F	October 18, 2019
G60-C047	August 17, 2012

#### 2.0 General Conditions

#### 2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.39.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.
- 2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

# 2.2. Acronyms

CAAA	Clean Air Act Amendments	NSPS	New Source Performance
CBI	Confidential Business Information		Standards
CEM	Continuous Emission Monitor	PM	Particulate Matter
CES	Certified Emission Statement	$PM_{10}$	Particulate Matter less than
C.F.R. or CFR	Code of Federal Regulations		10μm in diameter
CO	Carbon Monoxide	pph	Pounds per Hour
C.S.R. or CSR	Codes of State Rules	ppm	Parts per Million
DAQ	Division of Air Quality	PSD	Prevention of Significant
DEP	Department of Environmental		Deterioration
	Protection	psi	Pounds per Square Inch
FOIA	Freedom of Information Act	SIC	Standard Industrial
HAP	Hazardous Air Pollutant		Classification
HON	Hazardous Organic NESHAP	SIP	State Implementation Plan
HP	Horsepower	$SO_2$	Sulfur Dioxide
lbs/hr or lb/hr	Pounds per Hour	TAP	Toxic Air Pollutant
LDAR	Leak Detection and Repair	TPY	Tons per Year
m	Thousand	TRS	Total Reduced Sulfur
MACT	Maximum Achievable Control	TSP	Total Suspended Particulate
	Technology	USEPA	United States
mm	Million		<b>Environmental Protection</b>
mmBtu/hr	Million British Thermal Units per		Agency
	Hour	UTM	Universal Transverse
mmft³/hr <i>or</i>	Million Cubic Feet Burned per		Mercator
mmcf/hr	Hour	VEE	Visual Emissions
NA or N/A	Not Applicable		Evaluation
NAAQS	National Ambient Air Quality	VOC	Volatile Organic
	Standards		Compounds
NESHAPS	National Emissions Standards for		
	Hazardous Air Pollutants		
$NO_x$	Nitrogen Oxides		

#### 2.3. Permit Expiration and Renewal

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c. [45CSR§30-5.1.b.]
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.

[45CSR§30-4.1.a.3.]

- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3. [45CSR§30-6.3.b.]
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.

  [45CSR§30-6.3.c.]

#### 2.4. Permit Actions

2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

[45CSR§30-5.1.f.3.]

#### 2.5. Reopening for Cause

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
  - a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.
  - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
  - c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
  - d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

#### [45CSR§30-6.6.a.]

#### 2.6. Administrative Permit Amendments

2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.

[45CSR§30-6.4.]

#### 2.7. Minor Permit Modifications

2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.

[45CSR§30-6.5.a.]

# 2.8. Significant Permit Modification

2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.

[45CSR§30-6.5.b.]

# 2.9. Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.

[45CSR§30-5.1.h.]

#### 2.10. Off-Permit Changes

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:
  - a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
  - b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
  - c. The change shall not qualify for the permit shield.
  - d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
  - e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR\$30-5.9.

[45CSR§30-5.9.]

#### 2.11. Operational Flexibility

2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:
  - a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
  - b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

#### [45CSR§30-5.8.c.]

2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.40]

#### 2.12. Reasonably Anticipated Operating Scenarios

- 2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.
  - a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
  - b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
  - c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

#### 2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

#### 2.14. Inspection and Entry

- 2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:
  - At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's
    premises where a source is located or emissions related activity is conducted, or where records must be
    kept under the conditions of this permit;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
  - d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

#### 2.15. Schedule of Compliance

- 2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:
  - a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
  - b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

#### 2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations. [45CSR§30-5.1.f.2.]

#### 2.17. Reserved

#### 2.18. Federally-Enforceable Requirements

- 2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.

  [45CSR§30-5.2.a.]
- 2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

#### 2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

[45CSR§30-5.1.f.5.]

#### 2.20. Duty to Supplement and Correct Information

2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

[45CSR§30-4.2.]

#### 2.21. Permit Shield

- 2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.

  [45CSR§30-5.6.a.]
- 2.21.2. Nothing in this permit shall alter or affect the following:
  - a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
  - b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
  - c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

#### 2.22. Credible Evidence

[45CSR§30-5.3.e.3.B.]

#### 2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.
[45CSR§30-5.1.e.]

#### 2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege. [45CSR§30-5.1.f.4]

# 2.25. Acid Deposition Control

- 2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.
  - a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
  - b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
  - c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

#### [45CSR§30-5.1.d.]

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.

[45CSR§30-5.1.a.2.]

#### 3.0 Facility-Wide Requirements

#### 3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. [45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.

[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.

[40 C.F.R. §61.145(b) and 45CSR34]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.

[45CSR§4-3.1 State-Enforceable only.]

3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.

[45CSR§11-5.2]

3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.

[W.Va. Code § 22-5-4(a)(14)]

- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
  - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.

[40 C.F.R. 68]

3.1.9. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is darker in shade or appearance than that designated as No. 1 Ringelmann or twenty (20) percent opacity, except as noted in 45CSR§§7-3.2 (3.1.10), 3.3, 3.4, 3.5, 3.6 and 3.7 (3.1.11).

[45CSR§7-3.1 and 45CSR13, R13-2117, 4.1.5.a]

- 3.1.10. The provisions of 45CSR§7-3.1 (3.1.9.) shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.
  - [45CSR§7-3.2 and 45CSR13, R13-2117, 4.1.5.b]
- 3.1.11. No person shall cause, suffer, allow, or permit emissions of smoke and/or particulate matter into the open air from any storage structure associated with any manufacturing process pursuant to 45CSR§7-5.1 is required to have a full enclosure and be equipped with a particulate matter control device.

  [45CSR§7-3.7]
- 3.1.12. No person shall cause suffer, allow or permit particulate matter to be vented into the open air from any type of source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A found at the end of 45CSR7.

