



07/24/2026

Marian Gammon
Cleveland-Cliffs Warren
2234 Main Ave SW
Warren, OH 44481

Facility ID: 0278000648
Permit Number: P0138917
County: Trumbull

RE: DRAFT AIR POLLUTION TITLE V PERMIT

Permit Type: Renewal

Dear Permit Holder:

A draft of the OAC Chapter 3745-77 Title V permit for the referenced facility has been issued. The purpose of this draft is to solicit public comments. A public notice will appear in the Ohio Environmental Protection Agency (EPA) Weekly Review and Public Notices website, [*Weekly Review and Public Notices*](#). A copy of the public notice, the Statement of Basis, and the draft permit are enclosed. This permit can be accessed electronically on the Ohio EPA document search website here: [*eDocument Search*](#). Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrea Moore
Permit Review/Development Section
Ohio EPA, DAPC
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43216-1049

and

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Rd.
Twinsburg, OH 44087

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published on the Ohio EPA Weekly Review and Public Notices website, [*Weekly Review and Public Notices / Ohio Environmental Protection Agency*](#). You will be notified if a public hearing is scheduled. A decision on processing the Title V permit will be made after consideration of comments received and oral testimony if a public hearing is conducted. You will then be provided with a Preliminary Proposed Title V permit and another opportunity to comment prior to the 45-day Proposed Title V permit submittal to U.S. EPA Region 5. The permit will be issued final after U.S. EPA review is completed and no objections to the final issuance have been received. If you have any questions, please contact Ohio EPA DAPC, Northeast District Office at (330)963-1200.

Sincerely,

Robert Hodanbosi
Chief, Division of Air Pollution Control

cc: U.S. EPA Region 5 - *Via E-Mail Notification*
Ohio EPA-NEDO; Pennsylvania; West Virginia

Public Notice

The following matters are the subject of this public notice by the Ohio Environmental Protection Agency. The complete public notice, including any additional instructions for submitting comments, requesting information, a public hearing, or filing an appeal may be obtained at: [*Weekly Review and Public Notices / Ohio Environmental Protection Agency*](#) or Hearing Clerk, Ohio EPA, 50 W. Town St., Columbus, Ohio 43215. Phone: 614-644-3037 Email: [*HClerk@epa.ohio.gov*](mailto:HClerk@epa.ohio.gov)

Draft Title V Permit Renewal

Cleveland-Cliffs Warren
2234 Main Ave SW

Warren, OH 44481

ID#: P0138917
Date of Action: 07/24/2026
Permit Desc: Renewal Title V operating permit for coke battery operations.

The permit and complete instructions for requesting information or submitting comments may be obtained at: <https://ohioepa.commentinput.com> - Search by entering the permit # P0138917 in the "Search Projects" search box.

Statement of Basis* For Air Pollution Title V Permit

*As defined in OAC rule 3745-77-01(MM): "Statement of basis" or "SOB" means a statement that sets forth the legal and factual basis for the draft [Title V] permit conditions (including references to the applicable statutory or regulatory provisions)."

Completing this form is intended to satisfy those requirements.

Facility ID:	0278000648
Facility Name:	Cleveland-Cliffs Warren
Facility Description:	Coke plant
Facility Address:	2234 Main Ave SW Warren, OH 44481
Permit #:	P0138917

This facility is subject to Title V because it is major for:

- ☐ Lead ☒ Sulfur Dioxide ☐ Carbon Monoxide ☐ Volatile Organic Compounds ☒ Nitrogen Oxides
- ☒ Particulate Matter $\leq$ 10 microns ☒ Single Hazardous Air Pollutant ☒ Combined Hazardous Air Pollutants ☐ GHG

And/or subject to:

- ☐ Maximum Available Control Technology Standard(s) ☐ GACT standard(s) that requires a Title V permit ☐ Title IV ☐ Opt-In source

A. Permit Background

1. Has each insignificant emissions unit been reviewed to confirm it meets the definition in OAC rule 3745-77-01(V)?

Yes ☒ No ☐ Comments:

2. Discuss any **common control determinations** (this includes revisions to previous determinations), include justification, factors, and facts which led to the final decision.

Discussion: N/A

3. Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document resulting from a **renewal** per OAC rule 3745-77-08(E). This includes identifying conditions from previous permits that are not included in the new permit.

PTI No.: P0138244

Affected EUs: F013

Discussion of changes from the previous Title V: Added a coke screening station

4. Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document resulting from a **minor modification** per OAC rules 3745-77-08(C)(1) or (2)

PTI No.: N/A

Affected EUs: N/A

Minor Modification Description:

5. Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a **significant permit modification** per OAC rule 3745-77-08(C)(3)

PTI No.: N/A

Affected EUs: N/A

Significant Modification Description: N/A

6. Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a **reopening** per OAC rule 3745-77-08(D)

PTI No.: N/A

Affected EUs: N/A

Reopening for Cause for Description: N/A

7. Please identify the affected emissions unit(s) and pollutant(s) for which a **Compliance Assurance Monitoring (CAM)** Plan is required per 40 CFR 64. Provide more emissions unit specific detail in Section C.

Affected EUs: **None.**

8. Please identify any federal **Consent Decree (CD)** that resulted in the addition of Title V T&Cs – include the CD Number, the CD Public Notice date (if known) and Ohio EPA Permit Number (if applicable, along with final permit issuance date) that incorporates the CD requirements.

CD No. N/A	Public Notice Date:	PTI No.	PTI Issuance Date:
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9. Please identify any **complex or unusual rule applicability determination** that is not readily apparent in the permit T&Cs and warrants additional explanation in the Statement of Basis. If the discussion is included in a PTI Permit Strategy Write Up cite the Permit Number and copy/paste or summarize the determination here.

PTI No.	Discussion:
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10. Please identify any **streamlining determinations** within the permit. Include an identification of the subsumed limit(s) and an explanation of how the resulting limit is equivalent to or more stringent than those subsumed. If the discussion exists in a PTI Permit Strategy Write Up, cite the Permit Number and summarize the determination here. This would also be noted for specific emissions units identified in C.

PTI No. None	Discussion: None
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11. Please identify any current **enforcement actions** to address violations at the facility resulting in a compliance plan and schedule.

Director's Final Findings and Orders; AGO Consent Decree; or U.S. EPA Consent Decree Date:	List the Order/Injunctive Relief number from the associated enforcement document and provide a description: None.
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B. Facility-Wide Terms and Conditions

Term and Condition (paragraph)	Basis		Comments
	SIP (3745-)	Other	
B.1.			All the following facility-wide terms and conditions are federally enforceable with the exception of B.11 below which are enforceable under state law only.
B.2	25		This facility is subject to the applicable requirements specified in OAC Chapter 3745-25. In accordance with Ohio EPA Engineering Guide #49, the emission control action programs, as specified in OAC rule 3745-25-03, shall be developed and submitted within 60 days after receiving notification from the Ohio EPA.
B.3		40 CFR Part 63, Subpart A	Subject to 40 CFR Part 63, Subpart A, as set forth in Table 10 of Subpart DDDDD, Table 1 of Subpart CCCCC, and Table 8 of Subpart ZZZZ.

B.4		40 CFR Part 61 Subpart FF	The permittee shall repeat the determination of total annual benzene quantity from the facility whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 1 Mg/year or more.
B.5		40 CFR Part 63, Subpart L (coke oven)	B901 subject to the applicable emission limitation(s) and/or control measures, operational restrictions, monitoring and/or record keeping requirements specified in 40 CFR 63, Subpart L, in accordance with 40 CFR 63.300 through 63.313. The terms of this permit restate these requirements and are not intended to make these requirements more stringent or provide less flexibility than the existing federal requirements.
B.6.		40 CFR Part 61, Subpart L (benzene emissions)	P801, P802, T001, T002, T003, T004, T011, and T012 are subject to this subpart L
B.7.		40 CFR Part 61 Subpart V (equipment leaks)	P801 is subject to the applicable emission limitation(s) and/or control measures, operational restrictions, monitoring and/or record keeping requirements specified in 40 CFR 61, Subpart V, in accordance with 40 CFR 61.240 through 61.247. The terms of this permit restate these requirements and are not intended to make these requirements more stringent or provide less flexibility than the existing federal requirements.
B.8.		40 CFR Part 63, Subpart CCCCC	B901 and P001 are subject to the applicable emission limitation(s) and/or control measures, operational restrictions, monitoring and/or recordkeeping requirements specified in 40 CFR 63, Subpart CCCCC, in accordance with 40 CFR 63.7280 through 63.7352. The terms of this permit restate these requirements and are not intended to make these requirements more stringent or provide less flexibility than the existing federal requirements.
B.9.		40 CFR Part 63, Subpart DDDDD	The emission units in the Industrial, Commercial, Institutional Boiler and Process Heater Source Category are B001 (Standby Boiler), B004 (Hot Oil Package Boiler), B006 (Clayton Boiler), B007 (Clayton Boiler), B010 (No. 1 Boiler), B011 (No. 2 Boiler), and B012 (No. 3 Boiler). Any of these boilers that combust at least 50 percent of the average annual heat input was derived from COG, or any other regulated gas stream, during any 3 consecutive calendar years are exempt from Subpart DDDDD pursuant to 40 CFR 63.7491(i).

			Emission units B002 (Chemico Landbase Water Heater) and B003 (Chemico Landbase Water Heater), which are part of the No. 4 Coke Oven Battery (B901) Chemico hot water scrubber pushing emission control system, are exempt from Subpart DDDDD pursuant to 40 CFR 63.7491(h), which exempts boilers and process heaters that are part of an affected source subject to another subpart of 40 CFR Part 63, such as boilers and process heaters used as control devices.
B.10		40 CFR Part 63, Subpart ZZZZ	The permittee is subject to the applicable emission limitation(s) and /or control measures, operating restrictions, monitoring and/or recordkeeping requirements specified in 40 CFR 63, Subpart ZZZZ, in accordance with 40 CFR 63.6580 through 63.6660. The terms of this permit restate these requirements and are not intended to make these requirements more stringent or provide less flexibility than the existing federal requirements.
B.11	14		Nitrogen Oxides (NOx) Budget Trading Program
B.12	17, 18, 21, 31	40 CFR Part 60 or 63	Insignificant EUs: F003, P026, P027, P028, P029, P030, P031, P042, P043, B017, B021 and P036

C. Emissions Unit Terms and Conditions

Key: EU = emissions unit ID ND = negative declaration (i.e., term that indicates that a particular rule(s) is (are) not applicable to a specific emissions unit) OR = operational restriction M = monitoring requirements ENF = did noncompliance issues drive the monitoring requirements?	R = record keeping requirements Rp = reporting requirements ET = emission testing requirements (not including compliance method terms) Misc = miscellaneous requirements
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Emissions Unit Table

EU(s)	Limitation	Basis	ND	OR	M	R	Rp	ET	ENF	Misc	Comments
Section C.1: B001, Standby Boiler											
B001	VE: 20% opacity as a six-minute avg.	17-07(A)(1)	N	Y	Y	Y	Y	N	N	N	OR - Only natural gas and/or coke oven gas are permitted to be burned in the emissions unit.
B001	PE:0.020 lb/MMBtu	17-10(B)(1)	N	Y	Y	Y	Y	N	N	N	OR - Only natural gas and/or coke oven gas are permitted to be burned in the emissions unit.
B001	PE: 8.8 tpy	17-10 (B)(1)	N	Y	Y	Y	Y	N	N	N	OR - Only natural gas and/or coke oven gas are permitted to be burned in the emissions unit.
B001	SO2: 0.18	31-05(A)(3)	N	Y	Y	Y	Y	N	N	N	OR - Only natural gas and/or coke oven gas are permitted to be burned in the emissions unit.

	lb/MMBtu and 78.8 tpy	PTI: 02- 17383									
	NOx: 0.15 lb/MMBtu and 65.8 tpy										
	CO: 0.083 lb/MMBtu and 36.0 tpy										
	VOC: 0.0054 lb/MMBtu and 2.4 tpy										

Section C.2: B010, 492 MMBtu/hr No. 1 Boiler

B010	PE: 0.10 lb/MMBtu when burning coal or when co- firing coal with any gaseous fuels	17-10(C)(1)	N	Y	Y	Y	Y	Y	N	N	OR - The permittee shall burn only natural gas, coal, blast furnace gas, and coke oven gas in this emissions unit.
B010	SO2: 3.9 lb/MMBtu	18-84(J)	N	Y	Y	Y	Y	Y	N	N	OR - The coal burned in this emissions unit shall have a sulfur content, on a dry basis, that is sufficient to comply with the allowable sulfur dioxide emission limitation of 3.9 pounds sulfur dioxide/mmBtu actual heat input. M - Monitoring and record keeping for the sulfur content is not required for coke oven gas because the sulfur dioxide emission rate from the burning of undesulfurized coke oven gas is less than the allowable sulfur dioxide emission rate in b)(1)d of these terms and conditions. M - Monitoring and record keeping for the sulfur content is not required for blast furnace gas because the sulfur dioxide emission rate from the burning of blast furnace gas is less than the allowable sulfur dioxide emission rate in b)(1)d of these terms and conditions.

Section C.3: B011, 387 MMBtu/hr No. 2 Boiler											
B011	SO ₂ : 1.6 lbs/MMBtu	18-84/(J)	N	Y	Y	Y	Y	Y	N	N	OR - The quality of the oil burned in this emissions unit shall meet a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.6 pounds per million Btu of actual heat input.
B011	PE: 0.13 lb/MMBtu when burning No. 6 fuel oil or any mixture of No. 6 fuel oil and other gaseous fuels.	17-10(C)	N	N	Y	Y	Y	Y	N	N	OR - The permittee shall burn only natural gas, blast furnace gas, coke oven gas, and number 6 fuel oil in this emissions unit.
Section C.4: B012, 469 MMBtu/hr No. 3 Boiler											
B012	PE: 0.030 lb/MMBtu when burning blast furnace gas or any mixture of blast furnace gas and other gaseous fuels.	31-05(A)(3) PTI 02-486	N	N	Y	Y	Y	Y	N	N	
B012	SO ₂ : 0.20 lb/MMBtu NO _x : 0.20 lb/MMBtu of actual heat input	31-05(A)(3) PTI 02-486; 40 CFR 52.21 PSD permit #5-79- A-8	N	Y	Y	Y	Y	Y	N	N	OR - The permittee shall burn in this emissions unit only natural gas, blast furnace gas, and coke oven gas with a concentration of H ₂ S less than 35 grains per 100 dry standard cubic feet (as an average for each rolling, 3-hour period), unless the permittee demonstrates through calculations that during periods when coke oven gas containing greater than 35 grains per 100 dry standard

											cubic feet is burned, the sulfur dioxide emission rate is less than 0.20 lb/MMBtu actual heat input
B012	VE: VE: 20% opacity as a six-minute avg., except for one-minute period per hour of not more than 27% opacity.	40 CFR Part 60, Subpart D	N	N	Y	Y	Y	Y	N	N	
Section C.2: B010, 492 MMBtu/hr No. 1 Boiler , Section C.3: B011, 387 MMBtu/hr No. 2 Boiler, and Section C.4: B012, 469 MMBtu/hr No. 3 Boiler											
B010, B011, B012	PE: 0.020 lb/MMBtu	17-10(B)(1)	N	Y	Y	Y	Y	Y	N	N	OR - The permittee shall burn only natural gas, blast furnace gas, coke oven gas, and number 6 fuel oil in this emissions unit.
Section C.3: B011, 387 MMBtu/hr No. 2 Boiler, and Section C.4: B012, 469 MMBtu/hr No. 3 Boiler											
B010, B011	VE: 20% as a 6-minute avg.	17-07(A)	N	Y	Y	Y	Y	Y	N	N	OR - The permittee shall burn only natural gas, coke oven gas, and number 6 fuel oil in this emissions unit.

Section C.1: B001, Standby Boiler,
Section C.2: B010, 492 MMBtu/hr No. 1 Boiler ,
Section C.3: B011, 387 MMBtu/hr No. 2 Boiler,
Section C.4: B012, 469 MMBtu/hr No. 3 Boiler,
Section C.19: Emissions Unit Group -Boilers: B004, B006, B007,
Section C.20: Emission Unit Group - M1, M2 Boilers: B019 and B020 and
Section C.21: Emissions Unit Group -Boilers: B002, B003.

B001, B004, B006, B007, B010, B011, B012, B019, B020	See comments section	40 CFR Part 63, Subpart DDDDD	Y	N	Y	Y	Y	N	N	N	If any of these boilers combust COG at least 50 percent of the average annual heat input or any other regulated gas stream, during any 3 consecutive calendar years they are exempt from Subpart DDDDD pursuant to 40 CFR 63.7491(i).
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Section C.5: B901, No. 4 Coke Oven battery

B901	VE: ≤12 sec/ charge over 5 consecutive charges	40 CFR, Part 63, Subpart L [40 CFR, Part 63.302(a)(3)(v)] *40 CFR, Part 63, Subpart L [40 CFR, Part 63.302(a)(4)(v)]	N	Y	Y	Y	Y	Y	N	N	OR - The permittee shall operate according to the work practice plan for controlling visible emissions from charging operations following the second independent exceedance of the visible emission limitation within six months for charging operations. *12/5/2024 Final rule, pursuant to the presidential proclamation 10993 of November 21, 2025: these emissions limitations and related reporting requirements are exempt from compliance for a period of 2 years beyond the regulatory deadline of July 7, 2025.)
B901	VE: no VE From more than 2.5 % of offtake systems	40 CFR, Part 63, Subpart L [40 CFR, Part 63.304(b)(2)(iii)] *40 CFR, Part 63, Subpart L [40 CFR, Part 63.304(a)(4)(iv)]	N	Y	Y	Y	Y	Y	N	N	OR - The permittee shall operate according to the work practice plan for controlling visible emissions from offtake systems following the second independent exceedance of the visible emission limitation within six months for offtake systems. *12/5/2024 Final rule, pursuant to the presidential proclamation 10993 of November 21, 2025: these emissions limitations and related reporting

											requirements are exempt from compliance for a period of 2 years beyond the regulatory deadline of July 7, 2025.)
B901	VE: no VE from more than 0.4 % of topside Lids	40 CFR, Part 63, Subpart L [40 CFR, Part 63.304(b)(2)(ii)] *40 CFR, Part 63, Subpart L [40 CFR, Part 63.304(a)(4)(iii)]	N	Y	Y	Y	Y	Y	N	N	OR - The permittee shall operate according to the work practice plan for controlling visible emissions from topside lids following the second independent exceedance of the visible emission limitation within six months for topside lids. *12/5/2024 Final rule, pursuant to the presidential proclamation 10993 of November 21, 2025: these emissions limitations and related reporting requirements are exempt from compliance for a period of 2 years beyond the regulatory deadline of July 7, 2025.)
B901	VE: no VE from more than 3.3 % of coke oven doors	40 CFR, Part 63, Subpart L [40 CFR, Part 63.304(b)(3)(ii)] *40 CFR, Part 63, Subpart L [40 CFR, Part 63.304(a)(4)(ii)]	N	Y	Y	Y	Y	Y	N	N	OR - The permittee shall operate according to the work practice plan for controlling visible emissions from coke oven doors following the second independent exceedance of the visible emission limitation within six months for coke oven doors. *12/5/2024 Final rule, pursuant to the presidential proclamation 10993 of November 21, 2025: these emissions limitations and related reporting requirements are exempt from compliance for a period of 2 years beyond the regulatory deadline of July 7, 2025.)
B901	PE: 0.03 lb/ton of coke pushed for >90 % of total emissions during pushing	31-05	N	Y	Y	Y	Y	Y	N	N	OR - The Chemico car hot water scrubber system shall be continuously maintained at a minimum water pressure of 200 psi and a minimum water temperature of 250 degrees Fahrenheit prior to the start of the pushing operation.
B901	VE: 20% opacity from battery top during pushing	17-07 (B) (2)(e)	N	Y	Y	Y	Y	N	N	N	OR - The Chemico car hot water scrubber system shall be continuously maintained at a minimum water pressure of 200 psi and a minimum water temperature of 250 degrees Fahrenheit prior to the start of the pushing operation.

											ET – No emission testing, demonstrates compliance through M, R & Rp.
B901	VE: no VE from bleeder flare Except for < 5 minutes during 2 consecutive hours	40 CFR, Part 63, Subpart L (40 CFR, Part 63.307)	N	Y	Y	Y	Y	Y	N	N	OR - The flare shall be able to control 120 % of the normal gas flow generated by the battery. The flare shall be steam-assisted and shall be designed for a net heating value of 240 Btu/scf. The flare shall be operated with a continuously operable pilot flame monitored by a thermocouple. The coke oven emissions shall not be vented to the atmosphere through the bypass bleeder stack, except through the flare.
B901	0.03 gr/dscf from the combustion stack	31-05	N	N	Y	Y	Y	Y	N	N	
B901	See Comments Section	31-05	N	N	Y	Y	Y	Y	N	N	The concentration of sulfur compounds, measured as hydrogen sulfide, in the coke oven gas combusted during coke oven firing shall be less than 35 grains per 100 dscf of coke oven gas produced.
B901	VE: 20% opacity as a six-minute avg. (opacity from the combustion stack – for extended coking) VE: 15% opacity as a six-minute avg. (opacity from the combustion stack – for normal coking)	40 CFR, Part 63, Subpart CCCCC (40 CFR, Part 63.7296 63.307)	N	N	Y	Y	Y	Y	N	N	ET – Use of a COM.
B901	During pushing operations:	*40 CFR, Part 63, Subpart CCCCC (40 CFR, Part 63.7290(b)-(e))	N	Y	Y	Y	Y	Y	N	N	*12/5/2024 Final rule, pursuant to the presidential proclamation 10993 of November 21, 2025: these emissions limitations and related reporting

	PM: 0.04 lb/ton coke from mobile scrubber exhaust Hg: 8.9E-7 lb/ton from mobile scrubber exhaust Total acid gases: 0.013 lb/ton from mobile scrubber exhaust HC: 0.0015 lb/ton from mobile scrubber exhaust PAH: 4.0E-4 lb/ton from mobile scrubber exhaust										requirements are exempt from compliance for a period of 2 years beyond the regulatory deadline of January 5, 2026.
B901	From battery's combustion stack: PM: 0.13 gr/dscf at 10% O ₂ Hg: 4.5E-5 lb/ton	40 CFR, Part 63, Subpart CCCCC (40 CFR, Part 63.7296(c)-(f))	N	Y	Y	Y	Y	Y	N	N	*12/5/2024 Final rule, pursuant to the presidential proclamation 10993 of November 21, 2025: these emissions limitations and related reporting requirements are exempt from compliance for a period of 2 years beyond the regulatory deadline of January 5, 2026.

	Total acid gases: 0.16 lb/ton HC: 0.032 lb/ton PAH: 4.0E-4 lb/ton										
B901	VE: 20% opacity as a six-minute avg. (opacity from the combustion stack)	17-07 (A)	N	N	Y	Y	Y	N	N	N	ET - No emission testing, demonstrates compliance through M, R & Rp.
B901	See Comments section	17-08 (B)	N	N	Y	Y	Y	N	N	N	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.
Section C.6: F001, Coal handling and processing											
F001	VE: 20% opacity as a three-minute avg. from coke handling and processing	17-07 (B)(1)	N	N	Y	Y	Y	N	N	N	ET - No emission testing, demonstrates compliance through M, R & Rp.
F001	See Comments section	17-08 (B)	N	N	Y	Y	Y	N	N	N	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.
Section C.7: F002, Paved and unpaved roadways											
F002	VE: 10% opacity from	17-07 (B)(8)	N	N	Y	Y	Y	N	N	N	ET - No emission testing, demonstrates compliance through M, R & Rp.

	roadways and parking areas										
F002	See Comments section	17-07(B), (B)(2), (B)(8), (B)(9)	N	N	Y	Y	Y	N	N	N	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.
Section C.8: F004, Portable Paved Roadways and Parking Areas											
F004	< 10 tpy	31-05(A)(3)(ii)	N	N	N	N	N	N	N	N	No BAT
F004	VE: 10% opacity from roadways and parking areas	17-07(B)(8)	N	N	Y	Y	Y	N	N	N	ET - No emission testing, demonstrates compliance through M, R & Rp.
F004	See Comments section	17-07(B), (B)(8), (B)(9)	N	N	Y	Y	Y	N	N	N	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. ET - No emission testing, demonstrates compliance through M, R & Rp.
Section C.9: F005, Portable Stock Piles											
F005	< 10 tpy	31-05(A)(3)(ii)	N	N	N	N	N	N	N	N	No BAT
F005 Load-in Load-out	VE: 20% opacity as a three-minute avg.	17-07(B)(8)(b)	N	N	Y	Y	Y	N	N	N	ET - No emission testing, demonstrates compliance through M, R & Rp.