  [45CSR§7-4.1 and 45CSR13, R13-2117, 4.1.5.c]
- 3.1.13. No person shall cause, suffer, allow or permit any manufacturing process generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained, and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable. [45CSR§7-5.1 and 45CSR13, R13-2117, 4.1.5.d]
- 3.1.14. The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment. [45CSR§7-5.2 and 45CSR13, R13-2117, 4.1.5.e]
- 3.1.15. Due to unavoidable malfunction of equipment, emissions exceeding those provided for in 45CSR7 may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four-(24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.

  [45CSR§7-9.1]

3.1.16. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an instack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations.

[45CSR§10-4.1 and 45CSR13, R13-2117, 4.1.6.a]

3.1.17. Maintenance operations shall be exempt from the provisions of 45CSR§7-4 provided that at all times the owner or operator shall conduct maintenance operations in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source.

[45CSR§7-10.3]

- 3.1.18. An owner or operator may apply for an alternative visible emission standard for start-up and shutdown periods, on a case-by-case basis, by filing a written petition with the Director. The Director may approve an alternative visible emission standard for start-ups and shutdowns to the visible emission standard required under 45CSR§7-3. The petition shall include a demonstration satisfactory to the Director: a) That it is technologically or economically infeasible to comply with 45CSR§7-3; b) That establishes the need for approval of a start-up or shutdown plan based upon information including, but not limited to, monitoring results, opacity observations, operating procedures and source inspections. c) That the particulate matter weight emission standards under 45CSR§7-4 are being met, as determined in accordance with 45CSR7A -"Compliance Test Procedures For 45CSR7 - ' To Prevent and Control Particulate Air Pollution From Manufacturing Process Operations"; and d) That during periods of start-ups and shutdowns the owner or operator shall, to the extent practicable, maintain and operate any manufacturing process including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source. [45CSR§7-10.4]
- 3.1.19. The permittee shall develop, maintain and implement procedures on startup, shutdown and maintenance activities to help insure they are conducted in a manner consistent with provisions of this Permit. At the request of the Director, or his or her duly authorized representative, such data shall be made available for inspection or copying.

[45CSR§30-5.1.c]

3.1.20. Due to unavoidable malfunction of equipment or inadvertent fuel shortages, emissions exceeding those provided for in this rule may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the equipment malfunction or fuel shortage. In cases of major equipment failure or extended shortages of conforming fuels, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.

[45CSR§10-9.1]

3.1.21. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions and according to manufacturer's recommendations, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR§13-5.11 and 45CSR13, R13-2117, 4.1.7]

#### 3.2. Monitoring Requirements

3.2.1. *[Reserved]* 

#### 3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:
  - a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
  - b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.
  - c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
  - d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
    - 1. The permit or rule evaluated, with the citation number and language.
    - 2. The result of the test for each permit or rule condition.

3. A statement of compliance or non-compliance with each permit or rule condition.

#### [WV Code §§ 22-5-4(a)(14-15) and 45CSR13]

- 3.3.2. At such reasonable times as the Director may designate, the operator of any manufacturing process source operation may be required to conduct or have conducted stack tests to determine the particulate matter loading in exhaust gases. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director. The Director, or his duly authorized representative, may at his option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices. [45CSR§7-8.1]
- 3.3.3. At such reasonable time(s) as the Secretary may designate, in accordance with the provisions of 3.3 of this permit, the permittee shall conduct or have conducted test(s) to determine compliance with the emission limitations or emission control requirements established in this permit and/or applicable regulations. [45CSR§7-8.2 and 45CSR13, R13-2117, 4.3.1]

#### 3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
  - a. The date, place as defined in this permit and time of sampling or measurements;
  - b. The date(s) analyses were performed;
  - c. The company or entity that performed the analyses;
  - d. The analytical techniques or methods used;
  - e. The results of the analyses; and
  - f. The operating conditions existing at the time of sampling or measurement.

#### [45CSR§30-5.1.c.2.A. and 45CSR13, R13-2117, 4.4.1]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

#### [45CSR§30-5.1.c.2.B.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken. [45CSR§30-5.1.c. State-Enforceable only.]

3.4.4. The permittee shall keep on site facility monthly natural gas and propane bills with the amount of natural gas and propane stated in order to be able to account for emissions associated with natural gas and propane combustion.

[45CSR§30-5.1.c]

3.4.5. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13, R13-2117, 4.4.2]

- 3.4.6. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:
  - a. The equipment involved.
  - b. Steps taken to minimize emissions during the event.
  - c. The duration of the event.
  - d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-2117, 4.4.3]

#### 3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[45CSR§§30-4.4. and 5.1.c.3.D.]

- 3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31. [45CSR§30-5.1.c.3.E.]
- 3.5.3. Except for the electronic submittal of the annual compliance certification and semi-annual monitoring reports to the DAQ and USEPA as required in 3.5.5 and 3.5.6 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic format by e-mail as

set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

DAQ: US EPA:

Director Section Chief

WVDEP U. S. Environmental Protection Agency, Region III

Division of Air Quality Enforcement and Compliance Assurance Division

601 57<sup>th</sup> Street SE Air, RCRA and Toxics Branch (3ED21)

Charleston, WV 25304 Four Penn Center

1600 John F. Kennedy Boulevard Philadelphia, PA 19103-2852

# DAQ Compliance and Enforcement<sup>1</sup>:

DEPAirQualityReports@wv.gov

<sup>1</sup>For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status reports, Initial Notifications, etc.

- 3.5.4. **Fees.** The permittee shall pay fees on an annual basis in accordance with 45CSR§30-8. **[45CSR§30-8.]**
- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. The annual certification shall be submitted in electronic format by e-mail to the following addresses:

DAQ: US EPA:

DEPAirQualityReports@wv.gov R3\_APD\_Permits@epa.gov

[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4. The semi-annual monitoring reports shall be submitted in electronic format by e-mail to the following address:

#### DAO:

DEPAirQualityReports@wv.gov

[45CSR§30-5.1.c.3.A.]