F005 Load-in Load-out	See Comments section	17-08(B)	N	N	Y	Y	Y	N	N	N	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.
F005 Pile working operation ns	VE: 10%, 12- observations.	17-07(B)(8)(c)	N	N	Y	Y	Y	N	N	N	ET - No emission testing, demonstrates compliance through M, R & Rp.
F005 Pile working operation ns	See Comments section	17-08(B)	N	N	Y	Y	Y	N	N	N	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.
F005 Pile wind erosion	VE: 20% opacity as a three-minute avg.	17-07(B)(8)(d)	N	N	Y	Y	Y	N	N	N	ET - No emission testing, demonstrates compliance through M, R & Rp.
F005 Pile wind erosion	See Comments section	17-08(B)	N	N	Y	Y	Y	N	N	N	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.
F005 Material handling	VE: 20% opacity as a three-minute avg.	17-07(B)(8)(b)	N	N	Y	Y	Y	N	N	N	ET - No emission testing, demonstrates compliance through M, R & Rp.
F005 Material handling	See Comments section	17-08(B), B(B)(6)	N	N	Y	Y	Y	N	N	N	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.
Section C.10: F011, Boiler Ash Handling											
F011	VE: 20% opacity as a three-minute avg.	17-07(B)(1)	N	N	Y	Y	Y	N	N	N	ET - No emission testing, demonstrates compliance through M, R & Rp.

F011	See Comments section	17-08(B)	N	N	Y	Y	Y	N	N	N	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.
Section C.11: F013, Coke screening station											
F013	PM10/PM2.5 - BAT does not apply < 10 tpy	31-05(A)(3)(a)(ii)	N	N	N	N	N	N	N	N	
F013	See Comments section	17-08(B)	N	N	Y	Y	Y	N	N	N	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.
F013	VE: 20% opacity as a three-minute avg.	17-07(B)(1)	N	N	Y	Y	Y	N	N	N	ET - No emission testing, demonstrates compliance through M, R & Rp.
Section C.12: P001, No. 4 Coke oven battery quenching station											
P001	See Comments section	40 CFR, Part 63, Subpart L (40 CFR, Part 63.7295)	N	Y	Y	Y	Y	Y	N	N	OR - Wet testing: TDS ≤ 1,100 mg/L, acceptable make-up H2O, ne more than 5% cross sectional area of baffles open to sky, baffles washed daily, monthly inspections
P001	See Comments Section	31-05	N	N	N	N	N	N	N	N	Less stringent than the requirements in 40 CFR, Part 63, Subpart L (40 CFR, Part 63.7295)
P001	PE: 51.3 lbs/hr	17-11	N	Y	Y	Y	Y	N	N	N	OR - The total dissolved solids in the quench water applied to the coke shall not exceed 1,100 mg/L. ET - No emission testing, demonstrates compliance through M, R & Rp.
P001	VE: 20% opacity as a six-minute avg. of	17-07 (A)	N	Y	Y	Y	Y	N	N	N	OR - The permittee shall employ and maintain a baffle system within the quench tower which shall provide coverage of not less than 95 percent of the

	quench tower.										interior cross-sectional area of the tower. The total dissolved solids in the quench water applied to the coke shall not exceed 1100 mg/L.
Section C.13: P002, Desulfurization Plant											
P002	See Comments section	31-05(A)(3)	N	Y	Y	Y	Y	Y	N	N	The concentration of sulfur compounds, measured as hydrogen sulfide, in the coke oven gas combusted in this emissions unit shall be less than 35 grains per 100 dscf of coke oven gas produced. ET - CEM OR - Avg. temperature of tail gas thermal incinerator outlet shall not be less than 1,000 F, when in operation. OR - The permittee shall vent all excess desulfurized coke oven gas to the excess coke oven gas flare
P002	See Comments section	17-11	N	N	N	N	N	N	N	N	The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
P002	VE: 20% opacity as a six-minute avg. from gas flare.	17-07 (A)	N	N	Y	Y	Y	N	N	N	ET - No emission testing, demonstrates compliance through M, R & Rp.
Section C.14: P801, Light Oil Recovery System											
P801	VOC: No detectable fugitive VOC emissions	40 CFR Part 61, Subpart L	N	Y	Y	Y	Y	Y	N	N	OR - Requirements for enclosing and sealing openings; positive pressure, gas blanketing control system; and pressure relief device. ET - leak detection monitoring
P801	See Comments section	40 CFR Part 61, Subpart V	N	Y	Y	Y	Y	Y	N	N	OR - Requirements for enclosing and sealing openings; positive pressure, gas blanketing control system; pressure relief device; recovery system for

											sampling connection system; open ended valve equipment; repair of equipment leak; and control systems. ET - leak detection monitoring
P801	See Comments section	21-09 (DD)	N	Y	Y	Y	Y	N	N	N	OR - Requirements for a leak detection and repair program for the light oil recovery system in benzene service. ET - leak detection monitoring
Section C.15: B802, Tar Recovery System											
P802	VOC: no detectable fugitive VOC emissions	40 CFR Part 61, Subpart L	N	N	Y	Y	Y	Y	N	N	OR - Requirements for enclosing and sealing openings; positive pressure, gas blanketing control system; and pressure relief device. ET - leak detection monitoring
Section C.16: P901, Coke handling											
P901	VE: 20 % opacity	17-07 (B)(8)(b)	N	N	Y	Y	Y	N	N	N	ET - No emission testing, demonstrates compliance through M, R & Rp.
P901	See Comments section	17-08 (B)	N	N	Y	Y	Y	N	N	N	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.
Section C.17: T001, Tar Tank T-1/ Back-up ammonia liquor tank											
T001	VOC: 4.2 TPY	31-05	N	N	Y	Y	Y	N	N	N	Requirements for enclosing and sealing openings; positive pressure, gas blanketing control system; and pressure relief device.

Section C.17: T001, Tar Tank T-1/ Back-up ammonia liquor tank Section C.21: Section C.24: Emissions Unit Group -Tar Tanks: T002, T003 and T004 Section C.22: T011, T0NH3-1 Wastewater Treatment Tank (300,000 gallon) and T012, T0NH3-2 Wastewater Treatment Tank (300,000 gallon)											
T001, T002, T003, T004, T011, T012.	VOC: no detectable fugitive VOC emissions	40 CFR Part 61, Subpart L	N	N	Y	Y	Y	Y	N	N	Requirements for enclosing and sealing openings; positive pressure, gas blanketing control system; and pressure relief device. ET - leak detection monitoring
Section C.18: Emissions Unit Group -Boilers: B004, B006, B007											
B004	PE: 0.20 lb/hr when fired with natural gas;	31-05(A)(3) PTI: 02-20787 17-10 (B)(1)	N	N	Y	Y	Y	N	N	N	OR - Only natural gas and/or coke oven gas are permitted to be burned in the emissions unit.
B004	PE: 0.20 lb/hr when fired with natural gas; 0.12 lb/hr when fired with COG; 0.020 lb/ lb/MMBtu of actual heat input; and 0.88 tpy CO: 0.82 lb/hr when fired with natural gas;	31-05(A)(3) PTI: 02-20787	N	Y	Y	Y	Y	N	N	N	OR - Only natural gas and/or coke oven gas are permitted to be burned in the emissions unit.



Permit Number: P0138917
Cleveland-Cliffs Warren
Facility ID: 0278000648
Statement of Basis

[illegible]

B006, B007	PE: 0.020 lb/MMBtu	17-10(B)(1)	N	N	Y	Y	Y	N	N	N	OR - The permittee shall burn only natural gas and/or coke oven gas in this emissions unit.
B006, B007	VE: 20% opacity as a six-minute avg.	17-07(A)(1)	N	N	Y	Y	Y	N	N	N	

Section C.19: Emissions Unit Group -Boilers (M1, M2): B019, B020

B019, B020	Source design characteristic : NO _x emissions shall not exceed 0.08 lb/MMBtu of actual heat input. CO emissions shall not exceed 0.08 lb/MMBtu of actual heat input. Monthly allowable: For each boiler SO ₂ emissions shall be less than 6.33 tons per month averaged over a 12-	31-05(A)(3) PTI: P0134387	N	N	Y	Y	Y	N	N	N	OR - The permittee shall burn only natural gas and/or coke oven gas in this emissions unit.
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Statement of Basis

Section C.20: Emissions Unit Group -Boilers: B002, B003

B002, B003	PE:0.020 lb/MMBtu	17-10 (B)(1)	N	Y	Y	Y	Y	N	N	N	OR - Only natural gas and/or coke oven gas are permitted to be burned in the emissions unit.
B002, B003	VE: 20 % opacity as a six-minute avg.	17-07 (A)(1)	N	Y	Y	Y	Y	N	N	N	OR - Only natural gas and/or coke oven gas are permitted to be burned in the emissions unit.
B002, B003	See comment	31-05(A)(3) PTI: 02-171									PTI requirements are equivalent to OAC rule 3745-17-10(B)(1) and OAC rule 3745-17-07(A).



**Environmental
Protection
Agency**

DRAFT

**Division of Air Pollution Control
Title V Permit
for
Cleveland-Cliffs Warren**

Facility ID:	0278000648
Permit Number:	P0138917
Permit Type:	Renewal
Issued:	07/24/2026
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance

Division of Air Pollution Control
Title V Permit
for
Cleveland-Cliffs Warren
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**Environmental
Protection
Agency**

Authorization

Facility ID:	0278000648
Facility Description:	Coke plant
Application Number(s):	A0080079
Permit Number:	P0138917
Permit Description:	Renewal Title V operating permit for coke battery operations.
Permit Type:	Renewal
Issue Date:	
Effective Date:	To be entered upon final issuance
Expiration Date:	To be entered upon final issuance
Superseded Permit Number:	P0137190

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

Cleveland-Cliffs Warren
2234 Main Ave SW
Warren, OH 44481

Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Rd.
Twinsburg, OH 44087
(330)963-1200

The above-named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Ohio EPA DAPC, Northeast District Office. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months and no later than 6 months prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

John Logue
Director

List of Commonly Used Abbreviations

AP-42 = U.S. EPA's Compilation of Air Pollution Emissions Factors	HVLP = high volume, low pressure	PER = Permit Evaluation Report
ASTM = American Society for Testing and Materials	LAER = lowest achievable emission rate	PM = particulate matter
BACT = Best Available Control Technology	lb(s)/hr = pound(s) per hour	PM ₁₀ = particulate matter with an aerodynamic diameter less than or equal to 10 microns
BAT = Best Available Technology	LDAR = leak detection and repair	PM _{2.5} = particulate matter with an aerodynamic diameter less than or equal to 2.5 microns
CAA = Clean Air Act	LPG = liquefied petroleum gas/propane	ppb = parts per billion
CAM = compliance assurance monitoring	MACT = maximum achievable control technology	ppm = parts per million
CEMS = continuous emissions monitoring system	MAGLC = maximum acceptable ground level concentration	PSD = Prevention of Significant Deterioration
CFC = chlorofluorocarbon	mg/m ³ = milligrams per cubic meter	psi = pounds per square inch
CFR = Code of Federal Regulations	MM = million	psia = pounds per square inch absolute
CH ₄ = methane	MMBtu = million British Thermal Units	PTE = potential-to-emit
CI = compression ignition	MSDS = material safety data sheet	PTI = Permit-to-Install
CO = carbon monoxide	MSW = municipal solid waste	PTIO = Permit-to-Install and Operate
CO ₂ = carbon dioxide	NAAQS = National Ambient Air Quality Standard	PTO = Permit-to-Operate
COM = continuous opacity monitor	NESHAP = National Emission Standard for Hazardous Air Pollutants	PWR = process weight rate
DAPC = Division of Air Pollution Control	NG = natural gas	RACM = reasonably available control measures
DO/LAA = District Office/Local Air Agency	ng/m ³ = nanograms per cubic meter	RACT = reasonably available control technology
dscf = dry standard cubic foot	NH ₃ = ammonia	RATA = relative accuracy test audit
EAC = emissions activity category	NMHC = non-methane hydrocarbons	RTO = regenerative thermal oxidizer
eDocs = electronic documents database	NMOC = non-methane organic compound	SB265 = Senate Bill 265
ERAC = Environmental Review Appeals Commission	NO = nitrogen oxide	scfm = standard cubic feet per minute
ESP = electrostatic precipitator	NO ₂ = nitrogen dioxide	SI = spark ignition
EU = emissions unit	NO _x = nitrogen oxides	SIP = State Implementation Plan
FEPTIO = Federally Enforceable Permit-to-Install and Operate	NSPS = New Source Performance Standard	SO ₂ = sulfur dioxide
FER = Fee Emissions Report	NSR = New Source Review	SSMP = startup, shutdown, and malfunction plan
FR = Federal Register	NTV = Non-Title V	TDS = total dissolved solids
GACT = generally achievable control technology	O&M = operation and maintenance	TLV = threshold limit value
GHG = greenhouse gases	OAC = Ohio Administrative Code	TO = thermal oxidizer
gr/dscf = grains per dry standard cubic foot	OC = organic compound	TPH = ton(s) per hour
H ₂ S = hydrogen sulfide	Ohio EPA = Ohio Environmental Protection Agency	TPY = ton(s) per year
H ₂ SO ₄ = sulfuric acid	ORC = Ohio Revised Code	TSP = total suspended particulates
HAP = hazardous air pollutant	Pb = lead	VE = visible particulate emissions
HCl = hydrogen chloride	PBR = Permit-By-Rule	VMT = vehicle miles traveled
HF = hydrogen fluoride	PCB = polychlorinated biphenyl	VOC = volatile organic compound
Hg = mercury	PE = particulate emissions	WPP = work practice plan
hp = horsepower	PEMS = predictive emissions monitoring system	µg/m ³ = micrograms per cubic meter

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under state law only:
- (1) Standard Term and Condition A. 21., Air Pollution Nuisance
 - (2) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions
 - (3) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions
 - (4) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting for State-Only Requirements
 - (5) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
 - (6) Standard Term and Condition A. 30., Submitting Documents Required by this Permit

[Authority for term: ORC 3704.036(A)]

2. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
- (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) The operating conditions existing at the time of sampling or measurement.

[Authority for term: OAC rule 3745-77-07(A)(3)(b)(i)]

- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

[Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii)]

- c) The permittee shall submit required reports in the following manner:
- (1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be



submitted by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any submitted scheduled maintenance requests, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.

[[Authority for term: OAC rule 3745-77-07(A)(3)(c)]

- (2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be submitted promptly to the Ohio EPA DAPC, Northeast District Office. Except as provided below, the written reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.



If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this Standard Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.

[[Authority for term: OAC rule 3745-77-07(A)(3)(c)]]

- (3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.20, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted to the Ohio EPA DAPC, Northeast District Office by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.

[[Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b)]]

- (4) Each written report shall be signed by a Responsible Official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in

the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete." Signature by the Responsible Official may be represented by entry of the personal identification number (PIN) by the Responsible Official as part of the electronic submission process or by the scanned attestation document signed by the Responsible Official that is attached to the electronically submitted written report.

[Authority for term: OAC rule 3745-77-07(A)(3)(c)(v)]

- (5) Consistent with A.2.c.1. above, reports of any required monitoring and/or record keeping information required to be submitted to Ohio EPA shall be submitted to Ohio EPA DAPC, Northeast District Office unless otherwise specified.

[Authority for term: OAC rule 3745-77-07(A)(3)(c)]

3. Reporting of Any Exceedance of a Federally Enforceable Emission Limitation or Control Requirement Resulting from Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.

[Authority for term: OAC rule 3745-77-07(A)(3)(c)]

4. Risk Management Plans

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. ("Act"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

- a) A compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or
- b) As part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

[Authority for term: OAC rule 3745-77-07(A)(4)]

5. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

[Authority for term: OAC rule 3745-77-07(A)(5)]

6. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

[Authority for term: OAC rule 3745-77-07(A)(6)]

7. General Requirements

- a) Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b) It shall not be a defense for the 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 federally enforceable terms and conditions of this permit except as provided pursuant to A.16 below.
- c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.11 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.
- f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:
 - (1) The permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01 based on the permanent shutdown and removal of one or more emissions units identified in this permit; or
 - (2) The permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01 based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable; or
 - (3) A combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

[Authority for term: OAC rule 3745-77-01, OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77-07(A)(7)]

8. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

[Authority for term: OAC rule 3745-77-07(A)(8)]

9. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

[Authority for term: OAC rule 3745-77-07(A)(9)]

10. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these standard terms and conditions shall apply to all operating scenarios authorized in this permit.

[Authority for term: OAC rule 3745-77-07(A)(10)]

11. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a) Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen 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 paragraph (E)(1) of OAC rule 3745-77-08.
- b) This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit and shall not require a reopening of this permit.
- c) The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d) The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

[Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D)]

12. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the state, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under state law only.

[Authority for term: OAC rule 3745-77-07(B)]

13. Compliance Requirements

- a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

- (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c) The permittee shall submit progress reports to the Ohio EPA DAPC, Northeast District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the Ohio EPA DAPC, Northeast District Office) and the Administrator of the U.S. EPA in the following manner and with the following content:
- (1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
 - (2) Compliance certifications shall include the following:
 - a. Identification of each term or condition that is the basis of the certification. The identification may include a statement by the Responsible Official that every term and condition that is federally enforceable has been reviewed, and such terms and conditions with which there has been continuous compliance throughout the year are not separately identified.
 - b. The permittee's current compliance status.
 - c. Whether compliance was continuous or intermittent consistent with A.13.d)(2)a. above.
 - d. The method(s) used for determining the compliance status of the source currently and over the required reporting period consistent with A.13.d)(2)a. above.
 - e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
 - (3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

[Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L)]

14. Permit Shield

- a) Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b) This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

[Authority for term: OAC rule 3745-77-07(F)]

15. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [defined as "Title I modification" in OAC rule 3745-77-01], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the Ohio EPA DAPC, Northeast District Office with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days' notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the Ohio EPA DAPC, Northeast District Office as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

[Authority for term: OAC rules 3745-77-07(H)(1) and (2)]

16. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

[Authority for term: OAC rule 3745-77-07(G)]

17. Off-Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as "insignificant activities and emissions levels" as defined in OAC rule 3745-77-01. Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.
- c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

- e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit-to-install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

[Authority for term: OAC rule 3745-77-07(I)]

18. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Federal Register 8314, Feb. 24, 1997), in the context of any future proceeding.

(This term is provided for informational purposes only.)

19. Insignificant Activities or Emissions Levels

Each IEU that is subject to one or more applicable requirements shall comply with those applicable requirements.

[Authority for term: OAC rule 3745-77-07(A)(1)]

20. Permit-to-Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit-to-install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

[Authority for term: OAC rule 3745-77-07(A)(1)]

21. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

[Authority for term: OAC rule 3745-77-07(A)(1)]

22. Permanent Shutdown of an Emissions Unit

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the Responsible Official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the Responsible Official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records

relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

Unless otherwise exempted, no emissions unit identified in this permit that has been certified by the Responsible Official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

[Authority for term: OAC rule 3745-77-01]

23. Title VI Provisions

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a) Persons operating appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.
- c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

[Authority for term: OAC rule 3745-77-01(H)(11)]

24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or record keeping information shall be submitted to the Ohio EPA DAPC, Northeast District Office.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Northeast District Office. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

25. Records Retention Requirements Under State Law Only

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

26. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable state air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

[Authority for term: OAC rule 3745-77-07(C)]

27. Scheduled Maintenance/Malfunction Reporting for State-Only Requirements

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the Ohio EPA DAPC, Northeast District Office in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

28. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Ohio EPA DAPC, Northeast District Office must be notified in writing of any transfer of this permit.

[Authority for term: OAC rule 3745-77-01(C)]

29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

- a) Where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or
- b) Where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potential to emit; or
- c) Where the company's Responsible Official has certified that an emissions unit has been permanently shut down.

30. Submitting Documents Required by this Permit

All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications,

notifications, or reports required to be submitted to Ohio EPA fulfill the requirement to submit the required information to the Director, the Ohio EPA DAPC, Northeast District Office, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the Responsible Official may be represented as provided through procedures established in Air Services.

B. Facility-Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

a) B.11.

2. This facility is subject to the applicable requirements specified in OAC Chapter 3745-25. In accordance with Ohio EPA Engineering Guide #49, the emission control action programs, as specified in OAC rule 3745-25-03, shall be developed and submitted within 60 days after receiving notification from the Ohio EPA.

[Authority for term: OAC Chapter 3745-25]

3. 40 CFR Part 63, Subpart A, General Provisions

The permittee is subject to the applicable requirements of 40 CFR Part 63, Subpart A (General Provisions), as set forth in Table 10 of Subpart DDDDD, Table 1 of Subpart CCCCC, and Table 8 of Subpart ZZZZ and incorporated by reference in Section C of this permit. The terms of this permit restate these requirements and are not intended to make these requirements more stringent or provide less flexibility than the existing federal requirements.

[Authority for term: 40 CFR Part 63, Subpart A]

4. National Emission Standard for Benzene Waste Operations [40 CFR Part 61, Subpart FF]

The permittee shall repeat the determination of total annual benzene quantity from the facility whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 1 Mg/year or more.

[Authority for term: 40 CFR Part 61, Subpart FF]

5. National Emission Standards for Coke Oven Batteries [40 CFR Part 63, Subpart L]

The permittee is subject to the applicable emission limitation(s) and/or control measures, operational restrictions, monitoring and/or record keeping requirements specified in 40 CFR 63, Subpart L, in accordance with 40 CFR 63.300 through 63.314. The terms of this permit restate these requirements and are not intended to make these requirements more stringent or provide less flexibility than the existing federal requirements. (After July 7, 2027, where the underlying NESHAP 40 CFR 63 Subpart L as codified in 40 CFR Part 63 version on the website of U.S. Government Publishing Office ("GPO") differ from the requirements below, the Permittee shall comply with the relevant Subpart requirements in the GPO version of 40 CFR Part 63. Note, U.S. EPA also granted reconsideration of some of the relevant Coke Ovens related regulatory change per a letter dated March 20, 2025.)

The following emission unit is subject to the aforementioned requirements: B901.

[Authority for term: 40 CFR Part 63, Subpart L]

6. National Emission Standards for Benzene Emissions from Coke By-Product Recovery Plants [40 CFR Part 61, Subpart L]

The permittee is subject to the applicable emission limitation(s) and/or control measures, operational restrictions, monitoring and/or record keeping requirements specified in 40 CFR Part 61, Subpart L, in accordance with 40 CFR 61.130 through 61.139. The terms of this permit restate these requirements and are not intended to make these requirements more stringent or provide less flexibility than the existing federal requirements.

The following emission units are subject to the aforementioned requirements: P801, P802, T001, T002, T003, T004, T011, and T012.

[Authority for term: 40 CFR Part 61, Subpart L]

7. National Emission Standard for Equipment Leaks (Fugitive Emission Sources) [40 CFR Part 61, Subpart V]

The permittee is subject to the applicable emission limitation(s) and/or control measures, operational restrictions, monitoring and/or record keeping requirements specified in 40 CFR Part 61, Subpart V, in accordance with 40 CFR 61.240 through 61.247. The terms of this permit restate these requirements and are not intended to make these requirements more stringent or provide less flexibility than the existing federal requirements.

The following emission unit is subject to the aforementioned requirements: P801.

[Authority for term: 40 CFR Part 61, Subpart V]

8. National Emission Standards for Air Pollutants from Coke Ovens: Pushing, Quenching, and Battery Stacks [40 CFR Part 63, Subpart CCCCC]

The permittee is subject to the applicable emission limitation(s) and/or control measures, operational restrictions, monitoring and/or record keeping requirements specified in 40 CFR 63, Subpart CCCCC, in accordance with 40 CFR 63.7280 through 63.7352. The terms of this permit restate these requirements and are not intended to make these requirements more stringent or provide less flexibility than the existing federal requirements. (After January 5, 2028, where the underlying NESHAP 40 CFR 63 Subpart CCCCC as codified in 40 CFR Part 63 version on the website of GPO differ from the requirements below, the Permittee shall comply with the relevant Subpart requirements in the GPO version of 40 CFR Part 63. EPA also granted reconsideration of some of the relevant Coke Ovens related regulatory change per a letter dated March 20, 2025.)

The following emission units are subject to the aforementioned requirements: B901 and P001.

[Authority for term: 40 CFR Part 63, Subpart CCCCC]

9. National Emission Standards for Industrial, Commercial and Institutional Boilers [40 CFR Part 63, Subpart DDDDD]

The permittee is subject to the applicable emission limitation(s) and/or control measures, operational restrictions, monitoring and/or record keeping requirements specified in 40 CFR 63, Subpart DDDDD, in accordance with 40 CFR 63.7480 through 63.7575. The terms of this permit restate these requirements and are not intended to make these requirements more stringent or provide less flexibility than the existing federal requirements.

The emission units in the Industrial, Commercial, Institutional Boiler and Process Heater Source Category are B001 (Standby Boiler), B004 (Hot Oil Package Boiler), B006 (Clayton Boiler), B007 (Clayton Boiler), B010 (No. 1 Boiler), B011 (No. 2 Boiler), B012 (No. 3 Boiler), B019, B020 and B021. Any of these boilers that combust at least 50 percent of the average annual heat input was derived from COG, or any other regulated gas stream, during any 3 consecutive calendar years are exempt from Subpart DDDDD pursuant to 40 CFR 63.7491(i).

Emission units B002 (Chemico Landbase Water Heater) and B003 (Chemico Landbase Water Heater), which are part of the No. 4 Coke Oven Battery (B901) Chemico hot water scrubber pushing emission control system, are exempt from Subpart DDDDD pursuant to 40 CFR 63.7491(h), which exempts boilers and process heaters that are part of an affected source subject to another subpart of 40 CFR Part 63, such as boilers and process heaters used as control devices.

[Authority for term: 40 CFR Part 63, Subpart DDDDD]

10. NESHAP for Stationary Reciprocating Internal Combustion Engines [40 CFR Part 63, Subpart ZZZZ]

The permittee is subject to the applicable emission limitation(s) and /or control measures, operating restrictions, monitoring and/or recordkeeping requirements specified in 40 CFR 63, Subpart ZZZZ, in accordance with 40 CFR 63.6580 through 63.6660. The terms of this permit restate these requirements and are not intended to make these requirements more stringent or provide less flexibility than the existing

federal requirements.

The following emission units are subject to the aforementioned requirements: P026, P027, P028, P029, P030 and P031.

[Authority for term: 40 CFR Part 63, Subpart ZZZZ]

11. NO_x Budget Program

OAC Chapter 3745-14

In restating the applicable requirements of this Chapter, it is not the Ohio EPA's intent to make these requirements, in any way, more stringent or less flexible than the rules.

- a) Facility Code - 54207
- b) The following regulated EUs are subject to the applicable requirements specified in OAC rule 3745-14: B010, B011 and B012.
- c) The EUs identified in B.11.b) above are NO_x budget units under OAC rule 3745-14-01(C)(1)(b).
[Authority for term: OAC rule 3745-14-01(C)(1)]
- d) The NO_x designated representative shall submit a complete Title V permit renewal application for the NO_x budget source covering the NO_x budget units at the source in accordance with paragraph (E) of OAC rule 3745-77-08.
[Authority for term: OAC rule 3745-14-03(B)(2)(a)]
- e) Except as provided below, the Director shall revise the NO_x budget terms and conditions in the Title V operating permit, as necessary, in accordance with OAC rule 3745-77-08. Each permit is deemed to incorporate automatically the definitions of terms under paragraph (B) of OAC rule 3745-14-01.
[Authority for term: OAC rules 3745-14-03(D)(2) and 3745-14-03(E)(1)]
- f) The owners and operators of the NO_x budget unit shall keep on site at the source each of the following documents for a period of five years from the date the document is created: (This period may be extended for cause, at any time prior to the end of five years, in writing by the Director or Administrator.)
 - (1) Documents demonstrating the designated representative's authority necessary to carry out his or her duties and responsibilities under the NO_x budget program on behalf of the owners and operators of the NO_x budget source and of each NO_x budget unit at the source and certifying that each such owner and operator shall be fully bound by the designated representative's representations, actions, inactions, or submissions and by any decision or order issued to the designated representative by the director, the Administrator, or a court regarding the source or unit, provided that the documents shall be retained on site at the source beyond such five-year period until such documents are superseded because of the selection of a new designated representative.
 - (2) All emission monitoring information, in accordance with OAC rule 3745-14-08.
 - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the NO_x budget program.
 - (4) Copies of all documents used to complete a permit application and any other submission under the NO_x budget program or to demonstrate compliance with the requirements of the NO_x budget program.

[Authority for term: OAC rule 3745-14-01(D)(4)(a)(i) through (iv)]

- g) The NO_x designated representative of the NO_x budget unit shall submit the reports and compliance certifications required under the NO_x budget program, including those under OAC rules 3745-14-04 and 3745-14-08, to the Director and Administrator.

[Authority for term: OAC rule 3745-14-01(D)(4)(b)]

- h) For each control period in which one or more NO_x budget units at a source are subject to the NO_x budget program, the designated representative of the source shall submit to the Director, by November 30 of that year, in a format prescribed by the Director, a compliance certification report for each unit at the source. The compliance certification report shall include all of the following:

- (1) Identification of each NO_x budget unit.

[Authority for term: OAC rules 3745-14-04(A)(1)]

- (2) Certification by the NO_x designated representative, based upon reasonable inquiry of those persons with the primary responsibility for operating the source and the NO_x budget units at the source in compliance with the NO_x budget program, whether each NO_x budget unit for which the compliance certification is submitted was operated during the calendar year covered by the report in compliance with the requirements of the NO_x budget program applicable to the unit, including all the following:

- a. For NO_x budget units subject to monitoring and reporting requirements provided in paragraphs (A) to (G) of rule 3745-14-08 of the Administrative Code:
 - i. Whether the monitoring plan that governs the unit has been maintained to reflect the actual operation and monitoring of the unit, and contains all information necessary to attribute NO_x emissions to the unit, in accordance with paragraphs (A) to (G) of OAC rule 3745-14-08.
 - ii. Whether all the NO_x emissions from the unit, or group of units (including the unit) using a common stack, were monitored or accounted for through the missing data procedures and reported in the quarterly monitoring reports, including whether conditional data were reported in the quarterly reports in accordance with OAC rule 3745-14-08, and if conditional data were reported, the permittee shall indicate whether the status of all conditional data has been resolved and all necessary quarterly report submissions have been made.
- b. For NO_x budget units with approved alternative monitoring and reporting requirements provided in paragraph (H) of rule 3745-14-08 of the Administrative Code, whether all the NO_x emissions from the unit, or a group of units (including the unit) using a common stack, were accounted for in accordance with paragraph (H) of rule 3745-14-08 of the Administrative Code and the terms and specifications specified in the applicable installation or operating permit issued in accordance with Chapter 3745-77 or Chapter 3745-31 of the Administrative Code.
- c. Whether the facts that form the basis for certification under OAC rule 3745-14-08 of each monitor at the unit or group of units (including the unit) using a common stack, or for using an excepted monitoring method or alternative monitoring method approved under OAC rule 3745-14-08, if any, have changed.
- d. If a change is required to be reported under B.11.h)(2)(c) above, specify the nature of the change, the reason for the change, when the change occurred, and how the unit's compliance status was determined subsequent to the change, including what method was used to determine emissions when a change mandated the need for monitor re-certification.

[Authority for term: OAC rule 3745-14-04(A)(2)]

- i) The emission measurements recorded and reported in accordance with OAC rule 3745-14-08 shall be used to determine compliance with the NO_x state program budget under paragraph (D)(1) of OAC rule 3745-14-01.

[Authority for term: OAC rule 3745-14-01(D)(3)(b)]

- j) U.S. EPA has approved Ohio's regulations for the NO_x Budget Program specified in OAC 3745-14 into the Ohio SIP on August 22, 2019, except for OAC 3745-14-08(H) - Alternative Monitoring Requirements. U.S. EPA approved OAC 3745-14-08(H) into Ohio's SIP on April 8, 2020. The Permittee shall follow Part 75 monitoring specified in paragraphs A through G of OAC 3745-14-08 and the terms and conditions contained in paragraph B.11.k) of this permit, except as noted in the subsequent sentence. Upon issuance of this Title V permit renewal, the permittee may follow OAC 3745-14-08(H) alternative monitoring terms in accordance with the terms and conditions contained in paragraph B.11.l) of this permit. If issuance of this Title V permit renewal permit occurs during the ozone season control period (May 1 through September 30), then the permittee shall follow the transition process below as outlined in the permittee's Title V application that addresses the Alternative NO_x Monitoring submitted March 2, 2020, pursuant to OAC 3745-14-08(H).

(1) Upon start of ozone season (May 1):

- a. implement the proposed Alternative Monitoring Requirements in B.11.l) below, including the NO_x Budget Program terms and conditions specified in Section C. of this permit for EU B010, B011, and B012; and
- b. continue to comply with the Part 75 monitoring and quarterly electronic data reporting (EDR) requirements specified in B.11.k) below. The quarterly EDRs shall include NO_x emissions from May 1 until discontinuation of the Part 75 monitoring requirements.

(2) Upon issuance of this Title V permit renewal during the ozone season, discontinue operation of the Part 75 monitoring equipment and continue compliance with the Alternative Monitoring Requirements in B.11.l) below, including the NO_x Budget Program terms and conditions specified in Section C. of this permit for EU B010, B011, and B012.

- a. The permittee shall include both the reported quarterly NO_x EDR tons above, and the NO_x tons for the balance of the ozone season, in the annual NO_x reporting requirement specified in B.11.l)(3)c. to satisfy the entire ozone season control period reporting requirement.

[Authority for term: OAC rule 3745-14-08(H)(3)]

- k) Part 75 monitoring and reporting.

(1) The owner or operator of a NO_x budget unit shall comply with the prohibitions under OAC rule 3745-14-08(A)(5).

[Authority for term: OAC rule 3745-14-08(A)(5)]

(2) The permittee, and to the extent applicable, the NO_x designated representative of the NO_x budget unit, shall comply with the applicable monitoring and reporting requirements as provided in paragraphs (A) to (G) of OAC rule 3745-14-08 and in 40 CFR Part 75, Subpart H. For purposes of complying with such requirements the definitions in OAC rule 3745-14-01(B) and in 40 CFR 72.2 shall apply, and the terms "affected unit," and "continuous emission monitoring

system" (or "CEMS") in 40 CFR Part 75 shall be replaced by the terms "NO_x budget unit," and "continuous emission monitoring system" (or "CEMS"), respectively, as defined in OAC rule 3745-14-01(B).

[Authority for term: OAC rule 3745-14-08(A)(1)]

- (3) The permittee shall operate and maintain equipment to continuously monitor and record NO_x emissions from these EUs in units of the applicable standards. Such continuous monitoring and recording equipment shall comply with the applicable requirements specified in 40 CFR Part 75. Each continuous monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software. This includes all systems required to monitor the NO_x emission rate, NO_x concentration, heat input rate, and stack flow rate, in accordance with the applicable requirements of 40 CFR Parts 75.71 and 75.72. The permittee shall comply with the applicable initial and re-certification procedures of 40 CFR Part 75. The permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous NO_x monitoring system has been certified in accordance with the applicable requirements of 40 CFR Part 75. The letter of certification shall be made available to the Director upon request. The permittee shall maintain records of the following data obtained by the continuous NO_x monitoring system: emissions of NO_x in lbs/hr, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments. Whenever the monitoring system fails to meet the applicable quality assurance or data validation requirements of 40 CFR Part 75, data shall be substituted using the applicable procedures in Subpart D, Appendix D, or Appendix E of 40 CFR Part 75.

[Authority for term: OAC rules 3745-14-01(D)(3)(a), 3745-14-01(D)(4)(a)(ii), 3745-14-08(A)(2)(a) through (A)(2)(d), 3745-14-08(B)(1), and 3745-14-08(C)(1)]

- (4) The permittee shall comply with the applicable monitoring plan requirements of 40 CFR Part 75.62, except that the monitoring plan is only required to include the applicable information required by 40 CFR Part 75, Subpart H.

[Authority for term: OAC rule 3745-14-08(E)(2)(b)]

- (5) The NO_x designated representative shall submit quarterly reports covering the period May 1 through September 30 of each year and including the applicable data described in 40 CFR 75.74(c)(6). The NO_x designated representative shall submit each quarterly report to the Administrator within thirty days following the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the applicable manner specified in 40 CFR Part 75, Subpart H and 40 CFR 75.64.

[Authority for term: OAC rules 3745-14-08(E)(4)(b) and 3745-14-08(E)(4)(c)]

- (6) The NO_x designated representative shall submit to the Administrator a compliance certification in support of each quarterly report based on a reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The compliance certification shall state that:
- The monitoring data submitted were recorded in accordance with the applicable requirements in paragraphs (A) to (G) of OAC rule 3745-14-08 and 40 CFR Part 75, including the quality assurance procedures and specifications.
 - For a unit with add-on NO_x emission controls and for all hours where data are substituted in accordance with the applicable requirements of 40 CFR Part 75.34(a)(1), the add-on emission control were operating within the range of parameters listed in the quality assurance program under the applicable

requirements of Appendix B of 40 CFR Part 75 and the substitute values do not systematically underestimate the NO_x emissions.

- c. For a unit that is reporting on a control period basis under paragraph (E)(4)(d)(ii) of this rule, the NO_x emission rate and NO_x concentration values substituted for missing data under 40 CFR Part 75, Subpart D are calculated using only values from a control period and do not systematically underestimate NO_x emissions.

[Authority for term: OAC rule 3745-14-08(E)(4)(d)(i, (ii) and (iii)]

- 7) The NO_x designated representative for a NO_x budget unit shall submit written notice of monitoring system certification and re-certification test dates to the Director and the Administrator in accordance with the applicable requirements of 40 CFR Part 75.61, except that if a unit is not subject to an acid rain emission limitation, notification is only required to be sent to the director. The NO_x authorized account representative shall submit a certification application to the Administrator, U.S. EPA, Region V Office, and the Director within forty-five days after completing all initial or re-certification tests required under paragraph (B) of OAC rule 3745-14-08, including the applicable information required under Subpart H of 40 CFR Part 75.

[Authority for term: OAC rules 3745-14-08(D) and 3745-14-08(E)(3)]

- 8) The permittee shall develop and maintain a written quality assurance/quality control plan for each continuous NO_x monitoring system designed to ensure continuous valid and representative readings of NO_x emissions in units of the applicable standard. The plan shall follow the applicable requirements of 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on-site and available for inspection during regular office hours.

[Authority for term: OAC rules 3745-14-08(A)(2)(c) and 3745-14-08(A)(2)(d)]

l) **Alternative Monitoring and Reporting to the NO_x Budget Program OAC 3745-14-08(H)**

- 1) The owners and operators (and to the extent applicable, the designated representative of the NO_x Budget Unit) may use the alternative monitoring and reporting requirements established in this permit in lieu of the requirements of B.11.k) above. Alternative monitoring and reporting requirements shall be based upon best available data for each NO_x budget unit and shall be sufficient to determine compliance with OAC Chapter 3745-14. Alternative monitoring and reporting shall include monitoring and reporting in accordance with 40 CFR Part 60 for EU B012 and shall include monitoring of heat input and fuel use for each control period and the approved emission factor for current operating conditions for EUs B010 and B011.

[Authority for term: OAC rules 3745-14-08(H)(1)]

- a. Each NO_x Budget Unit approved for monitoring and reporting under 40 CFR Part 60:
 - i. EU B012 (Boiler No. 3 at the Boiler House, burning primarily coke oven gas blended with NG).
- b. Each NO_x Budget Unit approved for monitoring and reporting using emission factors:
 - i. EU B010 (Boiler No. 1 at the Boiler House, burning primarily coke oven gas blended with NG): An emission factor will be entered upon receipt of Ohio EPA's approval of emission factor analysis from stack testing.
 - ii. EU B010 (Boiler No. 1 at Boiler House, burning primarily coal blended with coke oven gas and/or NG): 15 lbs NO_x/ton of coal (AP-42 emission factor, Table 1.1-3).

- iii. EU B011 (Boiler No. 2 at the Boiler House, burning primarily coke oven gas blended with NG): An emission factor will be entered upon receipt of Ohio EPA's approval of emission factor analysis from stack testing.
- iv. EU B011 (Boiler No. 2 at the Boiler House, burning primarily No. 6 oil blended with coke oven gas and/or NG): 47 lbs NO_x/1,000 gal (AP-42 emission factor, Chapter 1.3, Table 1.3-1, Fifth Edition).
- v. EU B010 and B011 will conduct stack testing within 90 days of permit issuance or resuming operation (during ozone season control period) whichever is later to determine approvable COG/NG emission factor for ozone season.
- vi. EU B010 will use the AP-42 emission factor and conduct stack testing within 90 days of resuming coal operation (during ozone season control period). The stack test shall be used to determine the appropriate emission factor to use for burning coal.
- vii. EU B011 will use the AP-42 emission factor and conduct stack testing within 90 days of resuming fuel oil operation (during ozone season control period). The stack test shall be used to determine the appropriate emission factor to use for burning fuel oil.

[Authority of term: OAC rules 3745-14-08(H)(1)]

- 2) The owners and operators (and to the extent applicable, the designated representative of the NO_x Budget Unit), shall comply with the monitoring, recordkeeping, and reporting requirements as provided in Section C of this permit for each NO_x Budget Unit during the ozone season control period (May 1 through September 30).

[Authority of term: OAC rules 3745-14-08(H)(5)]

- 3) The owners and operators (and to the extent applicable, the designated representative of a NO_x Budget Unit) approved for alternative monitoring and reporting shall meet all of the following:
 - a. Compliance with all terms and conditions specified in this permit.
 - b. Installation of all monitoring systems required for alternative monitoring.
 - c. Recordkeeping and reporting of data from the monitoring systems required under OAC rule 3745-14-08(H) in accordance with this permit:
 - i. By April 15th of each year: Report actual NO_x emissions in tons, as determined using the approved alternative monitoring procedures, for the previous control period in the Fee Emissions Report required in accordance with rule 3745-78-02 of the Administrative Code.
 - d. Conduct stacks to demonstrate the approved emission factor continues to be representative of current operating conditions:
 - i. Ongoing stack tests shall be conducted, during the ozone season control period, at least once every five years from the date of the previous stack test for NO_x Budget Units still in operation.
 - ii. If a NO_x Budget unit was not in operation or if a fuel type was not being used at the time a stack test was required under this paragraph, then conduct a stack test, during the ozone season control period, within 90 days of unit resuming operations or use of the new fuel type, during the ozone season control period.

- iii. Stack testing shall be performed in accordance with the test method(s) specified in this permit and reported to the Director within 30 days of the test.
- iv. If a stack test indicates that an emission factor may require adjustment:
 - (a) The Director may require submission of a Title V permit modification application.
 - (b) The Designated Representative of the NO_x Budget Unit shall submit the Title V permit modification application within 60 days of notification by the Director.

[Authority of term: OAC rules 3745-14-08(H)(6)]

4) Prohibitions

- a. No owner or operator of a NO_x Budget Unit shall operate the unit so as to discharge, or allow to be discharged, NO_x emissions to the atmosphere without accounting for all such emissions in accordance with the applicable provisions of this permit.
- b. No owner or operator of a NO_x budget unit shall retire or permanently discontinue use of the alternative monitoring system, or any component of the alternative monitoring system, except under the following circumstances:
 - i. During the period that the unit is covered by an exemption under OAC rule 3745-14-01(C)(2) that is in effect.
 - ii. When discontinuing use of the alternative monitoring and reporting in accordance with B.11.l) and resuming compliance with B.11.k) using Part 75 monitoring. This may only occur outside of the ozone season control period.

[Authority of term: OAC rules 3745-14-08(H)(7)]

- 5) The alternative monitoring requirements in B.11.l) do not authorize exceptions or alternatives to any 40 CFR Part 75 monitoring requirements that might apply to a source under a different legal authority.

[Authority of term: OAC rules 3745-14-08(H)(7)]

- 12. The following insignificant EUs or PBR exempt EUs at this facility must comply with all applicable State and federal regulations, as well as any emissions limitations and/or control requirements contained within the identified PTI for the EU. The insignificant EUs listed below are subject to one or more applicable requirements contained in a PTI or in the SIP approved versions of OAC Chapters 3745-17, 3745-18, 3745-21, and 3745-31, and/or 40 CFR Part 60 or 63:

EU ID	Operations, Property and/or Equipment Description
F003	Coal and Coke Storage Piles
P026	470 HP Diesel-fired Emergency Generator for Nitrogen System (Z016, PBR12068)
P027	470 HP Diesel-fired Emergency Compressor at Boiler house (Z012, PBR12023)
P028	80 HP Diesel-fired Emergency Generator No. 1 at Substation 2812 (PBR12023)
P029	80 HP NG -Fired Emergency Generator at Boil house (PBR12071)
P030	Two power outputs (74 HP and 138 HP) Diesel-fired Emergency Generator for Coke/Coal Conveyor System (PBR12023)
P031	215 HP Diesel-fired Emergency Pump for Flushing Liquor (Z014, PBR12023)
P042	80 HP Diesel-fired Emergency Generator No. 2 at Substation 2812 (PBR12023)
P043	350 KW Emergency Diesel Generator (PBR21623)
B017	Hot Oil Package Boiler (Z010, exempt from 40 CFR 63, Subpart DDDDD per 40 CFR 63.7491(d))
B021	99.9 MMBtu/hr NG-fired Boiler (PBR21613)

Effective Date: To be entered upon final issuance

EU ID	Operations, Property and/or Equipment Description
P036	Parts Cleaning Stations (Z021)

C. Emissions Unit Terms and Conditions

1. B001, Standby Boiler

Operations, Property and/or Equipment Description:

99.9 MMBtu/hr boiler fired with coke oven gas (COG) and/or natural gas.

- a) The following EU terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

- b) Applicable Emissions Limitations and/or Control Requirements

- (1) The specific operation(s), property, and/or equipment that constitute each EU along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI No. P0128139)	SO ₂ emissions shall not exceed 0.18 lb/MMBtu of actual heat input on a daily average basis and 78.8 TPY. NO _x emissions shall not exceed 0.15 lb/MMBtu of actual heat input and 65.8 TPY. CO emissions shall not exceed 0.083 lb/MMBtu of actual heat input and 36.0 TPY. VOC emissions shall not exceed 0.0054 lb/MMBtu of actual heat input and 2.4 TPY. PM emissions shall not exceed 8.8 TPY. See b)(2)a. and c)(2). The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-10(B)(1), OAC rule 3745-17-07(A) and 40 CFR Part 60, Subpart Dc.
b.	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
c.	OAC rule 3745-17-10(B)(1)	PM emissions shall not exceed 0.020 lb/MMBtu of actual heat input.
d.	40 CFR Part 60, Subpart Dc	Fuel usage record keeping requirements. See d)(2).
e.	40 CFR Part 63, Subpart DDDDD	This boiler combusts only NG and coke oven gas (COG) and therefore is not subject to any emission limitations specified in Table 2 of Subpart DDDDD. See b)(2)a.