3.5.7. Reserved.

#### 3.5.8. **Deviations.**

- a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:
  - 1. Reserved.
  - 2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or email. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
  - 3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
  - 4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

#### [45CSR§30-5.1.c.3.C.]

- b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

  [45CSR§30-5.1.c.3.B.]
- 3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

  [45CSR§30-4.3.h.1.B.]

# 3.6. Compliance Plan

3.6.1. None.

#### 3.7. Permit Shield

- 3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.
- 3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

Requirement	Regulatory Citation	Basis for Non-Applicability
PM emissions from Coal Preparation and Handling Plants	45CSR5	No coal handling operations at Beryl facility.

Requirement	Regulatory Citation	Basis for Non-Applicability
PM emissions from an incinerator	45CSR§6-4.1	The PM emission standard from 45CSR7 (45CSR§7-4.1) also applies and is more stringent. Because of the "inconsistency between rules" provision in 45CSR6 and 7, the more stringent rule will apply and therefore the PM standard from 45CSR6 is moot and the Permit Shield applies.
Opacity limits for an incinerator	45CSR§§6-4.3 and 4.4	The opacity standard from 45CSR7 (45CSR§§7-3.1 and 3.2) also applies and is more stringent. Because of the "inconsistency between rules" provision in 45CSR6 and 7, the more stringent rule will apply and therefore the opacity requirement from 45CSR6 is moot and the Permit Shield applies.
Type "d" chemical operation source	45CSR7, Table 45- 7A	This facility was previously determined by the Director as type "a" source, not a type "d" source
Testing, Monitoring, Recordkeeping and Reporting of Sulfur Oxides emissions	45CSR§10-8	Per 45CSR§10-10.3 partial wood combustion during the manufacture of charcoal shall be exempt from this requirement
Preparation of standby plans for reducing the emissions of air pollution during periods of an Air Pollution Alert, Air pollution Warning, and Air pollution Emergency	45CSR§11-5.1	This facility is not in Priority I or II regions, therefore it is not subject to this requirement
PSD source	45CSR14	Emission limits and production caps are accepted by the facility to avoid triggering PSD
Fugitive emissions from material handling	45CSR17	Per 45CSR§17-6.1 if sources are subject to 45CSR7 they are exempt from the requirements of this Rule
NSR permitting for non-attainment areas	45CSR19	Beryl facility is not in affected areas
VOC emissions regulations Emissions of toxic air pollutants	45CSR21 45CSR27	Beryl facility is not in affected areas  Beryl facility does not operate any "chemical processing units" and does not use listed chemicals
Federal Acid Rain provisions	45CSR33 Title IV of CAAA	No affected sources at Beryl facility
Control of Ozone Season Nitrogen Oxide Emissions	45CSR40	No affected sources at Beryl facility
Regional Haze Rule	40CFR§\$51.300-309	Beryl facility was constructed prior to 1977, but it doesn't have PTE for any affected pollutant exceeding 250 TPY
40 C.F.R. Part 63	Subpart JJJJJJ	There are no affected sources at this facility. Boiler 006-02 is natural gas fired, therefore it is not subject to this rule.

Requirement	Regulatory Citation	Basis for Non-Applicability
Compliance Assurance Monitoring (CAM) Rule	40CFR64	Cyclones C-05, C-06 and C-07 are used primarily for product recovery, therefore they are defined as "inherent process equipment" per 40CFR§64.1, and do not require a CAM plan.

#### 4.0 Rotary Wood Dryer Requirements [Emission Point S-02, Emission Unit ID E-03-01]

#### 4.1. Limitations and Standards

- 4.1.1. The Rotary Wood Dryer, identified as E-03-01, shall be operated according to the following requirements:
  - a. At all times the dryer is in operation, the exhaust gases from the unit shall be routed to and combusted by the After Combustion Chamber (ACC) prior to their release to the atmosphere; and
  - b. The maximum throughput of wet wood processed by the dryer shall not exceed 40 TPH or 192,000 TPY.

#### [45CSR13, R13-2117, 4.1.1]

- 4.1.2. Reserved.
- 4.1.3. The control devices in the Emission Units Table 1.1 for the Rotary Wood Dryer, shall be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions. [45CSR§30-5.1.c]
- 4.1.4. The permittee shall inspect all control systems, specified in the Emission Units Table 1.1 for the Rotary Wood Dryer, weekly to ensure that they are operated and maintained in conformance with their designs. [45CSR\$30-5.1.c]

#### **4.2.** Monitoring Requirements

4.2.1. None.

#### 4.3. Testing Requirements

4.3.1. None.

#### 4.4. Recordkeeping Requirements

- 4.4.1. The permittee shall maintain accurate records on the amount of wet wood charged to the Rotary Wood Dryer. [45CSR13, R13-2117, 4.2.2]
- 4.4.2. The permittee shall maintain accurate records on the hours of operation of the Rotary Wood Dryer on a daily basis. According to the facility process specifications, hours of operation of the Rotary Wood Dryer are equivalent to the time to load trailers with finished wood char.