(2) Additional Terms and Conditions

- a. If this EU does not combust COG for at least 50 percent of the average annual heat input during any 3 consecutive calendar years as provided in 40 CFR 63.7491(i), the permittee shall follow the additional terms and conditions for this EU specified in 40 CFR Part 63, Subpart DDDDD, as follows:

40 CFR 63.7500 (a)(1); 40 CFR 63.7495; 40 CFR 63.7510(e); and 40 CFR Part 63, Subpart DDDDD, Table 3.	For each existing Gas 1 boiler other than limited use units, a one-time energy assessment must be performed by a qualified energy assessor no later than the compliance date identified in 40 CFR 63.7495. The requirements for the energy assessment are identified in 40 CFR 63.7575 and Table 3. [A one-time energy assessment has been completed on December 14, 2015.]
40 CFR 63.7500(a)(1), (b), (e); 40 CFR 63.7495; 40 CFR 63.7510(e); 40 CFR 63.7515(d), (g); 40 CFR 63.7540(a)(10), (13); and 40 CFR Part 63, Subpart DDDDD, Table 3.	For each existing Gas 1 boiler, an initial tune-up must be completed no later than the compliance date identified in 40 CFR 63.7495 unless the boiler is not in operation at that time, where a tune-up must be completed within 30 days after the re-start of the boiler. Following the initial compliance date, tune-ups must be conducted for each boiler within the applicable annual schedule as specified in 40 CFR 63.7500(a), (b), (e), 40 CFR 63.7540(a)(10), (13), and Table 3 to the subpart, unless alternative work practice standards are approved pursuant to 40 CFR 63.6(g). Each subsequent annual tune-up must occur no more than 13 months after the previous tune-up. If the boiler is not in operation at the time of its scheduled tune-up, the permittee is not required to perform the tune-up at that time but must complete the tune-up within 30 days after the re-start of the boiler.
40 CFR Part 63, Subpart DDDDD, Table 10	The applicability of the General Provisions in 40 CFR Part 63, Subpart A to boilers subject to Subpart DDDDD is identified in Table 10 to the subpart.

c) Operational Restrictions

- (1) The permittee shall burn only NG and/or coke oven gas in this EU.

[Authority for Term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3)]

- (2) The total heat input to this EU shall not exceed 99.9 MMBtu/hr as demonstrated by the record keeping requirements specified in d)(2).

[Authority for Term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 60, Subpart Dc]

- (3) If this EU does not combust COG for at least 50 percent of the average annual heat input during any 3 consecutive calendar years as provided in 40 CFR 63.7491(i), the permittee shall follow the operating requirements for this EU specified in 40 CFR Part 63, Subpart DDDDD, as follows:

40 CFR 63.7500(a)(3)	The boiler and associated air pollution control and monitoring equipment must be operated and maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions.
40 CFR 63.7540(a)(12)	Boilers in the Gas 1 subcategory may elect to install an oxygen trim system that maintains an optimum air-to-fuel ratio to reduce the frequency of required tune-ups to once every 5 years per 40 CFR 63.7540(a)(12).

[Authority for Term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart DDDDD]

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than NG or coke oven gas, the permittee shall maintain a record of the type and quantity of fuel burned in this EU.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall maintain records of the following information for this EU:

- the NG usage per month (cubic feet);
- the coke oven gas usage per month (cubic feet);
- the total heat input per month (MMBtu);
- the hours of operation per month; and
- the average hourly heat input for the month (c/d).

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 60 Subpart Dc]

- (3) The permittee shall maintain records of all data necessary to determine the daily average H₂S content of the coke oven gas obtained by the continuous total reduced sulfur emissions monitoring system required for the desulfurization plant (EU P002).

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall maintain the following information each day for this EU when firing coke oven gas and the daily average concentration of H₂S in coke oven gas from the continuous total reduced sulfur emissions monitoring system is greater than 35 grains per 100 dscf of coke oven gas produced.

- amount of NG fired, in cubic feet/day;
- amount of coke oven gas fired, in cubic feet/day;



- c. determine the SO₂ emissions rate, in lb SO₂/MMBtu, using the equation in f)(1)a.ii to calculate the SO₂ emissions rate when firing only coke oven gas; and
- d. determine the SO₂ emissions, in lb SO₂/MMBtu, using the equation in f)(1)a.iii to calculate the SO₂ emissions rate when firing a mixture of NG and coke oven gas.

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3)]

- (5) If this EU does not combust COG for at least 50 percent of the average annual heat input during any 3 consecutive calendar years as provided in 40 CFR 63.7491(i), the permittee shall follow the monitoring and/or record keeping requirements for this EU specified in 40 CFR Part 63, Subpart DDDDD, as follows:

40 CFR 63.7555(a), (g)-(h); 40 CFR 63.7560; and 40 CFR 63.10(b)(1).	The applicable records required by the NESHAP are identified in 40 CFR 63.7555(a), (g)-(h) and they must be kept for at least 5 years following the date of the record or report submitted. Records must be accessible from on-site for at least two years after the date of the record and may be located off-site for the remaining three years.
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[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart DDDDD]

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than NG and/or coke oven gas was burned in this EU. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify each period when the SO₂ emission rate exceeded 0.18 lb/MMBtu actual heat input and the SO₂ emission rate (lb/MMBtu) for each such day.

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3)]

- (3) The permittee shall submit deviation (excursion) reports that identify each period of time when the total heat input to the emission unit exceeds 99.9 MMBtu/hr. These reports shall be submitted within 30 days after the deviation occurs.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (4) If this EU does not combust COG for at least 50 percent of the average annual heat input during any 3 consecutive calendar years as provided in 40 CFR 63.7491(i), the permittee shall follow the reporting requirements for this EU specified in 40 CFR Part 63, Subpart DDDDD, as follows:

40 CFR 63.7495(d); 40 CFR 63.7530(e)-(g); and 40 CFR 63.7545.	The notification requirements identified in 40 CFR 63.7(b), (c), 40 CFR 63.8(e), (f)(4), (6), 40 CFR 63.9(b)-(h), (j), 40 CFR 63.7545, and 40 CFR 63.7530(e)-(g), as applicable, shall be submitted to the Ohio EPA, Northeast District Office no later than the date identified in 40 CFR 63.7545.
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40 CFR 63.7550(a)-(b); and 40 CFR Part 63, Subpart DDDDD, Table 9.	The owner/operator must submit each compliance report identified in Table 9 to the NESHAP that is applicable to the boiler, either annually or every 5 years according to the requirements identified in 40 CFR 63.7550(b). The first annual or 5-year compliance report must be postmarked or delivered no later than January 31. Each subsequent compliance report must be submitted in accordance with the same applicable schedule and cover the applicable 1- or 5-year periods from January 1 to December 31.
40 CFR 63.7550(c), (h)	The information identified in 40 CFR 63.7550(c)(1), (c)(5)(i)-(iv), (xiv) shall be submitted in accordance with 40 CFR 63.7550(h).

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart DDDDD]

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

SO₂ emissions shall not exceed 0.18 lb/MMBtu of actual heat input on a daily average basis.

Applicable Compliance Method:

- i. To determine the actual SO₂ emission rate from burning NG, the following equation shall be used:

$$E \text{ (lb/MMBtu)} = (0.6 \text{ lb/1,000,000 scf})(1 \text{ scf/1020 Btu}^{***})(1,000,000 \text{ Btu/1 MMBtu}) = 0.00059 \text{ lb/MMBtu}$$

where:

E = SO₂ emission rate from burning NG, in lb/MMBtu;

0.6 lb/1,000,000 scf = emission factor for SO₂ from burning NG from AP-42, Section 1.4, NG Combustion, Table 1.4-2, 7/98; and

1 scf/1020 Btu *** = the heat value of 1 scf of NG.

*** Or the most recent representative heating value during which compliance was demonstrated.

- ii. To determine the actual SO₂ emission rate from burning COG, the following equation shall be used:

$$E \text{ (lb/MMBtu)} = (\text{H}_2\text{S content})(1 \text{ lb/7000 grains})(64 \text{ SO}_2/34 \text{ H}_2\text{S})(1 \text{ scf/532 Btu}^{***})(1,000,000 \text{ Btu/1 MMBtu})$$

where:

E = SO₂ emission rate from burning COG, in lb/MMBtu;

H₂S content = grains of H₂S in 100 dscf of COG (gr H₂S/100 dscf) for coke oven gas obtained from monitoring data in d)(3) of these terms and conditions;

1 lb/7000 grains = conversion of grains to pounds;

64 SO₂/34 H₂S = the ratio of grams per mole of SO₂ to grams per mole of H₂S;

1 scf/532 Btu = the heat value of 1 scf of COG; and

1,000,000 Btu/1 MMBtu = conversion from Btu to MMBtu.

*** Or the most recent representative heating value during which compliance was demonstrated.

- iii. To determine the actual SO₂ emission rate from burning a mixture of NG and COG, the following equation shall be used:

$$E \text{ (lb/MMBtu)} = (A*B + C*D*F)/[(G*B + H*F)*I]$$

where:

E = SO₂ emission rate from burning a mixture of NG and COG, in lb/MMBtu;

A = 0.6 lb/1,000,000 scf (emission factor for SO₂ from burning NG from AP-42, Section 1.4, NG Combustion, Table 1.4-2, 7/98);

B = amount of NG fired, in cubic feet/day;

C = grains of H₂S in 100 dscf of COG (gr H₂S/100 dscf) for coke oven gas obtained from monitoring data in d)(3) of these terms and conditions;

D = (1 lb/7000 grains)*(64 SO₂/34 H₂S);

F = amount of coke oven gas fired, in cubic feet/day;

G = 1020 Btu/1 scf *** (the heat value of 1 scf of NG);

H = 532 Btu/1 scf *** (the heat value of 1 scf of COG); and

I = 1 MMBtu/1,000,000 Btu (conversion from Btu to MMBtu).

*** Or the most recent representative heating value during which compliance was demonstrated.

- iv. If required, the permittee shall demonstrate compliance with this emission rate while burning COG in accordance with 40 CFR Part 60, Appendix A, Methods 6 and 6C and the procedures in OAC rule 3745-18-04.

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3)]

- b. Emissions Limitation:

SO₂ emissions shall not exceed 78.8 TPY.

Applicable Compliance Method:

Compliance with the annual emission limitation is shown as long as compliance with the short term emission limitation is maintained [the annual emission limitation was calculated by multiplying the short term emission limitation by the maximum



capacity of the EU (99.9 MMBtu/hr), multiplying that number by the maximum operating hours (8760 hrs/yr), and dividing by 2000 to convert to tons].

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3)]

c. Emissions Limitation:

NO_x emissions shall not exceed 0.15 lb/MMBtu of actual heat input.

Applicable Compliance Method:

i. To determine the actual NO_x emission rate from burning NG, the permittee shall use an emission factor of 0.0892 lb/MMBtu which was provided by the permittee based upon on-site emission testing. The provided emission factor is higher than the emission factor found in AP-42, Table 1.4-1, for NO_x.

ii. To determine the actual NO_x emission rate from burning COG, the following equation shall be used:

$$E \text{ (lb/MMBtu)} = (80 \text{ lbs/1,000,000 scf})(1 \text{ scf/532 Btu}^{***})(1,000,000 \text{ Btu/1 MMBtu}) = 0.15 \text{ lb/MMBtu}$$

where:

E = NO_x emission rate from burning COG, in lb/MMBtu;

80 lbs/1,000,000 scf = emission factor for NO_x from burning COG from FIRES 6.23, SCC #10200707, External Combustion Boilers, Industrial, Process Gas, Coke Oven Gas; and

1 scf/532 Btu*** = the heat value of 1 scf of coke oven gas.

*** Or the most recent representative heating value during which compliance was demonstrated.

iii. If required, the permittee shall demonstrate compliance with this emission rate while burning COG in accordance with 40 CFR Part 60, Appendix A, Method 7E.

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3)]

d. Emissions Limitation:

NO_x emissions shall not exceed 65.8 TPY.

Applicable Compliance Method:

Compliance with the annual emission limitation is shown as long as compliance with the short term emission limitation is maintained [the annual emission limitation was calculated by multiplying the short term emission limitation by the maximum capacity of the EU (99.9 MMBtu/hr), multiplying that number by the maximum operating hours (8760 hrs/yr), and dividing by 2000 to convert to tons].

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3)]

e. Emissions Limitation:

CO emissions shall not exceed 0.083 lb/MMBtu of actual heat input.

Applicable Compliance Method:

- i. To determine the actual CO emission rate from burning NG, the following equation shall be used:

$$E \text{ (lb/MMBtu)} = (84 \text{ lbs/1,000,000 scf})(1 \text{ scf/1020 Btu}^{***})(1,000,000 \text{ Btu/1 MMBtu}) = 0.082 \text{ lb/MMBtu}$$

where:

E = CO emission rate from burning NG, in lb/MMBtu;

84 lbs/1,000,000 scf = emission factor for CO from burning NG from AP-42, Section 1.4, NG Combustion, Table 1.4-1, 7/98; and

1 scf/1020 Btu^{***} = the heat value of 1 scf of NG.

*** Or the most recent representative heating value during which compliance was demonstrated.

- ii. To determine the actual CO emission rate from burning COG, the following equation shall be used:

$$E \text{ (lb/MMBtu)} = (18.4 \text{ lbs/1,000,000 scf})(1 \text{ scf/532 Btu}^{***})(1,000,000 \text{ Btu/1 MMBtu}) = 0.035 \text{ lb/MMBtu}$$

where:

E = CO emission rate from burning COG, in lb/MMBtu;

18.4 lbs/1,000,000 scf = emission factor for CO from burning coke oven gas from FIRES 6.23, SCC #10200707, External Combustion Boilers, Industrial, Process Gas, Coke Oven Gas; and

1 scf/532 Btu^{***} = the heat value of 1 scf of COG.

*** Or the most recent representative heating value during which compliance was demonstrated.

- iii. If required, the permittee shall demonstrate compliance with this emission rate while burning NG in accordance with 40 CFR Part 60, Appendix A, Methods 10, 10A, and 10B.

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3)]

- f. Emissions Limitation:

CO emissions shall not exceed 36.0 TPY.

Applicable Compliance Method:

Compliance with the annual emission limitation is shown as long as compliance with the short term emission limitation is maintained [the annual emission limitation was calculated by multiplying the short term emission limitation by the maximum capacity of the EU (99.9 MMBtu/hr), multiplying that number by the maximum operating hours (8760 hrs/yr), and dividing by 2000 to convert to tons].

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3)]

- g. Emissions Limitation:

VOC emissions shall not exceed 0.0054 lb/MMBtu of actual heat input.

Applicable Compliance Method:

- i. To determine the actual VOC emission rate from burning NG, the following equation shall be used:

$$E \text{ (lb/MMBtu)} = (5.5 \text{ lbs/1,000,000 scf})(1 \text{ scf/1020 Btu}^{***})(1,000,000 \text{ Btu/1 MMBtu}) = 0.0054 \text{ lb/MMBtu}$$

where:

E = VOC emission rate from burning NG, in lb/MMBtu;

5.5 lbs/1,000,000 scf = emission factor for VOC from burning NG from AP-42, Section 1.4, NG Combustion, Table 1.4-2, 7/98; and

1 scf/1020 Btu^{***} = the heat value of 1 scf of NG.

*** Or the most recent representative heating value during which compliance was demonstrated.

- ii. To determine the actual VOC emission rate from burning COG, the following equation shall be used:

$$E \text{ (lb/MMBtu)} = (2.8 \text{ lbs/1,000,000 scf})(1 \text{ scf/532 Btu}^{***})(1,000,000 \text{ Btu/1 MMBtu}) = 0.0053 \text{ lb/MMBtu}$$

where:

E = VOC emission rate from burning COG, in lb/MMBtu;

2.8 lbs/1,000,000 scf = emission factor for VOC from burning COG from FIRES 6.23, SCC #10200707, External Combustion Boilers, Industrial, Process Gas, Coke Oven Gas; and

1 scf/532 Btu^{***} = the heat value of 1 scf of COG.

*** Or the most recent representative heating value during which compliance was demonstrated.

- iii. If required, the permittee shall demonstrate compliance with this emission rate while burning NG in accordance with 40 CFR Part 60, Appendix A, Methods 18, 25, or 25A.

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3)]

- h. Emissions Limitation:

VOC emissions shall not exceed 2.4 TPY.

Applicable Compliance Method:

Compliance with the annual emission limitation is shown as long as compliance with the short term emission limitation is maintained [the annual emission limitation was calculated by multiplying the short term emission limitation by the maximum capacity of the EU (99.9 MMBtu/hr), multiplying that number by the maximum operating hours (8760 hrs/yr), and dividing by 2000 to convert to tons].

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3)]

- i. Emission Limitation:

PM emissions shall not exceed 0.020 lb/MMBtu of actual heat input.

Applicable Compliance Method:

- i. To determine the actual PM emission rate from burning NG, the following equation shall be used:

$$E \text{ (lb/MMBtu)} = (1.9 \text{ lbs/1,000,000 scf})(1 \text{ scf/1020 Btu}^{***})(1,000,000 \text{ Btu/1 MMBtu}) = 0.0019 \text{ lb/MMBtu}$$

where:

E = PM emission rate from burning NG, in lb/MMBtu;

1.9 lb/1,000,000 scf = emission factor for filterable particulate material from burning NG from AP-42, Section 1.4, NG Combustion, Table 1.4-2, 7/98; and

1 scf/1020 Btu^{***} = the heat value of 1 scf of NG.

*** Or the most recent representative heating value during which compliance was demonstrated.

- ii. To determine the actual PM emission rate from burning COG, the following equation shall be used:

$$E \text{ (lb/MMBtu)} = (6.2 \text{ lbs/1,000,000 scf})(1 \text{ scf/532 Btu}^{***})(1,000,000 \text{ Btu/1 MMBtu}) = 0.012 \text{ lb/MMBtu}$$

where:

E = PM emission rate from burning COG, in lb/MMBtu;

6.2 lbs/1,000,000 scf = emission factor from FIRES 6.23, SCC #10200707, External Combustion Boilers, Industrial, Process Gas, Coke Oven Gas; and

1 scf/532 Btu^{***} = the heat value of 1 scf of COG.

*** Or the most recent representative heating value during which compliance was demonstrated.

- iii. If required, compliance with this emission limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(9).

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-10(B)(1)]

- j. Emissions Limitation:

PM emissions shall not exceed 8.8 TPY.

Applicable Compliance Method:

Compliance with the annual emission limitation is shown as long as compliance with the short term emission limitation is maintained [the annual emission limitation was calculated by multiplying the short term emission limitation by the maximum capacity of the EU (99.9 MMBtu/hr), multiplying that number by the maximum operating hours (8760 hrs/yr), and dividing by 2000 to convert to tons].

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3)]

- k. Emissions Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible PE observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

[Authority for Term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), and OAC rule 3745-17-07(A).

g) Miscellaneous Requirements

(1) None.

2. B010, 492 MMBtu/hr No. 1 Boiler

Operations, Property and/or Equipment Description:

492 MMBtu/hr boiler fired with coal, coke oven gas (COG) and/or natural gas with a baghouse for controlling PE when burning coal. This boiler was acquired from BDM/RG Steel Warren on January 1, 2013. It was formerly known as RG Steel boiler (B001).

- a) The following EU terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

- b) Applicable Emissions Limitations and/or Control Requirements

- (1) The specific operation(s), property, and/or equipment that constitute each EU along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
b.	OAC rule 3745-17-10(B)(1)	PM emissions shall not exceed 0.020 lb/MMBtu of actual heat input when burning NG or coke oven gas.
c.	OAC rule 3745-17-10(C)(1)	PM emissions shall not exceed 0.10 lb/MMBtu of actual heat input when burning coal or when co-firing coal with any gaseous fuels. This limit was obtained from curve P-1 in Figure I of OAC rule 3745-17-10 using a total heat input of 879 MMBtu/hr, which is the combined total heat input from EUs B010 and B011.
d.	OAC rule 3745-18-84(J)	SO ₂ emissions shall not exceed 3.9 lbs/MMBtu actual heat input. See d)(5), d)(6) and d)(7).
e.	40 CFR Part 63, Subpart DDDDD NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters. [40 CFR Part 63, Subpart DDDDD does not apply to the extent this boiler acts as a control device to comply with 40 CFR Parts 60, 61, 63, or 65 and at least 50 percent of the average annual heat input was derived from COG, or any other regulated gas stream, during any 3	This boiler combusts only NG and coke oven gas (COG) and therefore is not subject to any emission limitations specified in Table 2 of Subpart DDDDD. See b)(2)a.



	consecutive calendar years per 40 CFR 63.7491(i)]	
f.	OAC rule 3745-14 NO _x Budget Program	See B.11 and d)(8), d)(9), e)(5) and f)(3).

(2) Additional Terms and Conditions

- a. If this EU does not combust COG for at least 50 percent of the average annual heat input during any 3 consecutive calendar years as provided in 40 CFR 63.7491(i), the permittee shall follow the additional terms and conditions for this EU specified in 40 CFR Part 63, Subpart DDDDD, as follows:

40 CFR 63.7500 (a)(1); 40 CFR 63.7495; 40 CFR 63.7510(e); and 40 CFR Part 63, Subpart DDDDD, Table 3.	For each existing Gas 1 boiler other than limited use units, a one-time energy assessment must be performed by a qualified energy assessor no later than the compliance date identified in 40 CFR 63.7495. The requirements for the energy assessment are identified in 40 CFR 63.7575 and Table 3.
40 CFR 63.7500(a)(1), (b), (e); 40 CFR 63.7495; 40 CFR 63.7510(e); 40 CFR 63.7515(d), (g); 40 CFR 63.7540(a)(10), (13); and 40 CFR Part 63, Subpart DDDDD, Table 3.	For each existing Gas 1 boiler, an initial tune-up must be completed no later than the compliance date identified in 40 CFR 63.7495 unless the boiler is not in operation at that time, where a tune-up must be completed within 30 days after the re-start of the boiler. Following the initial compliance date, tune-ups must be conducted for each boiler within the applicable annual schedule as specified in 40 CFR 63.7500(a), (b), (e), 40 CFR 63.7540(a)(10), (13), and Table 3 to the subpart, unless alternative work practice standards are approved pursuant to 40 CFR 63.6(g). Each subsequent annual tune-up must occur no more than 13 months after the previous tune-up. If the boiler is not in operation at the time of its scheduled tune-up, the permittee is not required to perform the tune-up at that time but must complete the tune-up within 30 days after the re-start of the boiler.
40 CFR Part 63, Subpart DDDDD, Table 2; 40 CFR 63.7500(a)(1); and 40 CFR 63.7495.	The emissions from the boiler shall not exceed the following emission limitations, as identified in the most recent amendment to 40 CFR Part 63, Subpart DDDDD, and as identified in:



	Table 2 for existing units: Hydrochloric acid (HCl) emissions shall not exceed 2.0E-02 lb/MMBtu of heat input. Mercury (Hg) emissions shall not exceed 5.4E-06 lb/MMBtu of heat input. Filterable PM shall not exceed 3.9E-02 lb/MMBtu of heat input or total selected metals (TSM) shall not exceed 5.3E-05 lb/MMBtu of heat input. CO by volume on a dry basis, corrected to 3% O₂, 3-run average, shall not exceed 130 ppm or if using CEMS*, CO by volume on a dry basis, corrected to 3% O₂, as a 30-day rolling average calculated from 1-hour daily averages, shall not exceed 320 ppm.
40 CFR 63.7525(c); 40 CFR Part 63, Subpart DDDDD, Tables 4 #3 and #6, 8 #1; and 40 CFR 63.7495.	Where not required to install PM CPMS* or where not using a bag leak detection system, COMS* must be used to demonstrate compliance with the opacity standard and VE shall not exceed 10% opacity as a daily block average.
40 CFR 63.7505(d); 40 CFR 63.7525(c); and 40 CFR 63.7495.	For each CMS (CEMS, COMS, CPMS)* used or required to demonstrate compliance with the NESHAP, the owner/operator must develop a site-specific monitoring plan that meets the requirements of 40 CFR 63.7505(d), and 40 CFR 63.7525(c). If requested, the site-specific monitoring plan must be submitted at least 60 days before the initial performance evaluation of the CMS.
40 CFR 63.7521(a), (b) and (g); and 40 CFR 63.7510(a)(2) and (b).	A site-specific fuel monitoring plan must be developed and submitted for each solid, liquid and "gas 2 (other) fuel" to be burned in the boiler, to include the information identified in this paragraph.
40 CFR 63.7500(a)(1) and (2); and 40 CFR 63.7495(g).	Each boiler must meet the applicable emission limits identified in Table 2; the work practice standard in Table 3; and the operating limits in Table 4 to



	the subpart by the compliance date identified in 40 CFR 63.7495(g).
40 CFR 63.7505(a) and (c); and 40 CFR Part 63, Subpart DDDDD, Table 3 #5 and #6.	Compliance with the emissions standards and operating limits of the NESHAP apply at all times, except during periods of startup and shutdown during which the requirements of Table 3 #5 and #6 apply. Compliance with the emissions limits is demonstrated through performance testing; fuel analyses; and/or monitoring documented by CMS (CEMS, COMS, and CPMS)*, where applicable.
40 CFR 63.7505(c); and 40 CFR Part 63, Subpart DDDDD, Table 6 #4.	Following the initial compliance demonstration, compliance with the emission standards for HCl and Hg, or TSM where opting to comply with the standard for TSM instead of PM, may be demonstrated using fuel analysis (instead of a performance test) if the emission rate, calculated in accordance with 40 CFR 63.7530(c), is less than the applicable limit identified in Table 2. Fuel analyses shall be conducted in accordance with 40 CFR 63.7521 and Table 6 to Subpart DDDDD of Part 63. For gaseous fuels, fuel analysis cannot be used for compliance with the HCl or TSM alternative standards.
40 CFR 63.7540(a)(1); and 40 CFR Part 63, Subpart DDDDD, Tables 4 and 8.	Continuous compliance with each emission limit, operating limit, and work practice standards in Tables 1 through 3 of the subpart must be demonstrated in accordance with the methods specified in Table 8 to the subpart. Operating above the established maximum or below the established minimum operating limit shall constitute a deviation of the operating limits identified in Table 4 of the subpart.
40 CFR Part 63, Subpart DDDDD, Table 10	The applicability of the General Provisions in 40 CFR Part 63, Subpart A to boilers subject to Subpart DDDDD is identified in Table 10 to the subpart.