  [45CSR§30-5.1.c]
- 4.4.3. Compliance with the hourly maximum limit [of wet wood charged to the Rotary Wood Dryer] shall be calculated on the basis of a rolling thirty day average expressed in tons per hour based on the hours of production for any specific 30 day period. Compliance with the annual limits shall be determined using a rolling yearly total. A rolling yearly total shall mean the sum of measured parameter, in tons, at any given
- 4.4.4. Calculation of amount of wood charged to the Rotary Wood Dryer shall be performed as set forth in Section 5.4.4.

time for the previous twelve (12) months. [45CSR13, R13-2117, 4.2.2]

4.4.5. The permittee shall maintain records of the results of weekly inspections of the control systems per Requirement 4.1.4. Records shall state the times the systems were inoperable, what corrective actions taken as a result of the weekly inspections and all scheduled and unscheduled maintenance procedures. [45CSR§30-5.1.c]

# 4.5. Reporting Requirements

4.5.1. None.

# 4.6. Compliance Plan

4.6.1. None.

# 5.0 Multi-Hearth Retort Furnace [Emission Point S-02, Emission Unit ID E-03-02] and Boiler [Emission Point S-08, Emission Unit ID 006-02] Requirements

#### 5.1. Limitations and Standards

- 5.1.1. The Multi-hearth Retort Furnace, identified as E-03-02, shall be operated according to the following requirements:
  - a. At all times the furnace is in operation, the exhaust gases from the unit shall be routed to and combusted by the ACC prior to their release to the atmosphere; and
  - The maximum throughput of dry wood processed by the furnace shall not exceed 20 TPH or 96,000 TPY.

[45CSR13, R13-2117, 4.1.2]

- 5.1.2. The maximum production of wood char at the facility shall not exceed 5.0 TPH or 32,000 TPY. **[45CSR13, R13-2117, 4.1.3]**
- 5.1.3. The control devices in the Emission Units Table 1.1 for the Multi-Hearth Retort Furnace, shall be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions. [45CSR§30-5.1.c]
- 5.1.4. The permittee shall inspect all control systems, specified in the Emission Units Table 1.1 for the Multi-Hearth Retort Furnace, weekly to ensure that they are operated and maintained in conformance with their designs. [45CSR§30-5.1.c]
- 5.1.5. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average. [45CSR§2-3.1] (Boiler 006-02).

# 5.2. Monitoring Requirements

5.2.1. None.

#### **5.3.** Testing Requirements

5.3.1. None.

# 5.4. Recordkeeping Requirements

5.4.1. The permittee shall maintain accurate records on the amount of dry wood charged to the Multi-hearth Retort Furnace.

[45CSR13, R13-2117, 4.2.2]

5.4.2. The permittee shall maintain accurate records on the hours of operation of the Multi-hearth Retort Furnace on a daily basis. According to the facility process specifications, hours of operation of the Multi-hearth Retort Furnace are equivalent to the time to load trailers with finished wood char.

[45CSR§ 30-5.1.c]

5.4.3. Compliance with the hourly maximum limit of the amount of dry wood charged to the Multi-hearth Retort Furnace] shall be calculated on the basis of a rolling thirty day average expressed in tons per hour based on the hours of production for any specific 30 day period. Compliance with the annual limit shall be determined using a rolling yearly total. A rolling yearly total shall mean the sum of dry wood, in tons, at any given time for the previous twelve (12) months.

[45CSR13, R13-2117, 4.2.2]

5.4.4. The permittee shall maintain accurate records on the amount of wood char produced by the facility. The permittee shall keep accurate records of the date and time to load each truck at the Beryl Facility (production time), the quantity (tons) of char loaded on each truck and the monthly total of char produced. The rate of char production will then be utilized to back calculate the amount of wet and dry wood charged to the process. Said records shall be certified by a responsible official and maintained on site for a period of no less than five (5) years.

[45CSR13, R13-2117, 4.2.2]

5.4.5. Compliance with the hourly maximum limit [of wood char produced] shall be calculated on the basis of a rolling thirty day average expressed in tons per hour based on the hours of production for any specific 30 day period.

[45CSR13, R13-2117, 4.2.2]

5.4.6. Compliance with the yearly char production limit shall be determined using a rolling yearly total. A rolling yearly total shall mean the sum of char production, in tons, at any given time for the previous twelve (12) months.

[45CSR13, R13-2117, 4.2.2]

5.4.7. The permittee shall maintain records of the results of weekly inspections of the control systems per Requirement 5.1.4. Records shall state the times the systems were inoperable, what corrective actions taken as a result of the weekly inspections and all scheduled and unscheduled maintenance procedures. Such records shall be maintained on site for a period of no less than five (5) years and shall be made available to the Director or his/her duly authorized representative upon request.

[45CSR§30-5.1.c]

#### 5.5. Reporting Requirements

5.5.1. None.

#### 5.6. Compliance Plan

5.6.1. None.

# 6.0 After Combustion Chamber Requirements [control device for Emission Point S-02, Control Device ID C-08]

#### 6.1. Limitations and Standards

6.1.1. Emissions to the atmosphere from the After Combustion Chamber (C-8) shall be limited to the following:

Pollutant	Maximum Allowable Emissions (lbs/ton-char)	Maximum Allowable Emissions (lbs/hr)	Maximum Allowable Emissions (tons/yr)
СО	2.06	10.30	32.94
NOx	13.00	65.00	208.00
PM <sup>(1)</sup>	10.00	50.00	160.00
PM <sub>10</sub> <sup>(1)</sup>	6.78	33.90	108.46
PM <sub>2.5</sub> <sup>(1)</sup>	5.00	25.00	80.00
SO <sub>2</sub>	3.00	15.00	48.00
VOC	0.58	2.90	9.26

<sup>(1)</sup> Include condensables

#### [45CSR13, R13-2117, 4.1.4]

- 6.1.2. No person shall cause, suffer, allow or permit the emission of particles of unburned or partially burned refuse or ash from any incinerator which are large enough to be individually distinguished in the open air. [45CSR§6-4.5]
- 6.1.3. Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.