* continuous monitoring system (CMS), continuous emissions monitoring system (CEMS), continuous opacity monitoring system (COMS), and continuous parameter monitoring system (CPMS).

c) Operational Restrictions

- (1) The permittee shall burn only NG, coal, and coke oven gas in this EU. The baghouse for controlling PE shall only be required when burning coal.

[Authority for Term: OAC rule 3745-77-07(A)(1)]

- (2) The pressure drop across the baghouse shall be maintained within the range of 2 to 8 inches of water while the EU is in operation and is burning coal. The pressure drop shall not be considered outside the normal range when the pressure drop falls below the minimum point in the pressure differential range as a result of bag replacements.

The permittee may petition the Ohio EPA, Northeast District Office for reestablishment of the pressure drop range at any time provided the permittee can demonstrate to the Ohio EPA, Northeast District Office that the operating conditions upon which the pressure drop range was previously established are no longer applicable.

[Authority for Term: OAC rule 3745-77-07(A)(1)]

- (3) The coal burned in this EU shall have a sulfur content, on a dry basis, that is sufficient to comply with the allowable SO₂ emission limitation of 3.9 lbs SO₂/MMBtu actual heat input.

Compliance with the above-mentioned specification shall be based upon the analytical results for the composite sample of coal collected during each calendar month.

[Authority for Term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-18-84(J)]

- (4) If this EU does not combust COG for at least 50 percent of the average annual heat input during any 3 consecutive calendar years as provided in 40 CFR 63.7491(i), the permittee shall follow the operating requirements for this EU specified in 40 CFR Part 63, Subpart DDDDD, as follows:

40 CFR 63.7500(a)(3)	The boiler and associated air pollution control and monitoring equipment must be operated and maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions.
40 CFR 63.7540(a)(12)	Boilers in the Gas 1 subcategory may elect to install an oxygen trim system that maintains an optimum air-to-fuel ratio to reduce the frequency of required tune-ups to once every 5 years per 40 CFR 63.7540(a)(12).
40 CFR 63.7525(b)(1) through (b)(4); 40 CFR 63.7530(b)(4)(ii); 40 CFR 63.7540(a)(9) and (a)(18); and 40 CFR Part 63, Subpart DDDDD, Table 8 #2.	Each boiler having an annual average heat input greater than 250 MMBtu per hour from solid fossil fuels or heavy liquid fuels must be equipped with either a PM CPMS or PM CEMS if demonstrating compliance with the PM standard instead of TSM. If choosing to install the CPMS, each PM CPMS must be installed, certified, operated, and



	maintained according to the requirements identified in 40 CFR 63.7525(b)(1) through (4), 40 CFR 63.7530(b)(4)(ii), 40 CFR 63.7540(a)(18), and the site-specific monitoring plan.
40 CFR 63.7525(b)(5) through (b)(8); and 40 CFR 63.7540(a)(9) and (a)(19).	Each boiler having an annual average heat input greater than 250 MMBtu per hour from solid fossil fuels or heavy liquid fuels must be equipped with either a PM CPMS or PM CEMS if demonstrating compliance with the PM standard instead of TSM. If choosing to install PM CEMS, each CEMS must be installed, certified, operated, and maintained in accordance with Performance Specification 11 in Appendix B of Part 60 and the site-specific monitoring plan.
40 CFR 63.7530(h); and 40 CFR Part 63, Subpart DDDDD, Table 3 #5 and #6.	A boiler, subject to the emissions standards in Table 2 of Subpart DDDDD to Part 63, must be operated to meet the work practice standards of Table 3 #5 during startups and Table 3 #6 during shutdowns.
40 CFR 63.7520(c); and 40 CFR Part 63, Subpart DDDDD, Tables 4 #7 and 8 #10.	For each boiler where compliance was/is demonstrated through a performance test, the permittee shall maintain the operating load such that it does not exceed 110% of the highest hourly average operating load recorded during the most recent performance test demonstrating compliance.
40 CFR 63.7505(c); 40 CFR 63.7510(b); 40 CFR 63.7515(e); 40 CFR 63.7540(a)(2) and (3); 40 CFR 63.7530(c); and 40 CFR Part 63, Subpart DDDDD, Tables 4 #7, 6 and 8 #8.	Where demonstrating compliance through fuel analyses for HCl, Hg, or TSM, conduct monthly (or quarterly if meeting the requirements of 40 CFR 63.7515(e)) fuel analyses in accordance with 40 CFR 63.7521 and Table 6 to the subpart; and maintain the fuel type or fuel mixture such that the applicable emission rate(s), calculated according to 40 CFR 63.7530(c)(1), (2) and/or (3), are no more than or less than the applicable emission limits in Table 2 of the subpart. Following the first 12 months of compliance, the rolling 12-month average emissions of HCl, Hg, and/or TSM shall be maintained at or below the applicable emission limit(s).
40 CFR 63.7525(a); 40 CFR 63.7575; and	Where using the option to install an oxygen trim system to demonstrate compliance



40 CFR Part 63, Subpart DDDDD, Tables 4 #8 and 8 #9.	with the CO standard, it shall maintain excess air at the desired level by providing a feedback signal to the combustion air controller. The O2 concentration must be maintained at or above the lowest hourly average measured during the most recent performance test (Method 10) demonstrating compliance with the CO limit.
40 CFR 63.7525(a); and 40 CFR 63.7575.	For boilers subject to a CO emission limit and the permittee is using the option to install an oxygen trim system, the monitoring system shall maintain excess air at the desired level by providing a feedback signal to the combustion air controller. The oxygen concentration of the stack gas must be maintained at or above the lowest hourly average O2 concentration measured during the most recent performance test demonstrating compliance with the CO limit. The minimum O2 level shall be set no lower than the minimum value established during the three performance tests.
40 CFR 63.7525(a); 40 CFR 63.7510(c); 40 CFR 63.8; and 40 CFR Part 63, Subpart DDDDD, Tables 4 #8 and 8 #9.	For boilers subject to a CO emission limit and using CO CEMS for compliance, must install, certify, operate, and maintain CO CEMS in accordance with Performance Specification 4, 4A, or 4B of Part 60 Appendix B; and must reduce the 1-hourly averages (corrected to 3% O ₂) to daily averages and calculate the 30-day rolling average CO concentration of the stack gas. The 30-day rolling average CO concentration must be maintained below the applicable CO limits identified in Table 2 to Part 63 Subpart DDDDD.
40 CFR 63.7525(c); 40 CFR 63.8; and 40 CFR Part 63, Subpart DDDDD, Tables 4 #3 and 8 #1.	For a boiler equipped with COMS to demonstrate compliance with the opacity limit, it must be installed, certified, operated, and maintained in accordance with Performance Specification 1 of Part 60 Appendix B and 40 CFR 63.7525(c); data must be reduced in accordance with 40 CFR 63.8(g)(2); and the opacity must be maintained less than or equal to 10% as a daily block average.

[Authority for Term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart DDDDD]

- (5) The continuous opacity monitoring system shall be operated during all times when firing coal or coal and any combination gaseous fuel in this EU.

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than NG, coal and coke oven gas, the permittee shall maintain a record of the type and quantity of fuel burned in this EU.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall install, operate and maintain equipment to continuously monitor and record the opacity of the visible PE from this EU, when burning coal. Such continuous monitoring and recording equipment shall comply with all specifications outlined in 40 CFR Part 60, Appendix B, "Performance Specification Test (PST) 1", as such appendix existed on July 1, 2002. [OAC rule 3745-17-03(C)(1)] See g)(1).

Each continuous monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The permittee shall maintain a certification letter from the Ohio EPA documenting that the continuous opacity monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, "Performance Specification Test 1", as such appendix existed on July 1, 2002. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous opacity monitoring system: percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the EU is in operation, when burning coal. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, operating manual(s), and/or the permittee's operational experience for similar sources. The permittee shall record the pressure drop across the baghouse on weekly basis when the EU is operating.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall collect a representative sample of each shipment of coal which is received for burning. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal. At the end of each calendar month, the representative samples of coal from all shipments of coal which were received during that calendar month shall be combined into one composite sample.

Each monthly composite sample of coal received shall be analyzed for sulfur content (percent) and heat content (Btu/pound of coal). The analytical methods for sulfur content shall be the most recent version of: ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isooperibol Calorimeters, respectively. Alternative, equivalent methods may be used upon written approval from the Ohio EPA, Northeast District Office.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (5) The permittee shall maintain monthly records of the total quantity of coal received, the results of the analyses for sulfur content and heat content, and the average SO₂ emission rate for coal, recorded as lbs SO₂/MMBtu actual heat input.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (6) Monitoring and record keeping for the sulfur content is not required for coke oven gas because the SO₂ emission rate from the burning of undesulfurized coke oven gas is less than the allowable SO₂ emission rate in b)(1)d of these terms and conditions.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (7) Monitoring and record keeping for the sulfur content is not required for NG because the SO₂ emission rate from the burning of NG is less than the allowable SO₂ emission rate in b)(1)d of these terms and conditions.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (8) The permittee shall collect and maintain records of the following information for this EU during the ozone season control period (see NO_x Budget Program requirements in Section B.11.):

- a. the amount of each fuel combusted each day (MMcf/day, and/or tons/day);
- b. the amount of each fuel combusted each month (MMcf/month, and/or tons/month) determined by summing the daily fuel usage recorded in "a." for the calendar month;
- c. the monthly average heat content of each fuel (MMBtu/MMcf, and/or MMBtu/ton);
- d. the heat input for each fuel (MMBtu/month) determined by multiply "b. x c." for each fuel;
- e. the total combined heat input (MMBtu/month) determined by summing the heat input for each fuel;
- f. the monthly NO_x emissions, in tons per month, determined by multiplying "e." by the corresponding approved NO_x emission factor [see Section B.11.l)1)] for this NO_x Budget Unit, and dividing by 2000 lbs/ton; and
- g. a copy of the supplier's monthly fuel analysis for the gross calorific value (GCV) of the NG and coal, as representative of the higher heating value (HHV).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-14-08(H)]

- (9) During periods of missing or inaccurate data for the records required to be collected and maintained in d)(8) above during the ozone season control period, the following procedures for data substitution shall be utilized as outlined in the permittee's Title V MPM application for Alternative NO_x Monitoring submitted March 2, 2020, pursuant to OAC rule 3745-14-08(H):

- a. Periods of missing or inaccurate data shall be estimated based on best available data, including hours of operation, load rates and/or available data from the previous and/or subsequent period.
- b. For the monthly heat content, the permittee shall use the arithmetic average of the values of the heat content immediately preceding and immediately following a missing or inaccurate data incident. If the "after" value is not available by the

reporting deadline, the permittee shall utilize the “before” value for the missing or inaccurate data substitution.

- c. For the daily fuel usage, the permittee shall estimate the fuel usage based on all available process data (e.g. steam production and operating hours). Alternatively, the permittee may use the maximum heat input capacity of the EU (B010), 492 MMBtu/hr, as the default substitution value for any periods of missing or inaccurate data.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-14-08(H)]

- (10) If this EU does not combust COG for at least 50 percent of the average annual heat input during any 3 consecutive calendar years as provided in 40 CFR 63.7491(i), the permittee shall follow the monitoring and/or record keeping requirements for this EU specified in 40 CFR Part 63, Subpart DDDDD, as follows:

40 CFR 63.7555; 40 CFR 63.7560; and 40 CFR 63.10(b)(1).	The applicable records required by the NESHAP are identified in 40 CFR 63.7555 and they must be kept for at least 5 years following the date of the record or report submitted. Records must be accessible from on-site for at least two years after the date of the record and may be located off-site for the remaining three years.
40 CFR 63.7540(a)(2); and 40 CFR 63.7550(c)(4).	Records must be kept of the type and amount of all fuels burned in each boiler during each reporting period, in order to demonstrate that all fuel burned in each unit would either: result in lower emissions of HCl, Hg, or TSM than the applicable emission limit (if demonstrating compliance through fuel analyses) or result in a lower fuel input of Cl, Hg, or TSM than the maximum values calculated during the last performance test (if demonstrating compliance through performance testing).
40 CFR 63.7525(a); 40 CFR 63.7575; and 40 CFR Part 63, Subpart DDDDD Tables 4 #8 and 8 #9.	For boilers subject to a CO emission limit and using the option to install an oxygen trim system, the monitor shall maintain excess air at the desired level by providing a feedback signal to the combustion air controller. The oxygen concentration of the stack gas must be maintained at or above the lowest hourly average O2 concentration measured during the most recent performance test (Method 10) demonstrating compliance with the CO limit.



40 CFR 63.7525(a); 40 CFR 63.7575; and 40 CFR Part 63, Subpart DDDDD Tables 4 #8 and 8 #9.	For boilers subject to a CO emission limit and using the option to install an oxygen analyzer, it shall be installed, calibrated, and maintained in accordance with the manufacturer's recommendations. The 30-day rolling average oxygen concentration of the stack gas, monitored by O2 monitor, must be maintained at or above the lowest hourly average O2 concentration measured during the most recent performance test (Method 10) demonstrating compliance with the CO limit.
40 CFR 63.7525(a); 40 CFR 63.8; 40 CFR 63.7510(c); 40 CFR 63.7540(a)(8); and 40 CFR Part 63, Subpart DDDDD Table 8 #10. .	For boilers subject to a CO emission limit and using the option to install an CO CEMS, install/operate/maintain CO CEMS in accordance with Performance Specification 4, 4A, or 4B of Part 60 Appendix B; reduce the 1-hourly averages (corrected to 3% O ₂) to daily averages and maintain the 30-day rolling average CO concentration of the stack gas below the lowest hourly average CO concentration measured during the most recent compliant performance test for CO.
40 CFR 63.7525(b); 40 CFR 63.7540(a)(9) and (a)(18); 40 CFR 63.7505(d); and 40 CFR Part 63, Subpart DDDDD Table 8 #2.	Each boiler having an average annual heat input greater than 250 MMBtu from solid fossil fuels or residual oil must be equipped with a PM CPMS or PM CEMS. Each PM CPMS must be installed, certified, operated, and maintained according to the requirements identified in 40 CFR 63.7525(b) and the site-specific monitoring plan. Compliance is based on the arithmetic 30-day rolling average PM CPMS output data, recorded in milliamps, PM concentration, or other raw data signal value, collected during all boiler operating hours.
40 CFR 63.7525(b)(5) through (b)(8); 40 CFR 63.7540(a)(9) and (a)(19); 40 CFR 63.7505(d); and 40 CFR Part 63, Subpart DDDDD Table 8 #2.	Each boiler having an average annual heat input greater than 250 MMBtu from solid fossil fuels or residual oil must be equipped with a PM CPMS or PM CEMS. Each PM CEMS must be installed, certified (PM CEMS only), operated, and maintained in accordance with Performance Specification 11 in Appendix B of Part 60 and the site-specific monitoring plan. The PM CEMS output data shall be collected during all non-exempt boiler operating hours and emissions shall be calculated from the arithmetic 30-day rolling average. The reportable measurement output from the PM CEMS shall be expressed in units of the applicable emission limit in Table 2.



40 CFR 63.7525(c); 40 CFR 63.8; and 40 CFR Part 63, Subpart DDDDD Table 8 #1.	Continuous opacity monitoring system (COMS) data must be collected in accordance with 40 CFR 63.7525(c) and 40 CFR 63.7535 and it shall be reduced to 6-minute averages as specified in 40 CFR 63.8(g)(2). Each COMS must complete one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period. Six-minute averages shall be collected for all periods of operation except during periods when the COMS is out of control.
40 CFR 63.7525(d) and 40 CFR Part 63, Subpart DDDDD Table 8.	Each continuous parameter monitoring system (CPMS) must be installed, operated, and maintained according to the procedures specified in this paragraph. The CPMS must complete a minimum of 1 cycle of sampling and analyzing for each successive 15-minute period with a minimum of 4 successive cycles of operation for each valid hour of data (except during malfunctions, repairs, and/or quality assurance checks). All valid readings must be reduced to 30-day rolling block averages for the final demonstration of compliance with the parameter limit being monitored. Results of inspections, calibrations and validation checks must be recorded and maintained.
40 CFR 63.7535	In order to demonstrate continuous compliance with the requirements of the NESHAP, the required monitoring and data collection systems must be operated at all times the affected source is in operation, except for periods of monitoring system malfunction, out of control periods, and required monitoring system quality assurance and/or control activities.
40 CFR Part 63, Subpart DDDDD Table 8 #10	Collect the operating load data or steam generation data every 15 minutes and maintain the operating load such that it does not exceed 110% of the average operating load recorded during the most recent compliance demonstration.
40 CFR 63.7521 and 40 CFR 63.7530(b).	To establish the maximum HAP input levels, for solid and liquid fuels, a fuel analyses must be conducted for Chlorine (Cl) and mercury (Hg), and TSM if opting to comply with TSM; all in accordance with the site-specific fuel monitoring plan and procedures identified in 40 CFR 63.7521 and Table 6 to the subpart. The maximum Cl, Hg, and TSM input must be calculated in accordance with 40 CFR 63.7530(b).



40 CFR 63.7530(g); 40 CFR 63.7540(c); and 40 CFR 63.7521(f) through (i).	If electing to demonstrate that a gaseous fuel meets the specifications of an "other gas 1 fuel" and the gas constituents could vary above the specifications identified for an "other gas 1 fuel" (40 µg Hg/m ³), monthly fuel specification analyses for Hg is required and the records maintained, in accordance with the procedures in 40 CFR 63.7521(f) through (i) and 40 CFR 63.7540(c).
40 CFR 63.7530(c)	Emission rates, through fuel analysis, for HCl, Hg, and TSM must be calculated in accordance with 40 CFR 63.7530(c) using Equations 15 (for 90 th percentile confidence level pollutant concentration), 16 (for HCl), 17 (for Hg) and 18 for (TSM).
40 CFR 63.7540(a)(3) and (a)(5).	If burning a new fuel and compliance with an HCl or Hg emission limit was demonstrated through fuel analyses, the emission rate must be recalculated using Equations 16 and/or 17 of 40 CFR 63.7530 and the recalculated HCl or Hg emission rate must be less than the applicable emission limits.
40 CFR 63.7540(a)(4) and (a)(6).	If burning a new fuel and compliance with the HCl or Hg emission limit was demonstrated through performance testing, the maximum Cl and Hg input must be recalculated using Equations 7 and/or 8 of 40 CFR 63.7530. If the results prove the maximum Cl or Hg input to be greater than the maximum established during the last performance test, a new performance test must be conducted within 60 days of burning the new fuel and new operating limits must be established.



40 CFR 63.7525(d) and 40 CFR 63.7535(c) and (d).	Data recorded during monitoring system malfunctions or out-of-control periods, repairs, or required monitoring system quality assurance and control activities shall not be used in data averages and calculations used to report emissions or operating levels used for demonstrating compliance. Data collected during all other periods of time shall be used in assessing compliance with the emissions limits (CEMS) and the operating limits of the control device or system. Records shall be made available, upon request, of results of CMS performance audits and the dates and duration of each period when the CMS is out of control, to completion of the corrective actions needed to return the CMS to operation consistent with the site-specific monitoring plan and Tables 4 and 8 to Subpart DDDDD. Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including system accuracy audits, calibration checks, and required zero and span adjustments), failure to collect required data is a deviation of the monitoring requirements.
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[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart DDDDD]

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than NG, coal, and/or coke oven gas was burned in this EU. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit reports following the end of each calendar quarter to the Ohio EPA, Northeast District Office documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective action(s) taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

For any calendar quarter during which the EU burned coal, the quarterly reports shall also identify any excursions of the start-up and shutdown provisions specified in OAC rule 3745-17-07(A)(3) and document any continuous opacity monitoring system downtime while the EU was online (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the EU operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of EU and control equipment malfunctions. The total operating time of the EU and the total operating time of the analyzer while the EU was online shall be included in the quarterly report.

If there are no excess emissions during the calendar quarter or the EU did not burn coal during the quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system

malfunctions. The total operating time of the EU and the total operating time of the analyzer while the EU was online also shall be included in the quarterly report.

These quarterly excess emission reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (3) For any calendar quarter during which the EU burned coal, the permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse was not within the allowable range specified above.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (4) Quarterly reports shall be submitted concerning the analytical results of the composite coal samples and the quantities of the coal received for this EU.

The quarterly reports shall include the following information for each month during the calendar quarter:

- a. the total quantity of coal received (tons);
- b. the average sulfur content (percent) of the coal received;
- c. the average heat content (Btu/pound) of the coal received; and
- d. the average SO₂ emissions rate (lbs SO₂/MMBtu actual heat input) from the coal received.

These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year, unless otherwise specified by the Ohio EPA, Northeast District Office, and shall cover the data obtained during the previous calendar quarters.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (5) The permittee shall submit an annual report of the actual ozone season NO_x emissions, in tons, in accordance with Section B.11.l)3c. of this permit.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-14-08(H)]

- (6) If this EU does not combust COG for at least 50 percent of the average annual heat input during any 3 consecutive calendar years as provided in 40 CFR 63.7491(i), the permittee shall follow the reporting requirements for this EU specified in 40 CFR Part 63, Subpart DDDDD, as follows:

40 CFR 63.7495(d); 40 CFR 63.7530(e)-(g); and 40 CFR 63.7545.	The notification requirements identified in 40 CFR 63.7(b), (c), 40 CFR 63.8(e), (f)(4), (6), 40 CFR 63.9(b)-(h), (j), 40 CFR 63.7545, and 40 CFR 63.7530(e)-(g), as applicable, shall be submitted to the Ohio EPA, Northeast District Office no later than the date identified in 40 CFR 63.7545.
40 CFR 63.7550(a)-(b); and 40 CFR Part 63, Subpart DDDDD, Table 9.	The owner/operator must submit each compliance report identified in Table 9 to the NESHAP that is applicable to the boiler, according to the requirements identified in 40 CFR 63.7550(b).



40 CFR 63.7550(c) through (h)	These paragraphs identify the information required to be submitted in the compliance reports.
40 CFR 63.7545(e); 40 CFR 63.7515(f); 40 CFR 63.7530(f); and OAC rule 3745-15-04(A).	A comprehensive written report on the results of performance tests and initial fuel analyses shall be submitted within 60 days after the completion of the test in the Notification of Compliance Status Report. Each report shall verify the unit has not changed or shall provide documentation of the revised parameters established during the performance test. However, Ohio rules require the testing results (signed by the person responsible for the tests) to be submitted to the appropriate Ohio EPA DO/LAA within 30 days following completion of the test(s).
40 CFR 63.7521(b)	The site-specific fuel analysis plan must be submitted no later than 60 days before the date of the intended initial compliance demonstration and it shall include the information identified in this paragraph.
40 CFR 63.7530(h)	If a boiler is subject to emission limits in Table 2 to the subpart, must submit a signed statement in the Notification of Compliance Status report certifying that good combustion practices were employed during startup and shutdown periods and oxygen concentrations were maintained as specified by the manufacturer.
40 CFR 63.7530(e)	The Notification of Compliance Status report must include a signed certification that an energy assessment was completed according to Table 3 to the subpart and that it is an accurate depiction of the facility.
40 CFR 63.7530(g)	If electing to demonstrate that a gaseous fuel meets the specification of "other gas 1 fuel", the Notification of Compliance Status report must include a signed certification stating that the fuel analyses, conducted in accordance with 63.7521(f) through (i), demonstrates that the Hg constituents in the gaseous fuel will never exceed the specifications outlined in the definition of other gas 1 fuels.
40 CFR 63.7550(h)	Within 60 days after the date of completing, results of RATA data and performance test data must be submitted electronically to EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (http://www.cdx.epa.gov/). Performance test data must be submitted in the file format generated through EPA's Electronic Reporting Tool (ERT) at: http://www.epa.gov/ttn/chief/ert/index.html .



40 CFR 63.7540(b)	Each instance in which a boiler does not meet each/any applicable emission limit and/or operating limit in Tables 1 through 4 to the subpart, the owner/operator must report each as a deviation from the requirements of the Part 63 Subpart DDDDD, in accordance with 40 CFR 63.7550.
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[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart DDDDD]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-07(A)(1)]

b. Emissions Limitation:

PM emissions shall not exceed 0.020 lb/MMBtu of actual heat input when burning NG or coke oven gas.

Applicable Compliance Method:

i. To determine the actual PM emission rate for NG, the following equation shall be used:

$$E \text{ (lb/MMBtu)} = (1.9 \text{ lbs/1,000,000 scf}) \times (1 \text{ scf/1020 Btu}) \times (1,000,000 \text{ Btu/1 MMBtu}) \times (1 \text{ MMscf/1,000,000 scf}) = 0.0018 \text{ lb/MMBtu}$$

where:

E = PM emission rate from NG, in lb/MMBtu;

1.9 lbs/1,000,000 scf = emission factor for filterable PM from burning NG, from AP42, Section 1.4 NG Combustion, Table 1.4-2, 7/98;

1 scf/1020 Btu = the heat value of 1 scf of NG; and

1,000,000 Btu/1 MMBtu = conversion from Btu to MMBtu.

ii. To determine the PM emission rate for coke oven gas, the permittee may use the emission factor of 0.012 lb PM/MMBtu from AP42, Section 12.5 Iron and Steel Production, Table 12.5-1, 10/86.

iii. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(9).

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-10(B)(1)]



c. Emissions Limitation:

PM emissions shall not exceed 0.10 lb/MMBtu of actual heat input when burning coal or co-firing coal with any gaseous fuel.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(9).

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-10(C)(1)]

d. Emissions Limitation:

SO₂ emissions shall not exceed 3.9 lbs/MMBtu of actual heat input.

Applicable Compliance Method:

Compliance with the SO₂ emission limitation when burning solid fuels shall be demonstrated based upon the record keeping requirements specified in d).

Testing for SO₂ from NG is not required because the SO₂ emission rate from the burning of NG is less than the allowable SO₂ emission rate in section b)(1)d. of these terms and conditions.

Testing for SO₂ from coke oven gas is not required because the SO₂ emission rate for burning undesulfurized coke oven gas is less than the allowable SO₂ emission rate in section b)(1)d. of these terms and conditions.

If required, the permittee shall demonstrate compliance with this emission rate, while burning coal, in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 6 and 6C and OAC rule 3745-18-04.

If required, the permittee shall demonstrate compliance with this emission rate, while burning NG, in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 6 and 6C and OAC rule 3745-18-04.

If required, the permittee shall demonstrate compliance with this emission rate, while burning coke oven gas, in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 6 and 6C and OAC rule 3745-18-04.

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-18-84(J)]

(2) The permittee shall conduct, or have conducted, emission testing for this EU in accordance with the following requirements:

- a. The emission testing shall be conducted within 6 months after the resumption of burning coal as fuel in this EU.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission limit for PM when burning coal as fuel.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 5 of 40 CFR Part 60, Appendix A.
- d. During the emission testing, the EU shall be operated under operational conditions approved in advance by the Ohio EPA, Northeast District Office. Operational conditions that may need to be approved include, but are not limited to, the production rate, the type of material processed, material make-up (solvent content, etc.), or control equipment operational limitations (burner temperature, precipitator



voltage, etc.). In general, testing shall be done under "worst case" conditions expected during the life of the permit. As part of the information provided in the "Intent to Test" notification form described below, the permittee shall provide a description of the EU operational conditions they will meet during the emissions testing and describe why they believe "worst case" operating conditions will be met. Prior to conducting the test(s), the permittee shall confirm with the Ohio EPA, Northeast District Office that the proposed operating conditions constitute "worst case". Failure to test under the approved conditions may result in Ohio EPA not accepting the test results as a demonstration of compliance.

- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the EU operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Northeast District Office's refusal to accept the results of the emission test(s).
- f. Personnel from the Ohio EPA, Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the EU and the testing procedures provide a valid characterization of the emissions from the EU and/or the performance of the control equipment.
- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Northeast District Office.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall conduct, or have conducted, emission testing for this EU in accordance with the following requirements:
 - a. The emission testing shall be conducted during the ozone season control period prior to the expiration of the permit, except as otherwise specified in Section B.11.l)3)d.i. and ii. of this permit.
 - b. The emission testing shall be conducted to demonstrate that the approved emission factor specified in Section B.11.l)1)b.i. and ii. continues to be representative of current operating conditions for this NO_x budget unit.
 - c. The emission testing shall be conducted stack testing within 90 days of permit issuance or resuming operation (during ozone season control period) whichever is later to determine approvable COG/NG emission factor for ozone season as specified in B.11.l)1)b.i.
 - d. The test method(s) specified in Section B.11.l)3)d.iii. shall be employed to demonstrate that the approved emission factor continues to be representative of current operating conditions. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 - e. During the emission testing, the EU shall be operated under operational conditions approved in advance by the Ohio EPA, Northeast District Office. Operational conditions that may need to be approved include, but are not limited to, the



production rate and fuel. Testing shall be done under conditions most representative of normal operations. As part of the information provided in the "Intent to Test" notification form described below, the permittee shall provide a description of the EU operational conditions they will meet during the emissions testing and describe why they believe that conditions most representative of normal operations will be met. Failure to test under the approved conditions may result in Ohio EPA not accepting the test results as a demonstration of compliance.

- f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the EU operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Northeast District Office's refusal to accept the results of the emission test(s).
- g. Personnel from the Ohio EPA, Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the EU and the testing procedures provide a valid characterization of the emissions from the EU and/or the performance of the control equipment.
- h. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Northeast District Office.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (4) If this EU does not combust COG for at least 50 percent of the average annual heat input during any 3 consecutive calendar years as provided in 40 CFR 63.7491(i), the permittee shall follow the testing requirements for this EU specified in 40 CFR Part 63, Subpart DDDDD, as follows:

40 CFR Part 63, Subpart DDDDD, Table 2	Table 2 to the NESHAP contains the emission limits for existing boilers and the sampling volume or test run duration required for performance testing.
40 CFR 63.7510(a); and 40 CFR 63.7530(a) and (b).	Initial compliance with 40 CFR Part 63, Subpart DDDDD shall be demonstrated through performance testing according to 40 CFR 63.7520 and Table 5; by conducting a fuel analysis for each type of fuel burned according to 40 CFR 63.7521 and Table 6; by establishing operating limits (Table 4) according to 40 CFR 63.7530 and Table 7; and/or by conducting CMS performance evaluations according to 40 CFR 63.7525 in conjunction with the stack test.



40 CFR 63.7530(b) and (c)	Where using fuel analyses to demonstrate compliance with HCl, Hg, or TSM limits, the maximum fuel pollutant input levels entering the boiler shall be established using the fuel type(s) or mixture(s) that has/have the highest content of each, Cl, Hg, and/or TSM. The maximum Cl, Hg, and/or TSM input (in lbs/MMBtu) shall be calculated as required in 40 CFR 63.7530(b) and the 90 th percentile confidence level pollutant concentration (in lbs/MMBtu) must be calculated as required in 40 CFR 63.7530(c).
40 CFR 63.7510(c); and 40 CFR 63.7525(a).	The initial compliance demonstration for CO includes a performance test conducted according to Table 5, or conduct a performance evaluation of your continuous CO CEM according to 63.7525(a).
40 CFR 63.7510(d); and 40 CFR 63.7525(b).	For each boiler having an average annual heat input greater than 250 MMBtu/hour that combusts solid fossil fuel or residual oil, the initial compliance demonstration for PM shall include a performance test in accordance with 40 CFR 63.7520 and Table 5.
40 CFR 63.7515(a) through (c).	Performance testing must be conducted on an annual basis in accordance with 40 CFR 63.7520 and completed no more than 13 months after the previous performance test. If after 2 consecutive years the emissions of a pollutant are at or below 75% of the emissions limit for that pollutant and there have been no changes to the boiler or control equipment (that could increase emissions), performance testing may revert to every 3 years, or no more than 37 months after the previous test, for the pollutant. If the pollutant exceeds 75% of the applicable limit in Table 1 or 2, testing reverts back to annual. The average operating load must be recorded during each performance test.
40 CFR 63.7515(e)	If fuel analysis is used to demonstrate compliance with the Hg, HCl, or TSM limits, a fuel analysis must be conducted monthly according to 40 CFR 63.7521 for each type of fuel burned that is subject to a limit in Table 2. A fuel analysis must be conducted for any new fuel before it is burned (if subject to a limit in the NESHAP).
40 CFR 63.7520(a) through (c)	Performance tests must be conducted and a site-specific stack test plan developed according to 40 CFR 63.7 and Table 5; and operating limits must be established as identified in Table 7 to the NESHAP. The performance test must be conducted at representative operating load conditions while burning the fuel or mixture of fuels that contain the highest content of the pollutant being tested (this may require more than 1 performance test).



40 CFR 63.7520(d)	Each performance test shall include 3 separate test runs as specified in 40 CFR 63.7(e)(3) and each test run must comply with the minimum sampling time or volumes as specified in Tables 1 or 2 to the NESHAP.
40 CFR 63.7520(e)	The F-Factor methodology and equations found in Sections 12.2 and 12.3 of EPA Method 19 (in Appendix A of 40 CFR Part 60) shall be used to convert the measured PM, HCl, and Hg concentrations from the performance test to lbs/MMBtu heat input.
40 CFR 63.7521(a) through (e); and 40 CFR 63.7530(c).	Fuel analyses must be conducted to determine the concentration of chloride and Hg in each solid and liquid fuel and the concentration of Hg in each "gas 2 (other)"* fuel (excluding fuels used only for startup/shutdowns or transient flame stability) according to paragraphs 40 CFR 63.7521(a) through f), Table 6 to the NESHAP, and the site-specific fuel monitoring plan. A fuel analysis from the supplier may be used to meet this requirement if they use the Methods identified in Table 6. The concentration of chlorine, Hg, and/or TSM must be in units of lbs/MMBtu of each composite sample, for each fuel type, and according to the procedures in Table 6 to the NESHAP.
40 CFR 63.7521(f) through (i) and 40 CFR 63.7530(g).	In order to demonstrate that a gaseous fuel qualifies as an "other gas 1 fuel"*, an initial fuel specification analyses must be conducted to determine the concentration of Hg in each gaseous fuel (excluding NG and refinery gas) according to the procedures in 40 CFR 63.7521 paragraphs (g) through (i), Table 6 to the NESHAP, and the site-specific fuel monitoring plan. The concentration of Hg must be in units of micrograms per cubic meter of each sample for each gas 1 fuel type*.
40 CFR 63.7530(b)(4) and 40 CFR Part 63, Subpart DDDDD, Table 4.	In order to establish the site-specific operating limits as required by 40 CFR 63.7530(b)(4) and Table 4 to Subpart DDDDD, the permittee shall collect and record the appropriate parameters for the control device, in accordance with Table 7 to the subpart, every 15 minutes during each performance test.
40 CFR 63.7521(c) and (d)	Composite samples used for the fuel analyses of solid fuels must be collected and prepared as required in these paragraphs.



40 CFR 63.7525(b)(5) through (8) and 40 CFR 63.7540(a)(9) and (19).	Where using PM CEMS to demonstrate continuous compliance with the PM limit, a performance evaluation of the CEMS shall be conducted in accordance with 40 CFR 60.8(e), and Performance Specification 11 at 40 CFR Part 60 Appendix B. PM and O ₂ or CO ₂ data shall be collected concurrently (or w/i a 60-minute period) by both the CEMS and Method 5, 5B, or 17. Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 2 at 40 CFR Part 60, Appendix F. Relative Response Audits must be performed annually and Response Correlation Audits must be performed every 3 years.
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[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart DDDDD]

g) **Miscellaneous Requirements**

- (1) In accordance with 40 CFR Part 51, Appendix P, and OAC rule 3745-17-03(C), the permittee is required to install equipment to continuously monitor and record the opacity of the visible PE from this EU by January 31, 1998. The required continuous opacity monitor system was installed, as required, and is only required when burning coal.

3. B011, 387 MMBtu/hr No. 2 Boiler

Operations, Property and/or Equipment Description:

387 MMBtu/hr boiler fired with coke oven gas (COG), natural gas and/or number 6 fuel oil. This boiler was acquired from BDM/RG Steel Warren on January 1, 2013. It was formerly known as RG Steel boiler (B002).

- a) The following EU terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

- b) Applicable Emissions Limitations and/or Control Requirements

- (1) The specific operation(s), property, and/or equipment that constitute each EU along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
b.	OAC rule 3745-17-10(B)(1)	PM emissions shall not exceed 0.020 lb/MMBtu of actual heat input when burning NG or coke oven gas.
c.	OAC rule 3745-17-10(C)	PM emissions shall not exceed 0.13 lb/MMBtu of actual heat input when burning number 6 fuel oil or any mixture of number 6 fuel oil and gaseous fuels.
d.	OAC rule 3745-18-84(J)	SO ₂ emissions shall not exceed 1.6 lbs/MMBtu of actual heat input. See d)(2), d)(3), d)(4) and d)(5).
e.	40 CFR Part 63, Subpart DDDDD NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters. [40 CFR Part 63, Subpart DDDDD does not apply to the extent this boiler acts as a control device to comply with 40 CFR Parts 60, 61, 63, or 65 and at least 50 percent of the average annual heat input was derived from COG, or any other regulated gas stream, during any 3 consecutive calendar years per 40 CFR 63.7491(i)]	This boiler combusts only NG and coke oven gas (COG) and therefore is not subject to any emission limitations specified in Table 2 of Subpart DDDDD. See b)(2)a.
f.	OAC rule 3745-14 NO _x Budget Program	See B.11 and d)(6), d)(7), e)(3) and f)(2).

(2) Additional Terms and Conditions

- a. If this EU does not combust COG for at least 50 percent of the average annual heat input during any 3 consecutive calendar years as provided in 40 CFR 63.7491(i), the permittee shall follow the additional terms and conditions for this EU specified in 40 CFR Part 63, Subpart DDDDD, as follows:

40 CFR 63.7500 (a)(1); 40 CFR 63.7495; 40 CFR 63.7510(e); and 40 CFR Part 63, Subpart DDDDD, Table 3.	For each existing Gas 1 boiler other than limited use units, a one-time energy assessment must be performed by a qualified energy assessor no later than the compliance date identified in 40 CFR 63.7495. The requirements for the energy assessment are identified in 40 CFR 63.7575 and Table 3.
40 CFR 63.7500(a)(1), (b), (e); 40 CFR 63.7495; 40 CFR 63.7510(e); 40 CFR 63.7515(d), (g); 40 CFR 63.7540(a)(10), (13); and 40 CFR Part 63, Subpart DDDDD, Table 3.	For each existing Gas 1 boiler, an initial tune-up must be completed no later than the compliance date identified in 40 CFR 63.7495 unless the boiler is not in operation at that time, where a tune-up must be completed within 30 days after the re-start of the boiler. Following the initial compliance date, tune-ups must be conducted for each boiler within the applicable annual schedule as specified in 40 CFR 63.7500(a), (b), (e), 40 CFR 63.7540(a)(10), (13), and Table 3 to the subpart, unless alternative work practice standards are approved pursuant to 40 CFR 63.6(g). Each subsequent annual tune-up must occur no more than 13 months after the previous tune-up. If the boiler is not in operation at the time of its scheduled tune-up, the permittee is not required to perform the tune-up at that time but must complete the tune-up within 30 days after the re-start of the boiler.



40 CFR Part 63, Subpart DDDDD, Table 2; 40 CFR 63.7500(a)(1); and 40 CFR 63.7495.	The emissions from the boiler shall not exceed the following emission limitations, as identified in the most recent amendment to 40 CFR Part 63, Subpart DDDDD, and as identified in: Table 2 for existing units: Hydrochloric acid (HCl) emissions shall not exceed 1.1E-03 lb/MMBtu of heat input. Mercury (Hg) emissions shall not exceed 7.3E-07 lb/MMBtu of heat input. Filterable PM shall not exceed 5.9E-02 lb/MMBtu of heat input or total selected metals (TSM) shall not exceed 2.0E-04 lb/MMBtu of heat input. CO by volume on a dry basis, corrected to 3% O₂, 3-run average, shall not exceed 130 ppm.
40 CFR 63.7505(d); 40 CFR 63.7525(c); and 40 CFR 63.7495.	For each CMS (CEMS, COMS, CPMS)* used or required to demonstrate compliance with the NESHAP, the owner/operator must develop a site-specific monitoring plan that meets the requirements of 40 CFR 63.7505(d), and 40 CFR 63.7525(c). If requested, the site-specific monitoring plan must be submitted at least 60 days before the initial performance evaluation of the CMS.
40 CFR 63.7521(a), (b) and (g); and 40 CFR 63.7510(a)(2) and (b).	A site-specific fuel monitoring plan must be developed and submitted for each solid, liquid and "gas 2 (other) fuel" to be burned in the boiler, to include the information identified in this paragraph.
40 CFR 63.7500(a)(1) and (2); and 40 CFR 63.7495(g).	Each boiler must meet the applicable emission limits identified in Table 2; the work practice standard in Table 3; and the operating limits in Table 4 to the subpart by the compliance date identified in 40 CFR 63.7495(g).



40 CFR 63.7505(a) and (c); and 40 CFR Part 63, Subpart DDDDD, Table 3 #5 and #6.	Compliance with the emissions standards and operating limits of the NESHAP apply at all times, except during periods of startup and shutdown during which the requirements of Table 3 #5 and 6 apply. Compliance with the emissions limits is demonstrated through: performance testing; fuel analyses; and/or monitoring documented by CMS (CEMS, COMS, and CPMS)*, where applicable.
40 CFR 63.7505(c); and 40 CFR Part 63, Subpart DDDDD, Table 6 #4.	Following the initial compliance demonstration, compliance with the emission standards for HCl and Hg, or TSM where opting to comply with the standard for TSM instead of PM, may be demonstrated using fuel analysis (instead of a performance test) if the emission rate, calculated in accordance with 40 CFR 63.7530(c), is less than the applicable limit identified in Table 2. Fuel analyses shall be conducted in accordance with 40 CFR 63.7521 and Table 6 to Subpart DDDDD of Part 63. For gaseous fuels, fuel analysis cannot be used for compliance with the HCl or TSM alternative standards.
40 CFR 63.7540(a)(1); and 40 CFR Part 63, Subpart DDDDD, Tables 4 and 8.	Continuous compliance with each emission limit, operating limit, and work practice standards in Tables 1 through 3 of the subpart must be demonstrated in accordance with the methods specified in Table 8 to the subpart. Operating above the established maximum or below the established minimum operating limit shall constitute a deviation of the operating limits identified in Table 4 of the subpart.
40 CFR Part 63, Subpart DDDDD, Table 10	The applicability of the General Provisions in 40 CFR Part 63, Subpart A to boilers subject to Subpart DDDDD is identified in Table 10 to the subpart.

* continuous monitoring system (CMS), continuous emissions monitoring system (CEMS), continuous opacity monitoring system (COMS), and continuous parameter monitoring system (CPMS).

c) Operational Restrictions

- (1) The permittee shall burn only NG, coke oven gas, and number 6 fuel oil in this EU.
[Authority for Term: OAC rule 3745-77-07(A)(1)]
- (2) The quality of the oil burned in this EU shall meet a sulfur content which is sufficient to comply with the allowable SO₂ emission limitation of 1.6 lb/MMBtu of actual heat input.
[Authority for Term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-18-84(J)]
- (3) If this EU does not combust COG for at least 50 percent of the average annual heat input during any 3 consecutive calendar years as provided in 40 CFR 63.7491(i), the permittee shall follow the operating requirements for this EU specified in 40 CFR Part 63, Subpart DDDDD, as follows:

40 CFR 63.7500(a)(3)	The boiler and associated air pollution control and monitoring equipment must be operated and maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions.
40 CFR 63.7540(a)(12)	Boilers in the Gas 1 subcategory may elect to install an oxygen trim system that maintains an optimum air-to-fuel ratio to reduce the frequency of required tune-ups to once every 5 years per 40 CFR 63.7540(a)(12).
40 CFR 63.7525(b)(1) through (b)(4); 40 CFR 63.7530(b)(4)(ii); 40 CFR 63.7540(a)(9) and (a)(18); and 40 CFR Part 63, Subpart DDDDD, Table 8 #2.	Each boiler having an annual average heat input greater than 250 MMBtu per hour from solid fossil fuels or heavy liquid fuels must be equipped with either a PM CPMS or PM CEMS if demonstrating compliance with the PM standard instead of TSM. If choosing to install the CPMS, each PM CPMS must be installed, certified, operated, and maintained according to the requirements identified in 40 CFR 63.7525(b)(1) through (4), 40 CFR 63.7530(b)(4)(ii), 40 CFR 63.7540(a)(18), and the site-specific monitoring plan.
40 CFR 63.7525(b)(5) through (b)(8); and 40 CFR 63.7540(a)(9) and (a)(19).	Each boiler having an annual average heat input greater than 250 MMBtu per hour from solid fossil fuels or heavy liquid fuels must be equipped with either a PM CPMS or PM CEMS if demonstrating compliance with the PM standard instead of TSM. If choosing to install PM CEMS, each CEMS must be installed, certified, operated, and maintained in accordance with Performance Specification 11 in Appendix B of Part 60 and the site-specific monitoring plan.



40 CFR 63.7530(h); and 40 CFR Part 63, Subpart DDDDD, Table 3 #5 and 6.	A boiler, subject to the emissions standards in Table 2 of Subpart DDDDD to Part 63, must be operated to meet the work practice standards of Table 3 #5 during startups and Table 3 #6 during shutdowns.
40 CFR 63.7520(c); and 40 CFR Part 63, Subpart DDDDD, Tables 4 #7 and 8 #10.	For each boilers where compliance was/is demonstrated through a performance test, the permittee shall maintain the operating load such that it does not exceed 110% of the highest hourly average operating load recorded during the most recent performance test demonstrating compliance.
40 CFR 63.7505(c); 40 CFR 63.7510(b); 40 CFR 63.7515(e); 40 CFR 63.7540(a)(2) and (3); 40 CFR 63.7530(c); and 40 CFR Part 63, Subpart DDDDD, Tables 4 #7, 6 and 8 #8.	Where demonstrating compliance through fuel analyses for HCl, Hg, or TSM, conduct monthly (or quarterly if meeting the requirements of 40 CFR 63.7515(e)) fuel analyses in accordance with 40 CFR 63.7521 and Table 6 to the subpart; and maintain the fuel type or fuel mixture such that the applicable emission rate(s), calculated according to 40 CFR 63.7530(c)(1), (2) and/or (3), are no more than or less than the applicable emission limits in Table 2 of the subpart. Following the first 12 months of compliance, the rolling 12-month average emissions of HCl, Hg, and/or TSM shall be maintained at or below the applicable emission limit(s).
40 CFR 63.7525(a); 40 CFR 63.7575; and 40 CFR Part 63, Subpart DDDDD, Tables 4 #8 and 8 #9.	Where using the option to install an oxygen trim system to demonstrate compliance with the CO standard, it shall maintain excess air at the desired level by providing a feedback signal to the combustion air controller. The O ₂ concentration must be maintained at or above the lowest hourly average measured during the most recent performance test (Method 10) demonstrating compliance with the CO limit.
40 CFR 63.7525(a); and 40 CFR 63.7575.	For boilers subject to a CO emission limit and the permittee is using the option to install an oxygen trim system, the monitoring system shall maintain excess air at the desired level by providing a feedback signal to the combustion air controller. The oxygen concentration of the stack gas must be maintained at or above the lowest hourly



	average O ₂ concentration measured during the most recent performance test demonstrating compliance with the CO limit. The minimum O ₂ level shall be set no lower than the minimum value established during the three performance tests.
40 CFR 63.7525(a); 40 CFR 63.7510(c); 40 CFR 63.8; and 40 CFR Part 63, Subpart DDDDD, Table 4 #8 and Table 8 #9.	For boilers subject to a CO emission limit and using CO CEMS for compliance, must install, certify, operate, and maintain CO CEMS in accordance with Performance Specification 4, 4A, or 4B of Part 60 Appendix B; and must reduce the 1-hourly averages (corrected to 3% O ₂) to daily averages and calculate the 30-day rolling average CO concentration of the stack gas. The 30-day rolling average CO concentration must be maintained below the applicable CO limits identified in Table 2 to Part 63 Subpart DDDDD.