  [45CSR§6-4.6]

#### **6.2.** Monitoring Requirements

- 6.2.1. **CAM monitoring requirement**. The permittee shall install, calibrate, maintain, and operate a monitoring device (thermocouple) with recorder for the measurement of the ACC combustion chamber temperature. The monitoring device is to be certified by the manufacturer to be accurate within  $\pm$  one (1) percent in degrees Fahrenheit. Accuracy of each thermocouple will be verified by a second thermocouple in the ACC stack. The validation check shall be conducted monthly. The acceptance criterion is  $\pm$ 0°F.
  - [45CSR§30-5.1.c and 40C.F.R. §§64.3(a), 64.3(b) and 64.6(c)(2)]
- 6.2.2. **CAM monitoring requirement**. Compliance with the hourly emission limits set forth in Requirement 6.1.1. will be demonstrated if the ACC combustion chamber temperature is maintained at or above a minimum of 1,400°F on a 3-hour rolling average during normal operations (not including periods of system startup, shutdown or maintenance).

An excursion shall be defined as: if during normal operation, the 1-hour average ACC temperature drops below 1,450°F. Excursions trigger an on-screen alarm, an inspection and evaluation, corrective action, recordkeeping and reporting requirements (permit conditions 6.4.2 and 6.5.2). The monitoring system shall continually sense the indicator, poll the indicator every second, compute 15-seconds averages, and use these 15-seconds averages to compute and record a 1-hour average.

[45CSR§30-12.7 and 40C.F.R. §§64.3(a), 64.3(b) and 64.6(c)(2)]

Compliance with Section 3 of 45CSR7 (conditions 3.1.9 and 3.1.10) and with the requirement of Section 6.2.3. 6.1.2 of this Permit shall be determined by conducting daily visual emission observations in accordance with Method 22 of 40 CFR 60, Appendix A for emission point S-02. These observations shall be conducted during periods of facility operation for a sufficient time interval to determine if the unit has visible emissions using procedures outlined in 40CFR60 Appendix A, Method 22. If sources of visible emissions are identified during the survey, the permittee shall conduct an Opacity Evaluation as outlined in 45CSR§7A-2.1.a,b, within 24 hours. A 45CSR§7A-2.1.a,b evaluation shall not be required if the visible emission condition is corrected in a timely manner and the units are operated at normal operating conditions with no visible emissions being observed. Records shall be maintained on site reporting the results of each test. An Opacity Evaluation shall only be conducted by an employee or contractor certified in 40CFR60 Appendix A, Method 9. Upon observing any visible emissions during an Opacity Evaluation in excess of twenty percent (20%) opacity (but less than forty percent (40%) opacity) for any period or periods aggregating more than five (5) minutes in any sixty (60) minute period, or upon observing any visible emissions in excess of forty percent (40%) opacity, the Company shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within five (5) days after taking said reading. When in compliance on a daily basis for four (4) consecutive weeks, then the observation frequency shall be decreased to a once-a-week sampling schedule. If an exceedance of the opacity limit is measured, then the observation frequency shall be reverted to the once-a-day sampling schedule and begin the progressive monitoring cycle again.

[45CSR13, R13-2117, 4.2.1 and 45CSR§30-5.1.c]

6.2.4. Each opacity evaluation observation per 45CSR§ 7A-2.1.a, b (6.2.3) shall be a minimum of six (6) minutes (24 single fifteen (15) second readings) without averaging of results, unless any one fifteen (15) second reading is greater than the opacity limit for the emission unit, in which case the observation period shall be extended to 60 minutes or until a violation of the emissions standard per 45CSR§7-3.2. has been documented (more than twenty (20) single fifteen (15) second readings of opacity are in excess of 20% opacity, but less than 40% opacity, or any single reading is equal or in excess of 40% opacity); whichever is the shorter period.

[45CSR§30-5.1.c]

- 6.2.5. **Proper maintenance (CAM).** At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. [45CSR§30-5.1.c and 40C.F.R. §64.7(b)]
- 6.2.6. Continued operation (CAM). Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

[45CSR§30-5.1.c and 40C.F.R. §64.7(c)]

#### 6.2.7. Response to excursions or exceedances (CAM).

- (1) Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (2) Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

#### [45CSR§30-5.1.c and 40 C.F.R. §64.7(d)]

6.2.8. **Documentation of need for improved monitoring (CAM).** After approval of monitoring under this part, if the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the part 70 or 71 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[45CSR§30-5.1.c and 40 C.F.R. §64.7(e)]

6.2.9. **Quality improvement plan (QIP) requirements.** Based on the results of a determination made under Condition 6.2.7(2) (§64.7(d)(2)), the Administrator or the permitting authority may require the owner or operator to develop and implement a QIP. Consistent with §64.6(c)(3), the part 70 or 71 permit may specify an appropriate threshold, such as an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a reporting period, for requiring the implementation of a QIP. The threshold may be set at a higher or lower percent or may rely on other criteria for purposes of indicating whether a pollutant-specific emissions unit is being maintained and operated in a manner consistent with good air pollution control practices.

[45CSR§30-5.1.c and 40 C.F.R. §64.8(a)]

# **6.3.** Testing Requirements

6.3.1. The permittee shall demonstrate compliance with the emission limits set forth in Requirement 6.1.1 by conducting performance tests utilizing the methods listed below. The performance tests shall be conducted in accordance with the schedule specified in Condition 6.3.2.

Test Method	Pollutant
EPA Reference Method 5	PM
Modified EPA Reference Method 201 and	$PM_{10}, PM_{2.5}$
EPA Reference Method 202	

Test Method	Pollutant
EPA Reference Method 6	$\mathrm{SO}_2$
EPA Reference Method 7E	$NO_x$
EPA Reference Method 10	CO
EPA Reference Method 18, 25 or 25A	VOC

This compliance testing shall be conducted in accordance with corresponding U.S. EPA test method. The Director may require a different test method or approve an alternative method in light of any new technology advancements or special operating conditions that may occur.

[45CSR§30-5.1.c]

6.3.2. Stack testing per Requirement 6.3.1 shall be performed in accordance with 40 C.F.R. 60, Appendix A, once per permit term within the first 14 months of the Permit issuance. The permittee shall submit an emissions testing protocol for DAQ review within 180 days after issuance of the permit. Results from such testing shall be submitted to the Director within sixty (60) days from the date of completion of said testing. The test shall demonstrate that the ACC unit can operate at the maximum processing rate specified in Requirements 4.1.1 and 5.1.1 in compliance with the emissions limits set forth in Requirement 6.1.1. [45CSR§30-5.1.c]

#### **6.4.** Recordkeeping Requirements

6.4.1. Records shall be maintained on site reporting the results of each visible emission test (as per Requirement 6.2.3). A record of each visible emission check required above shall be maintained on site for a period of no less than five (5) years. Said record shall include, but not be limited to, the date, time, name of emission unit, the applicable visible emissions requirement, the results of the check, what action(s) if any, was/were taken, and the name of the observer.

[45CSR§30-5.1.c]

#### 6.4.2. General Recordkeeping Requirements for 40 C.F.R. Part 64 (CAM)

- a. The combustion chamber temperature records per Requirement 6.2.2 shall be recorded hourly.
- b. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 C.F.R. §64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 C.F.R. Part 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
- c. Instead of paper records, the permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

# [45CSR§30-5.1.c and 40 C.F.R. §64.9(b)]

6.4.3. To demonstrate compliance with Requirement 6.1.3 the permittee shall maintain a record of all odor complaints received. Such record shall contain an assessment of the validity of the complaints as well as any corrective actions taken.

[45CSR§30-5.1.c]

# **6.5.** Reporting Requirements

6.5.1. Reporting shall be initiated as noted in 6.2.3.

#### 6.5.2. General Reporting Requirements for 40 C.F.R. Part 64 (CAM)

- (1) On and after the date specified in 40 C.F.R. §64.7(a) by which the permittee must use monitoring that meets the requirements of 40 C.F.R. Part 64, the permittee shall submit monitoring reports to the Director in accordance with permit condition 3.5.6.
- (2) A report for monitoring under 40 C.F.R. Part 64 shall include, at a minimum, the information required under permit condition 3.5.8 and the following information, as applicable:
  - i. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
  - ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
  - iii A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. §64.8. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 C.F.R. §64.9(a) and 45CSR§30-5.1.c]

#### **6.6.** Compliance Plan

6.6.1. None.

7.0 Wood Pile Management [Emission Unit ID 001-01, 001-02, and 001-03], Material Handling and Transfer Operations [Emission Unit ID 002-01 through 002-11], and Paved Roads [Emission Unit ID 004-01] Requirements [Emission Point S-07]

#### 7.1. Limitations and Standards

- 7.1.1. The control devices and procedures, specified in the Emission Units Table 1.1 for Emission Point S-07, shall be maintained and operated to control and minimize any fugitive escape of pollutants including but not limited to: enclosures, wet scrubber, chemical dust suppressants. Good operating practices shall be implemented and when necessary dust suppressants shall be applied in relation to stockpiling and general material handling to prevent dust generation and atmospheric entrainment. [45CSR§30-12.7 and 45CSR§7-5.2]
- 7.1.2. The permittee shall inspect all fugitive dust control systems, specified in the Emission Units Table 1.1 for Emission Point S-07, weekly to ensure that they are operated and maintained in conformance with their designs.

[45CSR§30-5.1.c]

# 7.2. Monitoring Requirements

7.2.1. Visual emission checks of the units listed in the Emission Units Table 1.1 for Emission Point S-07 emitting directly into the open air from points other than a stack outlet (including visible fugitive dust emissions that leave the plant site boundaries), shall be conducted during periods of facility operation for a minimum of 6 minutes to determine if the unit has visible emissions using procedures outlined in 40 C.F.R. 60, Appendix A, Method 22. If sources of visible emissions are identified during the survey, or at any other time, permittee shall conduct an evaluation as outlined in 45CSR§7A-2.1.a, b within a 24 hour period unless the permittee can demonstrate a valid reason that the time frame should be extended. A 45CSR§7A-2.1.a, b evaluation shall not be required if the visible emission condition is corrected in a timely manner and the units are operated at normal operating conditions. Weekly Method 22 checks shall be conducted for a minimum of 4 consecutive weeks. If no visible emissions are observed, then monthly Method 22 checks shall be conducted. Anytime when visible emissions are observed, then monitoring shall revert back to the weekly frequency requirement and begin the progressive monitoring cycle again.

[45CSR§30-5.1.c]

#### 7.3. Testing Requirements

7.3.1. None.

#### 7.4. Recordkeeping Requirements

- 7.4.1. The permittee shall maintain records indicating the use of any dust suppressants or any other suitable dust control measures applied at the facility (wood piles, transfer points, paved and unpaved roads). [45CSR\$30-5.1.c]
- 7.4.2. The permittee shall maintain records of the results of weekly inspections of the systems to minimize fugitive emissions per Requirement 7.1.2. Records shall state the times the systems were inoperable, what corrective actions were taken as a result of the weekly inspections and all scheduled and unscheduled maintenance procedures. [45CSR§30-5.1.c]

7.4.3. A record of each visible emission check per Requirement 7.2.1 shall be maintained. Said records shall include, but not be limited to, the date, time, name of emission unit, the applicable visible emission requirement, the results of the check, what action(s), if any, was/were taken, and the name of the observer. [45CSR§30-5.1.c]

# 7.5. Reporting Requirements

7.5.1. None.

# 7.6. Compliance Plan

7.6.1. None.

# 8.0 Emergency Generator Requirements [Emission Point S-07, Emission Unit ID 006-01]

#### 8.1. Limitations and Standards

8.1.1. The emergency generator is subject to General Permit Registration G60-C047 and General Permit G60-C.

Emission Unit	Pollutant	Maximum Hourly Emissions (lb/hr)	(1)Maximum Annual Emissions (tpy)
Natural Gas Fired Emergency Generator General Motors Industrial Powertrain, Vortec 8.1 L, 4-Cycle, Turbocharged and Charge Cooled (238 HP; 177.5 kW)	THC + NOx	0.06	0.01
	Carbon Monoxide (CO)	0.16	0.01

<sup>(1)</sup> Based on operating the engine 100 hours per year.