[Authority for Term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart DDDDD]

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than NG, coke oven gas, and number 6 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this EU.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (2) Monitoring and record keeping for sulfur content is not required for coke oven gas because the SO₂ emission rate from the burning of coke oven gas is less than the allowable SO₂ emission rate in b)(1)d of these terms and conditions.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (3) Monitoring and record keeping for sulfur content is not required for NG because the SO₂ emission rate from the burning of NG is less than the allowable SO₂ emission rate in b)(1)d of these terms and conditions.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this EU. The permittee shall perform or require the supplier to perform the analysis for sulfur content and heat content in accordance with the most recent versions of the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the Ohio EPA, Northeast District Office.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (5) For each shipment of oil received for burning in this EU, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content



and heat content, and the calculated SO₂ emission rate (in lbs/MMBtu). (The SO₂ emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).)

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (6) The permittee shall collect and maintain records of the following information for this EU during the ozone season control period (see NO_x Budget Program requirements in Section B.11.):
- a. the amount of each fuel combusted each day (MMcf/day, and/or gallons/day);
 - b. the amount of each fuel combusted each month (MMcf/month, and/or gallons/month) determined by summing the daily fuel usage recorded in "a." for the calendar month;
 - c. the monthly average heat content of each fuel (MMBtu/MMcf, and/or MMBtu/gallon);
 - d. the heat input for each fuel (MMBtu/month) determined by multiply "b. x c." for each fuel;
 - e. the total combined heat input (MMBtu/month) determined by summing the heat input for each fuel;
 - f. the monthly NO_x emissions, in tons per month, determined by multiplying "e." by the corresponding approved NO_x emission factor [see Section B.11.l)1)] for each NO_x Budget Unit, and dividing by 2000 lbs/ton; and
 - g. a copy of the supplier's monthly fuel analysis for the gross calorific value (GCV) of the NG and fuel oil, as representative of the higher heating value (HHV).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-14-08(H)]

- (7) During periods of missing or inaccurate data for the records required to be collected and maintained in d)(6) above during the ozone season control period, the following procedures for data substitution shall be utilized as outlined in the permittee's Title V MPM application for Alternative NO_x Monitoring submitted March 2, 2020, pursuant to OAC rule 3745-14-08(H):
- a. Periods of missing or inaccurate data shall be estimated based on best available data, including hours of operation, load rates and/or available data from the previous and/or subsequent period.
 - b. For the monthly heat content, the permittee shall use the arithmetic average of the values of the heat content immediately preceding and immediately following a missing or inaccurate data incident. If the "after" value is not available by the reporting deadline, the permittee shall utilize the "before" value for the missing or inaccurate data substitution.
 - c. For the daily fuel usage, the permittee shall estimate the fuel usage based on all available process data (e.g. steam production and operating hours). Alternatively, the permittee may use the maximum heat input capacity of the EU (B011), 387 MMBtu/hr, as the default substitution value for any periods of missing or inaccurate data.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-14-08(H)]

- (8) If this EU does not combust COG for at least 50 percent of the average annual heat input during any 3 consecutive calendar years as provided in 40 CFR 63.7491(i), the permittee shall



follow the monitoring and/or record keeping requirements for this EU specified in 40 CFR Part 63, Subpart DDDDD, as follows:

40 CFR 63.7555; 40 CFR 63.7560; and 40 CFR 63.10(b)(1).	The applicable records required by the NESHAP are identified in 40 CFR 63.7555 and they must be kept for at least 5 years following the date of the record or report submitted. Records must be accessible from on-site for at least two years after the date of the record and may be located off-site for the remaining three years.
40 CFR 63.7540(a)(2); and 40 CFR 63.7550(c)(4).	Records must be kept of the type and amount of all fuels burned in each boiler during each reporting period, in order to demonstrate that all fuel burned in each unit would either: result in lower emissions of HCl, Hg, or TSM than the applicable emission limit (if demonstrating compliance through fuel analyses) or result in a lower fuel input of Cl, Hg, or TSM than the maximum values calculated during the last performance test (if demonstrating compliance through performance testing).
40 CFR 63.7525(a); 40 CFR 63.7575; and 40 CFR Part 63, Subpart DDDDD, Tables 4 #8 and 8 #9.	For boilers subject to a CO emission limit and using the option to install an oxygen trim system, the monitor shall maintain excess air at the desired level by providing a feedback signal to the combustion air controller. The oxygen concentration of the stack gas must be maintained at or above the lowest hourly average O2 concentration measured during the most recent performance test (Method 10) demonstrating compliance with the CO limit.
40 CFR 63.7525(a); 40 CFR 63.7575; and 40 CFR Part 63, Subpart DDDDD, Tables 4 #8 and 8 #9.	For boilers subject to a CO emission limit and using the option to install an oxygen analyzer, it shall be installed, calibrated, and maintained in accordance with the manufacturer's recommendations. The 30-day rolling average oxygen concentration of the stack gas, monitored by O2 monitor, must be maintained at or above the lowest hourly average O2 concentration measured during the most recent performance test (Method 10) demonstrating compliance with the CO limit.
40 CFR 63.7525(a); 40 CFR 63.8; 40 CFR 63.7510(c); 40 CFR 63.7540(a)(8); and 40 CFR Part 63, Subpart DDDDD, Table 8 #10.	For boilers subject to a CO emission limit and using the option to install an CO CEMS, install/operate/maintain CO CEMS in accordance with Performance Specification 4, 4A, or 4B of Part 60 Appendix B; reduce the 1-hourly averages (corrected to 3% O ₂) to daily averages and maintain the 30-day rolling average CO concentration of the stack gas below the lowest hourly average CO concentration measured during the most recent compliant performance test for CO.



40 CFR 63.7525(b); 40 CFR 63.7540(a)(9) and (a)(18); 40 CFR 63.7505(d); and 40 CFR Part 63, Subpart DDDDD, Table 8 #2.	Each boiler having an average annual heat input greater than 250 MMBtu from solid fossil fuels or residual oil must be equipped with a PM CPMS or PM CEMS. Each PM CPMS must be installed, certified, operated, and maintained according to the requirements identified in 40 CFR 63.7525(b) and the site-specific monitoring plan. Compliance is based on the arithmetic 30-day rolling average PM CPMS output data, recorded in milliamps, PM concentration, or other raw data signal value, collected during all boiler operating hours.
40 CFR 63.7525(b)(5) through (b)(8); 40 CFR 63.7540(a)(9) and (a)(19); 40 CFR 63.7505(d); and 40 CFR Part 63, Subpart DDDDD, Table 8 #2.	Each boiler having an average annual heat input greater than 250 MMBtu from solid fossil fuels or residual oil must be equipped with a PM CPMS or PM CEMS. Each PM CEMS must be installed, certified (PM CEM only), operated, and maintained in accordance with Performance Specification 11 in Appendix B of Part 60 and the site-specific monitoring plan. The PM CEMS output data shall be collected during all non-exempt boiler operating hours and emissions shall be calculated from the arithmetic 30-day rolling average. The reportable measurement output from the PM CEMS shall be expressed in units of the applicable emission limit in Table 2.
40 CFR 63.7525(d) and 40 CFR Part 63, Subpart DDDDD, Table 8.	Each continuous parameter monitoring system (CPMS) must be installed, operated, and maintained according to the procedures specified in this paragraph. The CPMS must complete a minimum of 1 cycle of sampling and analyzing for each successive 15-minute period with a minimum of 4 successive cycles of operation for each valid hour of data (except during malfunctions, repairs, and/or quality assurance checks). All valid readings must be reduced to 30-day rolling block averages for the final demonstration of compliance with the parameter limit being monitored. Results of inspections, calibrations and validation checks must be recorded and maintained.
40 CFR 63.7535	In order to demonstrate continuous compliance with the requirements of the NESHAP, the required monitoring and data collection systems must be operated at all times the affected source is in operation, except for periods of monitoring system malfunction, out of control periods, and required monitoring system quality assurance and/or control activities.



40 CFR Part 63, Subpart DDDDD, Table 8 #10	Collect the operating load data or steam generation data every 15 minutes and maintain the operating load such that it does not exceed 110% of the average operating load recorded during the most recent compliance demonstration.
40 CFR 63.7521 and 40 CFR 63.7530(b).	To establish the maximum HAP input levels, for solid and liquid fuels, a fuel analyses must be conducted for Chlorine (Cl) and mercury (Hg), and TSM if opting to comply with TSM; all in accordance with the site-specific fuel monitoring plan and procedures identified in 40 CFR 63.7521 and Table 6 to the subpart. The maximum Cl, Hg, and TSM input must be calculated in accordance with 40 CFR 63.7530(b).
40 CFR 63.7530(g); 40 CFR 63.7540(c); and 40 CFR 63.7521(f) through (i).	If electing to demonstrate that a gaseous fuel meets the specifications of an "other gas 1 fuel" and the gas constituents could vary above the specifications identified for an "other gas 1 fuel" (40 µg Hg/m ³), monthly fuel specification analyses for Hg is required and the records maintained, in accordance with the procedures in 40 CFR 63.7521(f) through (i) and 40 CFR 63.7540(c).
40 CFR 63.7530(c)	Emission rates, through fuel analysis, for HCl, Hg, and TSM must be calculated in accordance with 40 CFR 63.7530(c) using Equations 15 (for 90 th percentile confidence level pollutant concentration), 16 (for HCl), 17 (for Hg) and 18 for (TSM).
40 CFR 63.7540(a)(3) and (a)(5)	If burning a new fuel and compliance with an HCl or Hg emission limit was demonstrated through fuel analyses, the emission rate must be recalculated using Equations 16 and/or 17 of 40 CFR 63.7530 and the recalculated HCl or Hg emission rate must be less than the applicable emission limits.
40 CFR 63.7540(a)(4) and (a)(6)	If burning a new fuel and compliance with the HCl or Hg emission limit was demonstrated through performance testing, the maximum Cl and Hg input must be recalculated using Equations 7 and/or 8 of 40 CFR 63.7530. If the results prove the maximum Cl or Hg input to be greater than the maximum established during the last performance test, a new performance test must be conducted within 60 days of burning the new fuel and new operating limits must be established.

40 CFR 63.7525(d) and 40 CFR 63.7535(c) and (d).	Data recorded during monitoring system malfunctions or out-of-control periods, repairs, or required monitoring system quality assurance and control activities shall not be used in data averages and calculations used to report emissions or operating levels used for demonstrating compliance. Data collected during all other periods of time shall be used in assessing compliance with the emissions limits (CEMS) and the operating limits of the control device or system. Records shall be made available, upon request, of results of CMS performance audits and the dates and duration of each period when the CMS is out of control, to completion of the corrective actions needed to return the CMS to operation consistent with the site-specific monitoring plan and Tables 4 and 8 to Subpart DDDDD. Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including system accuracy audits, calibration checks, and required zero and span adjustments), failure to collect required data is a deviation of the monitoring requirements.
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[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart DDDDD]

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than NG, coke oven gas, and/or number 6 fuel oil was burned in this EU. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall notify the Ohio EPA, Northeast District Office in writing of any record which shows a deviation of the allowable SO₂ emission limitation based upon the calculated SO₂ emission rate for each shipment of oil. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Northeast District Office with the next quarterly deviation report due.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall submit an annual report of the actual ozone season NO_x emissions, in tons, in accordance with Section B.11.l)3)c. of this permit.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-14-08(H)]

- (4) If this EU does not combust COG for at least 50 percent of the average annual heat input during any 3 consecutive calendar years as provided in 40 CFR 63.7491(i), the permittee shall follow the reporting requirements for this EU specified in 40 CFR Part 63, Subpart DDDDD, as follows:



40 CFR 63.7495(d); 40 CFR 63.7530(e)-(g); and 40 CFR 63.7545.	The notification requirements identified in 40 CFR 63.7(b), (c), 40 CFR 63.8(e), (f)(4), (6), 40 CFR 63.9(b)-(h), (j), 40 CFR 63.7545, and 40 CFR 63.7530(e)-(g), as applicable, shall be submitted to the Ohio EPA, Northeast District Office no later than the date identified in 40 CFR 63.7545.
40 CFR 63.7550(a)-(b); and 40 CFR Part 63, Subpart DDDDD, Table 9.	The owner/operator must submit each compliance report identified in Table 9 to the NESHAP that is applicable to the boiler, according to the requirements identified in 40 CFR 63.7550(b).
40 CFR 63.7550(c) through (h)	These paragraphs identify the information required to be submitted in the compliance reports.
40 CFR 63.7545(e); 40 CFR 63.7515(f); 40 CFR 63.7530(f); and OAC rule 3745-15-04(A).	A comprehensive written report on the results of performance tests and initial fuel analyses shall be submitted within 60 days after the completion of the test in the Notification of Compliance Status Report. Each report shall verify the unit has not changed or shall provide documentation of the revised parameters established during the performance test. However, Ohio rules require the testing results (signed by the person responsible for the tests) to be submitted to the appropriate Ohio EPA DO/LAA within 30 days following completion of the test(s).
40 CFR 63.7521(b)	The site-specific fuel analysis plan must be submitted no later than 60 days before the date of the intended initial compliance demonstration and it shall include the information identified in this paragraph.
40 CFR 63.7530(h)	If a boiler is subject to emission limits in Table 2 to the subpart, must submit a signed statement in the Notification of Compliance Status report certifying that good combustion practices were employed during startup and shutdown periods and oxygen concentrations were maintained as specified by the manufacturer.
40 CFR 63.7530(e)	The Notification of Compliance Status report must include a signed certification that an energy assessment was completed according to Table 3 to the subpart and that it is an accurate depiction of the facility.
40 CFR 63.7530(g)	If electing to demonstrate that a gaseous fuel meets the specification of "other gas 1 fuel", the Notification of Compliance Status report must include a signed certification stating that the fuel analyses, conducted in accordance with 63.7521(f) through (i), demonstrates that the Hg constituents in the gaseous fuel will never exceed the specifications outlined in the definition of other gas 1 fuels.



40 CFR 63.7550(h)	Within 60 days after the date of completing, results of RATA data and performance test data must be submitted electronically to EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (http://www.epa.gov/cdx). Performance test data must be submitted in the file format generated through EPA's Electronic Reporting Tool (ERT) at: https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert .
40 CFR 63.7540(b)	Each instance in which a boiler does not meet each/any applicable emission limit and/or operating limit in Tables 1 through 4 to the subpart, the owner/operator must report each as a deviation from the requirements of the Part 63 Subpart DDDDD, in accordance with 40 CFR 63.7550.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart DDDDD]

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-07(A)(1)]

b. Emissions Limitation:

PM emissions shall not exceed 0.020 lb/MMBtu of actual heat input except when burning NG or coke oven gas.

Applicable Compliance Method:

- i. To determine the actual PM emission rate for NG, the following equation shall be used:

$$E \text{ (lb/MMBtu)} = (1.9 \text{ lbs/1,000,000 scf}) \times (1 \text{ scf/1020 Btu*}) \times (1,000,000 \text{ Btu/1 MMBtu}) \times (1 \text{ MMscf/1,000,000 scf}) = 0.0018 \text{ lb/MMBtu}$$

where:

E = PM emission rate from NG, in lb/MMBtu;

1.9 lbs/1,000,000 scf = emission factor for filterable PM from burning NG, from AP42, Section 1.4 NG Combustion, Table 1.4-2, 7/98;

1 scf/1020 Btu* = the heat value of 1 scf of NG; and

1,000,000 Btu/1 MMBtu = conversion from Btu to MMBtu.

*or the most recent representative heating value during which compliance was demonstrated.

- ii. To determine the PM emission rate for coke oven gas, the permittee may use the emission factor of 0.012 lb PM/MMBtu from AP42, Section 12.5 Iron and Steel Production, Table 12.5-1, 10/86.
- iii. To determine the PM emission rate for number 6 fuel oil, the permittee may use the emission factor of $([9.19 \times (S)] + 3.22)$ lb PM/10³ gallons from AP42, Section 1.3 Fuel Oil Combustion, Table 1.3-1, 9/98.
- iv. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(9).

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-10(B)(1)]

c. Emissions Limitation:

PM emissions shall not exceed 0.13 lb/MMBtu of actual heat input when burning number 6 fuel oil or any mixture of number 6 fuel oil and other gaseous fuels.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation, while burning only number 6 fuel oil, in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(9).

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-10(C)(1)]

d. Emission Limitation:

SO₂ emissions shall not exceed 1.6 lbs/MMBtu of actual heat input.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission rate in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 6 or 6C and OAC rule 3745-18-04.

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-18-84(J)]

(2) The permittee shall conduct, or have conducted, emission testing for this EU in accordance with the following requirements:

- a. The emission testing shall be conducted during the ozone season control period prior to the expiration of the permit, except as otherwise specified in Section B.11.I)3)d.i. and ii. of this permit.
- b. The emission testing shall be conducted to demonstrate that the approved emission factor specified in Section B.11.I)1)b.iii. and iv. continues to be representative of current operating conditions for this NO_x budget unit.
- c. The emission testing shall be conducted stack testing within 90 days of permit issuance or resuming operation (during ozone season control period) whichever is

later to determine approvable COG/NG emission factor for ozone season as specified in B.11.l)1)b.iii.

- d. The test method(s) specified in Section B.11.l)3)d.iii. shall be employed to demonstrate that the approved emission factor continues to be representative of current operating conditions. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- e. During the emission testing, the EU shall be operated under operational conditions approved in advance by the Ohio EPA, Northeast District Office. Operational conditions that may need to be approved include, but are not limited to, the production rate and fuel. Testing shall be done under conditions most representative of normal operations. As part of the information provided in the "Intent to Test" notification form described below, the permittee shall provide a description of the EU operational conditions they will meet during the emissions testing and describe why they believe that most representative of normal operations will be met. Failure to test under the approved conditions may result in Ohio EPA not accepting the test results as a demonstration of compliance.
- f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the EU operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Northeast District Office's refusal to accept the results of the emission test(s).
- g. Personnel from the Ohio EPA, Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the EU and the testing procedures provide a valid characterization of the emissions from the EU and/or the performance of the control equipment.
- h. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Northeast District Office.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (3) If this EU does not combust COG for at least 50 percent of the average annual heat input during any 3 consecutive calendar years as provided in 40 CFR 63.7491(i), the permittee shall follow the testing requirements for this EU specified in 40 CFR Part 63, Subpart DDDDD, as follows:

40 CFR Part 63, Subpart DDDDD, Tables 2	Table 2 to the NESHAP contains the emission limits for existing boilers and the sampling volume or test run duration required for performance testing.
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40 CFR 63.7510(a); and 40 CFR 63.7530(a) and (b).	Initial compliance with 40 CFR Part 63, Subpart DDDDD shall be demonstrated through performance testing according to 40 CFR 63.7520 and Table 5; by conducting a fuel analysis for each type of fuel burned according to 40 CFR 63.7521 and Table 6; by establishing operating limits (Table 4) according to 40 CFR 63.7530 and Table 7; and/or by conducting CMS performance evaluations according to 40 CFR 63.7525 in conjunction with the stack test.
40 CFR 63.7530(b) and (c)	Where using fuel analyses to demonstrate compliance with HCl, Hg, or TSM limits, the maximum fuel pollutant input levels entering the boiler shall be established using the fuel type(s) or mixture(s) that has/have the highest content of each, Cl, Hg, and/or TSM. The maximum Cl, Hg, and/or TSM input (in lbs/MMBtu) shall be calculated as required in 40 CFR 63.7530(b) and the 90 th percentile confidence level pollutant concentration (in lbs/MMBtu) must be calculated as required in 40 CFR 63.7530(c).
40 CFR 63.7510(c); and 40 CFR 63.7525(a)	The initial compliance demonstration for CO includes a performance test conducted according to Table 5, or conduct a performance evaluation of your continuous CO CEM according to 63.7525(a).
40 CFR 63.7510(d); and 40 CFR 63.7525(b).	For each boiler having an average annual heat input greater than 250 MMBtu/hour that combusts solid fossil fuel or residual oil, the initial compliance demonstration for PM shall include a performance test in accordance with 40 CFR 63.7520 and Table 5.
40 CFR 63.7515(a) through (c).	Performance testing must be conducted on an annual basis in accordance with 40 CFR 63.7520 and completed no more than 13 months after the previous performance test. If after 2 consecutive years the emissions of a pollutant are at or below 75% of the emissions limit for that pollutant and there have been no changes to the boiler or control equipment (that could increase emissions), performance testing may revert to every 3 years, or no more than 37 months after the previous test, for the pollutant. If the pollutant exceeds 75% of the applicable limit in Table 2, testing reverts back to annual. The average operating load must be recorded during each performance test.
40 CFR 63.7515(e)	If fuel analysis is used to demonstrate compliance with the Hg, HCl, or TSM limits, a fuel analysis must be conducted monthly according to 40 CFR 63.7521 for each type of fuel burned that is subject to a limit in Table 2. A fuel analysis must be conducted for any new fuel before it is burned (if subject to a limit in the NESHP).



40 CFR 63.7520(a) through (c)	Performance tests must be conducted and a site-specific stack test plan developed according to 40 CFR 63.7 and Table 5; and operating limits must be established as identified in Table 7 to the NESHAP. The performance test must be conducted at representative operating load conditions while burning the fuel or mixture of fuels that contain the highest content of the pollutant being tested (this may require more than 1 performance test).
40 CFR 63.7520(d)	Each performance test shall include 3 separate test runs as specified in 40 CFR 63.7(e)(3) and each test run must comply with the minimum sampling time or volumes as specified in Tables 1 or 2 to the NESHAP.
40 CFR 63.7520(e)	The F-Factor methodology and equations found in Sections 12.2 and 12.3 of EPA Method 19 (in Appendix A of 40 CFR Part 60) shall be used to convert the measured PM, HCl, and Hg concentrations from the performance test to lbs/MMBtu heat input.
40 CFR 63.7521(a) through (e); and 40 CFR 63.7530(c).	Fuel analyses must be conducted to determine the concentration of chloride and Hg in each solid and liquid fuel and the concentration of Hg in each "gas 2 (other)"* fuel (excluding fuels used only for startup/shutdowns or transient flame stability) according to paragraphs 40 CFR 63.7521(a) through (e), Table 6 to the NESHAP, and the site-specific fuel monitoring plan. A fuel analysis from the supplier may be used to meet this requirement if they use the Methods identified in Table 6. The concentration of chlorine, Hg, and/or TSM must be in units of lbs/MMBtu of each composite sample, for each fuel type, and according to the procedures in Table 6 to the NESHAP.
40 CFR 63.7521(f) through (i) and 40 CFR 63.7530(g).	In order to demonstrate that a gaseous fuel qualifies as an "other gas 1 fuel"*, an initial fuel specification analyses must be conducted to determine the concentration of Hg in each gaseous fuel (excluding NG and refinery gas) according to the procedures in 40 CFR 63.7521 paragraphs (g) through (i), Table 6 to the NESHAP, and the site-specific fuel monitoring plan. The concentration of Hg must be in units of micrograms per cubic meter of each sample for each gas 1 fuel type*.
40 CFR 63.7530(b)(4) and 40 CFR Part 63, Subpart DDDDD, Table 4.	In order to establish the site-specific operating limits as required by 40 CFR 63.7530(b)(4) and Table 4 to Subpart DDDDD, the permittee shall collect and record the appropriate parameters for the control device, in accordance with Table 7 to the subpart, every 15 minutes during each performance test.
40 CFR 63.7521(a)	Gaseous and liquid fuels are exempt from composite sampling requirements in paragraphs (c) and (d) of this section.