#### [45CSR13, General Permit Registration G60-C047 and G60-C, 5.1.2]

8.1.2. Pursuant to 40 CFR 63 Subpart ZZZZ National Emission Standards for Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines, the facility is subject to the following provision given below:

#### § 63.6590 What parts of my plant does this subpart cover?

- (c) Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets the criteria in paragraph (c)(1) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.
  - (1) a new or reconstructed stationary RICE located at an area source;

#### [40 C.F.R. 63 Subpart ZZZZ, §63.6590(c)]

8.1.3. Pursuant to 40 CFR 60 Subpart JJJJ, *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines*, the facility is subject to the following limitations and standards given below:

# § 60.4233 What emission standards must I meet if I am an owner or operator of a stationary SI internal combustion engine?

(e) Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to 40 C.F.R. 60 Subpart JJJJ for their stationary SI ICE.

[45CSR16; 40 C.F.R. 60 Subpart JJJJ, §60.4233(e); 45CSR13, General Permit Registration G60-C047 and G60-C, 8.2.5]

Table 1 to Subpart JJJJ of Part 60

	Maximum		Emission standards <sup>a</sup>					
Engine type	engine	Manufacture	g/HP-hr			ppmvd at 15% O <sub>2</sub>		
and fuel	power	date	NOx	CO	VOC <sup>d</sup>	NOx	CO	VOC <sup>d</sup>
Emergency	HP≥130	1/1/2009	2.0	4.0	1.0	160	540	86

<sup>&</sup>lt;sup>a</sup> Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O<sub>2</sub>.

#### [45CSR16; 40 C.F.R. 60 Subpart JJJJ, Table 1]

<sup>&</sup>lt;sup>d</sup> For purposes of this subpart, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

(h) Owners and operators of stationary SI ICE that are required to meet standards that reference 40 CFR 1048.101 must, if testing their engines in use, meet the standards in that section applicable to field testing, except as indicated in paragraph (e) of §60.4233.

[45CSR16; 40C.F.R.60 Subpart JJJJ, §60.4233(h); 45CSR13, General Permit Registration G60-C047 and G60-C, 8.2.8]

§ 60.4234 How long must I meet the emission standards if I am an owner or operator of a stationary SI internal combustion engine?

Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in §60.4233 over the entire life of the engine.

[45CSR16; 40 C.F.R. 60 Subpart JJJJ, §60.4234; 45CSR13, General Permit Registration G60-C047 and G60-C, 8.2.9]

§ 60.4236 What is the deadline for importing or installing stationary SI ICE produced in the previous model year?

(c) For emergency stationary SI ICE with a maximum engine power of greater than 19 KW (25 HP), owners and operators may not install engines that do not meet the applicable requirements in §60.4233 after January 1, 2011.

[45CSR16; 40 C.F.R. 60 Subpart JJJJ, §60.4236(c); 45CSR13, General Permit Registration G60-C047 and G60-C, 8.3.4]

#### 8.2. Monitoring Requirements

- 8.2.1. If the emergency stationary SI internal combustion engine that is greater than or equal to 130 HP and less than 500 HP that was built on or after January 1, 2011, does not meet the standards applicable to non-emergency engines, the owner or operator must install a non-resettable hour meter.

  [45CSR16, 40 CFR §60.4237(b); 45CSR13, General Permit Registration G60-C047 and G60-C, 8.3.8]
- 8.2.2. If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in 40 CFR §60.4233(e) (section 8.1.3), you must demonstrate compliance according to the method specified in paragraph 1 below.
  - 1. Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to the method specified in 40 CFR §63.4243(a)(1).

If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if you are an owner or operator. You must also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply to you. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance.

[45CSR16, 40 CFR §\$60.4243(b)(1) and (a)(1); 45CSR13, General Permit Registration G60-C047 and G60-C, 8.4.1.a and 8.4.2.a]

8.2.3. If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs 8.2.3.1 through 8.2.3.3 below. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described

below, is prohibited. If you do not operate the engine according to the requirements in paragraphs 8.2.3.1 through 8.2.3.3 below, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

- 1. There is no time limit on the use of emergency stationary ICE in emergency situations.
- 2. You may operate your emergency stationary ICE for the purpose specified in paragraph 8.2.3.2(i) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by section 8.2.3.3 counts as part of the 100 hours per calendar year allowed by this paragraph 8.2.3.2.
  - i. Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
- 3. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in section 8.2.3.2. Except as provided in paragraph 8.2.3.3.(i) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
  - i. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
    - A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
    - B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
    - C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
    - D. The power is provided only to the facility itself or to support the local transmission and distribution system.
    - E. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

#### [45CSR16, 40 CFR §60.4243(d); 45CSR13, General Permit Registration G60-C047 and G60-C, 8.4.4]

8.2.4. Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep

records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of 40 CFR §60.4233 (section 8.1.3).

[45CSR16, 40 CFR §60.4243(e); 45CSR13, General Permit Registration G60-C047 and G60-C, 8.4.5]

8.2.5. If you are an owner or operator of a stationary SI internal combustion engine that is less than or equal to 500 HP and you purchase a non-certified engine or you do not operate and maintain your certified stationary SI internal combustion engine and control device according to the manufacturer's written emission-related instructions, you are required to perform initial performance testing as indicated in this section, but you are not required to conduct subsequent performance testing unless the stationary engine is rebuilt or undergoes rebuild, major repair or maintenance. Engine rebuilding means to overhaul an engine or to otherwise perform extensive service on the engine (or on a portion of the engine or engine system). For the purpose of this paragraph 8.2.5, perform extensive service means to disassemble the engine (or portion of the engine or engine system), inspect and/or replace many of the parts, and reassemble the engine (or portion of the engine or engine system) in such a manner that significantly increases the service life of the resultant engine.

[45CSR16, 40 CFR §60.4243(f); 45CSR13, General Permit Registration G60-C047 and G60-C, 8.4.6]

8.2.6. It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.

[45CSR16, 40 CFR §60.4243(g); 45CSR13, General Permit Registration G60-C047 and G60-C, 8.4.7]

- 8.2.7. Requirements for Use of Catalytic Reduction Devices
  - a. Rich-burn natural gas compressor engines equipped with non-selective catalytic reduction (NSCR) air pollution control devices shall be fitted with a closed-loop, automatic air/fuel ratio controller to ensure emissions of regulated pollutants do not exceed the potential to emit for any engine/NSCR combination under varying load. The closed-loop, automatic air/fuel ratio controller shall control a fuel metering valve to deliver additional fuel when required to ensure a fuel-rich mixture and a resultant exhaust oxygen content of less than or equal to 0.5%. The automatic air/fuel ratio controller shall also incorporate dual-point exhaust gas temperature and oxygen sensors which provide temperature and exhaust oxygen content differential feedback. Such controls shall ensure proper and efficient operation of the engine and NSCR air pollution control device;
  - b. The automatic air/fuel ratio controller or closed-loop automatic feedback controller shall provide a warning or indication to the operator and/or be interlocked with the engine ignition system to cease engine operation in case of a masking, poisoning or overrich air/fuel ratio situation which results in performance degradation or failure of the catalyst element; and
  - c. No person shall knowingly:
    - 1. Remove or render inoperative any air pollution or auxiliary air pollution control device installed subject to the requirements of General Permit G35-A;
    - 2. Install any part or component when the principal effect of the part or component is to bypass, defeat or render inoperative any air pollution control device or auxiliary air pollution control device installed subject to the requirements of General Permit G35-A; or
    - 3. Cause or allow engine exhaust gases to bypass any catalytic reduction device.

[45CSR13, General Permit Registration G60-C047 and G60-C, 5.1.4.a, c, and d]

#### 8.2.8. Catalytic Oxidizer Control Devices

- a. The registrant shall regularly inspect, properly maintain and/or replace catalytic reduction devices and auxiliary air pollution control devices to ensure functional and effective operation of the engine's physical and operational design. The registrant shall ensure proper operation, maintenance and performance of catalytic reduction devices and auxiliary air pollution control devices by:
  - Maintaining proper operation of the automatic air/fuel ratio controller or automatic feedback controller.
  - 2. Following operating and maintenance recommendations of the catalyst element manufacturer.

#### [45CSR13, General Permit Registration G60-C047 and G60-C, 5.2.1]

# **8.3.** Testing Requirements

8.3.1. The permittee shall comply with all applicable testing requirements as given under 40 CFR 60, Subpart JJJJ, §§60.4244(a) through (g).

[45CSR16; 40 C.F.R. §§60.4244(a) through (g); 45CSR13, General Permit Registration G60-C047 and G60-C, 8.5.1]

#### 8.4. Recordkeeping Requirements

8.4.1. Pursuant to 40 CFR 60 Subpart JJJJ, *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines*, the facility is subject to the following recordkeeping provisions given below:

§ 60.4245 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?

Owners or operators of stationary SI ICE must meet the following notification, reporting and recordkeeping requirements.

- (a) Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) of this section.
  - (1) All notifications submitted to comply with this subpart and all documentation supporting any notification.
  - (2) Maintenance conducted on the engine.
  - (3) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 1048, 1054, and 1060, as applicable.
  - (4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to \$60.4243(a)(2), documentation that the engine meets the emission standards.
- (b) For all stationary SI emergency ICE greater than or equal to 130 HP and less than 500 HP manufactured on or after July 1, 2011 that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency

operation, including what classified the operation as emergency and how many hours are spent for nonemergency operation.

# [45CSR16; 40 C.F.R. 60 Subpart JJJJ, §§60.4245(a), (b); 45CSR13, General Permit Registration G60-C047 and G60-C, 8.6.1.a, b]

8.4.2. The registrant shall maintain records of the amount and type of fuel consumed in each engine and the hours of operation of each engine. Said records shall be maintained on site or in a readily accessible off-site location maintained by the registrant for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13, General Permit Registration G60-C047 and G60-C, 5.4.1]

#### 8.5. Reporting Requirements

8.5.1. The permittee shall comply with all applicable reporting requirements as given under 40 CFR 60, Subpart JJJJ, §60.4245(d).

[45CSR16; 40 C.F.R. 60 Subpart JJJJ, §60.4245(d); 45CSR13, General Permit Registration G60-C047 and G60-C, 8.6.1.d]

- 8.5.2. If you own or operate an emergency stationary SI ICE with a maximum engine power more than 100 HP that operates for the purpose specified in section 8.2.3.3(i), you must submit an annual report according to the requirements in 40 CFR §60.4245(e).
  - 1. The report must contain the following information:
    - (i) Company name and address where the engine is located.
    - (ii) Date of the report and beginning and ending dates of the reporting period.
    - (iii) Engine site rating and model year.
    - (iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
    - (v)-(vi) [Reserved]
    - (vii) Hours spent for operation for the purposes specified in section 8.2.3.3(i) including the date, start time, and end time for engine operation for the purposes specified in section 8.2.3.3(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
  - 2. The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.
  - 3. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in § 60.4.

[45CSR16, 40 CFR §60.4245(e)]

# 8.6. Compliance Plan

8.6.1. None.