40 CFR 63.7525(b)(5) through (8) and 40 CFR 63.7540(a)(9) and (19).	Where using PM CEMS to demonstrate continuous compliance with the PM limit, a performance evaluation of the CEMS shall be conducted in accordance with 40 CFR 60.8(e) and Performance Specification 11 at 40 CFR Part 60 Appendix B. PM and O ₂ or CO ₂ data shall be collected concurrently (or w/i a 60-minute period) by both the CEMS and Method 5, 5B, or 17. Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 2 at 40 CFR Part 60, Appendix F. Relative Response Audits must be performed annually and Response Correlation Audits must be performed every 3 years.
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[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart DDDDD]

g) Miscellaneous Requirements

(1) None.

4. B012, 469 MMBtu/hr No. 3 Boiler

Operations, Property and/or Equipment Description:

469 MMBtu/hr boiler fired with coke oven gas (COG) and/or natural gas. This boiler was acquired from BDM/RG Steel Warren on January 1, 2013. It was formerly known as RG Steel boiler (B004).

- a) The following EU terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

- b) Applicable Emissions Limitations and/or Control Requirements

- (1) The specific operation(s), property, and/or equipment that constitute each EU along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 02-486)	The PM emission limitation established pursuant to this rule for NG and coke oven gas is less stringent than the emission limitation established pursuant to OAC rule 3745-17-10(B)(1). The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-10(B)(1) and 40 CFR Part 60, Subpart D. SO ₂ emissions shall not exceed 0.20 lb/MMBtu of actual heat input. NO _x emissions shall not exceed 0.20 lb/MMBtu of actual heat input.
b.	OAC rule 3745-17-07(A)	The emission limitation established pursuant to this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60, Subpart D.
c.	OAC rule 3745-17-10(B)(1)	PM emissions shall not exceed 0.020 lb/MMBtu of actual heat input.
d.	40 CFR Part 60, Subpart D	Visible PE shall not exceed 20% opacity except for one 6-minute period per hour of not more than 27% opacity. The emission limitation established pursuant to this rule for PM emissions is less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3) and OAC rule 3745-17-10(B)(1).

		The emission limitation established pursuant to this rule for NO _x emissions is equivalent to the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	40 CFR 52.21 PSD permit #5-79-A-8	The emission limitations established pursuant to this rule for SO₂ and NO_x emissions are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3). The emission limitation established pursuant to this rule for PM emissions is equivalent to the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
f.	40 CFR Part 63, Subpart DDDDD NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters. [40 CFR Part 63, Subpart DDDDD does not apply to the extent this boiler acts as a control device to comply with 40 CFR Parts 60, 61, 63, or 65 and at least 50 percent of the average annual heat input was derived from COG, or any other regulated gas stream, during any 3 consecutive calendar years per 40 CFR 63.7491(i)]	This boiler combusts only NG and coke oven gas (COG) and therefore is not subject to any emission limitations specified in Table 2 of Subpart DDDDD. See b)(2)a.
g.	OAC rule 3745-14 NO _x Budget Program	See B.11 and d)(2), d)(3), d)(6) and e)(4).

(2) Additional Terms and Conditions

- a. If this EU does not combust COG for at least 50 percent of the average annual heat input during any 3 consecutive calendar years as provided in 40 CFR 63.7491(i), the permittee shall follow the additional terms and conditions for this EU specified in 40 CFR Part 63, Subpart DDDDD, as follows:

40 CFR 63.7500 (a)(1); 40 CFR 63.7495; 40 CFR 63.7510(e); and 40 CFR Part 63, Subpart DDDDD, Table 3.	For each existing Gas 1 boiler other than limited use units, a one-time energy assessment must be performed by a qualified energy assessor no later than the compliance date identified in 40 CFR 63.7495. The requirements for the energy assessment are identified in 40 CFR 63.7575 and Table 3.
40 CFR 63.7500(a)(1), (b), (e); 40 CFR 63.7495;	For each existing Gas 1 boiler, an initial tune-up must be completed no later

40 CFR 63.7510(e); 40 CFR 63.7515(d), (g); 40 CFR 63.7540(a)(10), (13); and 40 CFR Part 63, Subpart DDDDD, Table 3.	than the compliance date identified in 40 CFR 63.7495 unless the boiler is not in operation at that time, where a tune-up must be completed within 30 days after the re-start of the boiler. Following the initial compliance date, tune-ups must be conducted for each boiler within the applicable annual schedule as specified in 40 CFR 63.7500(a), (b), (e), 40 CFR 63.7540(a)(10), (13), and Table 3 to the subpart, unless alternative work practice standards are approved pursuant to 40 CFR 63.6(g). Each subsequent annual tune-up must occur no more than 13 months after the previous tune-up. If the boiler is not in operation at the time of its scheduled tune-up, the permittee is not required to perform the tune-up at that time but must complete the tune-up within 30 days after the re-start of the boiler.
40 CFR Part 63, Subpart DDDDD, Table 10	The applicability of the General Provisions in 40 CFR Part 63, Subpart A to boilers subject to Subpart DDDDD is identified in Table 10 to the subpart.

c) Operational Restrictions

- (1) The permittee shall burn only NG and coke oven gas in this EU.

[Authority for Term: OAC rule 3745-77-07(A)(1)]

- (2) If this EU does not combust COG for at least 50 percent of the average annual heat input during any 3 consecutive calendar years as provided in 40 CFR 63.7491(i), the permittee shall follow the operating requirements for this EU specified in 40 CFR Part 63, Subpart DDDDD, as follows:

40 CFR 63.7500(a)(3)	The boiler and associated air pollution control and monitoring equipment must be operated and maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions.
40 CFR 63.7540(a)(12)	Boilers in the Gas 1 subcategory may elect to install an oxygen trim system that maintains an optimum air-to-fuel ratio to reduce the frequency of required tune-ups to once every 5 years per 40 CFR 63.7540(a)(12).

[Authority for Term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart DDDDD]

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than NG or coke oven gas, the permittee shall maintain a record of the type and quantity of fuel burned in this EU.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall operate and maintain equipment to continuously monitor and record the NO_x emissions from this EU in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

Each continuous monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous NO_x monitoring system has been certified in accordance with 40 CFR Part 60. The letter of certification shall be made available to the Director upon request.

The permittee shall develop a written quality assurance/quality control plan for the continuous NO_x monitoring system designed to ensure continuous valid and representative readings of NO_x emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR Part 60, Appendix F or equivalent requirements under OAC Chapter 3745-14. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

The permittee shall maintain records of the following data obtained by the continuous NO_x monitoring system: emissions of NO_x in lb/MMBtu actual heat input (as an average over each hour of operation), lbs/hr (as an average over each hour of operation), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

The permittee shall maintain daily records of the total actual heat input values as determined through F-Factor and carbon dioxide/oxygen calculations as specified in 40 CFR Part 60, Appendix A, Method 19.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 60, Subpart D]

- (3) During periods of missing or inaccurate data for the records required to be collected and maintained in d)(2) above during the ozone season control period, the following procedures for data substitution shall be utilized as outlined in the permittee's Title V MPM application for Alternative NO_x Monitoring submitted March 2, 2020, pursuant to OAC rule 3745-14-08(H):

- a. Periods of missing or inaccurate data shall be estimated based on best available data, including hours of operation, load rates and/or available data from the previous and/or subsequent period.
- b. For the monthly heat content, the permittee shall use the arithmetic average of the values of the heat content immediately preceding and immediately following a missing or inaccurate data incident. If the "after" value is not available by the reporting deadline, the permittee shall utilize the "before" value for the missing or inaccurate data substitution.
- c. For the daily fuel usage, the permittee shall estimate the fuel usage based on all available process data (e.g. steam production and operating hours). Alternatively, the

permittee may use the maximum heat input capacity of the EU (B012), 469 MMBtu/hr, as the default substitution value for any periods of missing or inaccurate data.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-14-08(H)]

- (4) The permittee shall maintain records of all data necessary to determine the daily average H₂S content of the coke oven gas obtained by the continuous total reduced sulfur emissions monitoring system required for the desulfurization plant (EU P002).

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (5) The permittee shall maintain the following information each day for this EU when firing coke oven gas and the daily average concentration of H₂S in coke oven gas from the continuous total reduced sulfur emissions monitoring system is greater than 35 grains per 100 dscf of coke oven gas produced.
- a. amount of NG fired, in cubic feet/day;
 - b. amount of coke oven gas fired, in cubic feet/day;
 - c. determine the SO₂ emissions rate, in lb SO₂/MMBtu, using the equation in f)(1)c.ii to calculate the SO₂ emissions rate when firing only coke oven gas; and
 - d. determine the SO₂ emissions, in lb SO₂/MMBtu, using the equation in f)(1)c.iii to calculate the SO₂ emissions rate when firing a mixture of NG and coke oven gas.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (6) The permittee shall collect and maintain records of the following information for this EU during the ozone season control period (see NO_x Budget Program requirements in Section B.11.):

The permittee has the option to collect and record either of the options:

Option 1:

- a. stack flow rate monitor data that is collected simultaneously with the NO_x CEM data collected in d)(2) to determine lbs/hr (as an average over each hour);
- b. operating times of the NO_x Budget Unit; and
- c. the monthly NO_x emissions, in tons per month.

Option 2:

- a. the amount of each fuel combusted each day (MMcf/day);
- b. the amount of each fuel combusted each month (MMcf/month) determined by summing the daily fuel usage recorded in "a." for the calendar month;
- c. the monthly average heat content of each fuel (MMBtu/MMcf);
- d. the heat input for each fuel (MMBtu/month) determined by multiply "b. x c." for each fuel;
- e. the total combined heat input (MMBtu/month) determined by summing the heat input for each fuel;



- f. the monthly NO_x emissions, in tons per month, determined by multiplying “e.” by the corresponding NO_x CEM data in d)(2) and dividing by 2000 lbs/ton; and
- g. a copy of the supplier’s monthly fuel analysis for the gross calorific value (GCV) of the NG, as representative of the higher heating value (HHV).

During periods of missing or inaccurate data, the procedures for data substitution shall be utilized as outlined in the permittee’s Title V application for Alternative NO_x Monitoring submitted March 2, 2020, pursuant to OAC rule 3745-14-08(H), which includes to estimate NO_x emissions from periods of missing or inaccurate data by using best available data, including hours of operation, load rates and/or available data from the previous and/or subsequent period.

- (7) If this EU does not combust COG for at least 50 percent of the average annual heat input during any 3 consecutive calendar years as provided in 40 CFR 63.7491(i), the permittee shall follow the monitoring and/or record keeping requirements for this EU specified in 40 CFR Part 63, Subpart DDDDD, as follows:

40 CFR 63.7555(a), (g)-(h); 40 CFR 63.7560; and 40 CFR 63.10(b)(1).	The applicable records required by the NESHAP are identified in 40 CFR 63.7555(a), (g)-(h) and they must be kept for at least 5 years following the date of the record or report submitted. Records must be accessible from on-site for at least two years after the date of the record and may be located off-site for the remaining three years.
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[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart DDDDD]

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than NG and/or coke oven gas was burned in this EU. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify each period when the SO₂ emission rate exceeded 0.20 lb/MMBtu actual heat input and the SO₂ emission rate (lb/MMBtu) for each such day.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall submit reports following the end of each calendar quarter to the Ohio EPA, Northeast District Office documenting the date, commencement and completion time, duration, magnitude, reason (if known), and corrective actions taken (if any), of all 3-hour average NO_x emission values in excess of the applicable NO_x emission limitation (lb/MMBtu).

The reports shall also document any continuous NO_x monitoring system downtime while the EU was online (date, time, duration and reason), along with any corrective action(s) taken. The permittee shall provide the EU operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of EU and control equipment malfunctions. The total operating time of the EU and the total operating time of the analyzer while the EU was online shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for

each time period of monitoring system malfunction. The total operating time of the EU and the total operating time of the analyzer while the EU was online also shall be included in the quarterly report.

These quarterly excess emission reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall submit an annual report of the actual ozone season NO_x emissions, in tons, in accordance with Section B.11.l)3c. of this permit.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-14-08(H)]

- (5) If this EU does not combust COG for at least 50 percent of the average annual heat input during any 3 consecutive calendar years as provided in 40 CFR 63.7491(i), the permittee shall follow the reporting requirements for this EU specified in 40 CFR Part 63, Subpart DDDDD, as follows:

40 CFR 63.7495(d); 40 CFR 63.7530(e)-(g); and 40 CFR 63.7545.	The notification requirements identified in 40 CFR 63.7(b), (c), 40 CFR 63.8(e), (f)(4), (6), 40 CFR 63.9(b)-(h), (j), 40 CFR 63.7545, and 40 CFR 63.7530(e)-(g), as applicable, shall be submitted to the Ohio EPA, Northeast District Office no later than the date identified in 40 CFR 63.7545.
40 CFR 63.7550(a)-(b); and 40 CFR Part 63, Subpart DDDDD, Table 9.	The owner/operator must submit each compliance report identified in Table 9 to the NESHAP that is applicable to the boiler, according to the requirements identified in 40 CFR 63.7550(b). The first annual or 5-year compliance report must be postmarked or delivered no later than January 31. Each subsequent compliance report must be submitted in accordance with the same applicable schedule and cover the applicable 1- or 5-year periods from January 1 to December 31.
40 CFR 63.7550(c), (h)	The information identified in 40 CFR 63.7550(c)(1), (c)(5)(i)-(iv), (xiv) shall be submitted in accordance with 40 CFR 63.7550(h).

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart DDDDD]

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

SO₂ emissions shall not exceed 0.20 lb/MMBtu of actual heat input on a daily average basis.

Applicable Compliance Method:

- i. To determine the actual SO₂ emission rate from burning NG, the following equation shall be used:

$$E \text{ (lb/MMBtu)} = (0.6 \text{ lb/1,000,000 scf})(1 \text{ scf/1020 Btu}^{***})(1,000,000 \text{ Btu/1 MMBtu}) = 0.00059 \text{ lb/MMBtu}$$

where:

E = SO₂ emission rate from burning NG, in lb/MMBtu;

0.6 lb/1,000,000 scf = emission factor for SO₂ from burning NG from AP-42, Section 1.4, NG Combustion, Table 1.4-2, 7/98; and

2 scf/1020 Btu *** = the heat value of 1 scf of NG.

*** Or the most recent representative heating value during which compliance was demonstrated.

- ii. To determine the actual SO₂ emission rate from burning COG, the following equation shall be used:

$$E \text{ (lb/MMBtu)} = (\text{H}_2\text{S content})(1 \text{ lb/7000 grains})(64 \text{ SO}_2/34 \text{ H}_2\text{S})(1 \text{ scf/532 Btu}^{***})(1,000,000 \text{ Btu/1 MMBtu})$$

where:

E = SO₂ emission rate from burning COG, in lb/MMBtu;

H₂S content = grains of H₂S in 100 dscf of COG (gr H₂S/100 dscf) for coke oven gas obtained from monitoring data in d)(4) of these terms and conditions;

1 lb/7000 grains = conversion of grains to pounds;

64 SO₂/34 H₂S = the ratio of grams per mole of SO₂ to grams per mole of H₂S;

1 scf/532 Btu = the heat value of 1 scf of COG; and

1,000,000 Btu/1 MMBtu = conversion from Btu to MMBtu.

*** Or the most recent representative heating value during which compliance was demonstrated.

- iii. To determine the actual SO₂ emission rate from burning a mixture of NG and COG, the following equation shall be used:

$$E \text{ (lb/MMBtu)} = (A*B + C*D*F)/[(G*B + H*F)*I]$$

where:

E = SO₂ emission rate from burning a mixture of NG and COG, in lb/MMBtu;

A = 0.6 lb/1,000,000 scf (emission factor for SO₂ from burning NG from AP-42, Section 1.4, NG Combustion, Table 1.4-2, 7/98);

B = amount of NG fired, in cubic feet/day;

C = grains of H₂S in 100 dscf of COG (gr H₂S/100 dscf) for coke oven gas obtained from monitoring data in d)(4) of these terms and conditions;

D = (1 lb/7000 grains)*(64 SO₂/34 H₂S);

F = amount of coke oven gas fired, in cubic feet/day;

$G = 1020 \text{ Btu}/1 \text{ scf}$ *** (the heat value of 1 scf of NG);

$H = 532 \text{ Btu}/1 \text{ scf}$ *** (the heat value of 1 scf of COG); and

$I = 1 \text{ MMBtu}/1,000,000 \text{ Btu}$ (conversion from Btu to MMBtu).

*** Or the most recent representative heating value during which compliance was demonstrated.

- iv. If required, the permittee shall demonstrate compliance with this emission rate while burning COG in accordance with 40 CFR Part 60, Appendix A, Methods 6 and 6C and the procedures in OAC rule 3745-18-04.

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3)]

b. Emissions Limitation:

NO_x emissions shall not exceed 0.20 lb/MMBtu of actual heat input.

Applicable Compliance Method:

The data from the continuous NO_x monitoring system shall be used to demonstrate compliance with the lb/MMBtu emission limitation.

If required, the permittee shall demonstrate compliance with this emission rate in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 7E.

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3)]

c. Emissions Limitation:

PM emissions shall not exceed 0.020 lb/MMBtu of actual heat input.

Applicable Compliance Method:

- i. To determine the actual PM emission rate from burning NG, the following equation shall be used:

$$E \text{ (lb/MMBtu)} = (1.9 \text{ lbs}/10^6 \text{ scf}) \times (1 \text{ scf}/1020 \text{ Btu}^*) \times (1,000,000 \text{ Btu/MMBtu}) \times (1 \text{ MMscf}/1,000,000 \text{ scf}) = 0.0018 \text{ lb/MMBtu}$$

where:

E = PM emission rate from burning NG, in lb/MMBtu;

$1.9 \text{ lbs}/10^6 \text{ scf}$ = emission factor for filterable particulate material from burning NG from AP42, Section 1.4 NG Combustion, Table 1.4-2, 7/98;

$1 \text{ scf}/1020 \text{ Btu}^*$ = the heat value of 1 scf of NG; and

$1,000,000 \text{ Btu}/1 \text{ MMBtu}$ = conversion from Btu to MMBtu.

*or the most recent representative heating value during which compliance was demonstrated.

- ii. To determine the PM emission rate for coke oven gas, the permittee may use the emission factor of 0.012 lb particulate/MMBtu from AP42, Section 12.5 Iron and Steel Production, Table 12.5-1, 10/86.
- iii. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(9).



[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-10(B)(1)]

d. Emissions Limitation:

Visible PE shall not exceed 20% opacity except for one 6-minute period per hour of not more than 27% opacity.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 60 Subpart D]

g) Miscellaneous Requirements

(1) None.

5. B901, No. 4 Coke oven battery

Operations, Property and/or Equipment Description:

No. 4 Coke oven battery, including charging operations, offtake systems, topside lids, coke oven doors, pushing operations, bypass bleeder flares, collection mains and combustion stack.

- a) The following EU terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

- b) Applicable Emissions Limitations and/or Control Requirements

- (1) The specific operation(s), property, and/or equipment that constitute each EU along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Charging Operations:

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	40 CFR Part 63, Subpart L [40 CFR Part 63.302(a)(3)(v)] 12/5/2024 Final rule: 40 CFR Part 63, Subpart L [40 CFR Part 63.302(a)(4)(v)] (Pursuant to the presidential proclamation 10993 of November 21, 2025: these emissions limitations and related reporting requirements are exempt from compliance for a period of 2 years beyond the regulatory deadline of July 7, 2025.)	On and after July 14, 2005: During charging operations, visible PE shall not exceed 12 seconds per charge over 5 consecutive charges as a logarithmic 30-day rolling average, as determined by the procedures in f)(1)d of these terms and conditions, except as provided by rule within Method 303. On and after July 7, 2027: During charging operations, visible PE shall not exceed 12 seconds per charge over 5 consecutive charges as a logarithmic 30-day rolling average, as determined by the procedures in f)(1)d of these terms and conditions, except as provided by rule within Method 303. See b)(2)b.
b.	OAC rule 3745-31-05 (PTI 02-171)	The emission limitation specified in the PTI is less stringent than the emission limitation specified in 40 CFR Part 63, Subpart L [40 CFR Part 63.304(b)(2)(iv)]. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-08(B).
c.	OAC rule 3745-17-07(B)(2)(a)	The emission limitation specified by this rule is less stringent than the visible PE



		limitation specified in 40 CFR Part 63, Subpart L [40 CFR Part 63.304(b)(2)(iv)].
d.	OAC rule 3745-17-08(B)	The permittee shall employ RACM that are sufficient to minimize or eliminate VE of fugitive dust from the charging operations. See b)(2)b.i.
e.	40 CFR Part 52.21 PSD Permit No. EPA-5-77-A-9	The emission limitation specified in the PSD permit is less stringent than the emission limitation specified in 40 CFR Part 63, Subpart L [40 CFR Part 63.304(b)(2)(iv)].

Offtake Systems:

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
f.	40 CFR Part 63, Subpart L [40 CFR Part 63.302(a)(3)(iv)] 12/5/2024 Final rule: 40 CFR Part 63, Subpart L [40 CFR Part 63.302(a)(4)(iv)] (Pursuant to the presidential proclamation 10993 of November 21, 2025: these emissions limitations and related reporting requirements are exempt from compliance for a period of 2 years beyond the regulatory deadline of July 7, 2025.)	On and after July 14, 2005: There shall be no visible PE from more than 2.5 percent of the offtake systems as a 30-day rolling average, as determined by the procedures in f)(1)e of these terms and conditions, except as provided by rule within Method 303. On and after July 7, 2027: There shall be no visible PE from more than 2.1 percent of the offtake systems as a 30-day rolling average, as determined by the procedures in f)(1)e of these terms and conditions, except as provided by rule within Method 303. See b)(2)b.
g.	OAC rule 3745-31-05 (PTI 02-171)	The emission limitation specified in the PTI is less stringent than the emission limitation specified in 40 CFR Part 63, Subpart L [40 CFR Part 63.304(b)(2)(iii)]. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-08(B).
h.	OAC rule 3745-17-07(B)(2)(b)	The emission limitation specified by this rule is less stringent than the visible emission limitation specified in 40 CFR Part 63, Subpart L [40 CFR Part 63.304(b)(2)(iii)].
i.	OAC rule 3745-17-08(B)	The permittee shall employ RACM that are sufficient to minimize or eliminate VE of fugitive dust from the offtake systems. See b)(2)b.ii.

j.	40 CFR Part 52.21 PSD Permit No. EPA-5-77-A-9	The emission limitation specified in the PSD permit is less stringent than the emission limitation specified in 40 CFR Part 63, Subpart L [40 CFR Part 63.304(b)(2)(iv)].
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Topside Lids:

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
k.	40 CFR Part 63, Subpart L [40 CFR Part 63.30 2(a)(3)(iii)] 12/5/2024 Final rule: 40 CFR Part 63, Subpart L [40 CFR Part 63.304(a)(4)(iii)] (Pursuant to the presidential proclamation 10993 of November 21, 2025: these emissions limitations and related reporting requirements are exempt from compliance for a period of 2 years beyond the regulatory deadline of July 7, 2025.)	On and after July 14, 2005: There shall be no visible PE from more than 0.4 percent of the topside lids systems as a 30-day rolling average, as determined by the procedures in f)(1)e of these terms and conditions, except as provided by rule within Method 303. On and after July 7, 2027: There shall be no visible PE from more than 0.32 percent of the topside lids systems as a 30-day rolling average, as determined by the procedures in f)(1)e of these terms and conditions, except as provided by rule within Method 303. See b)(2)b.
l.	OAC rule 3745-31-05 (PTI 02-171)	The emission limitation specified in the PTI is less stringent than the emission limitation specified in 40 CFR Part 63, Subpart L [40 CFR Part 63.304(b)(2)(ii)]. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-08(B).
m.	OAC rule 3745-17-07(B)(2)(c)	The emission limitation specified by this rule is less stringent than the visible emission limitation specified in 40 CFR Part 63, Subpart L [40 CFR Part 63.304(b)(2)(ii)].
n.	OAC rule 3745-17-08(B)	The permittee shall employ RACM that are sufficient to minimize or eliminate VE of fugitive dust from the topside lids. See b)(2)b.iii.
o.	40 CFR Part 52.21 PSD Permit No. EPA-5-77-A-9	The emission limitation specified in the PSD permit is less stringent than the emission limitation specified in 40 CFR Part 63, Subpart L [40 CFR Part 63.304(b)(2)(ii)].

Coke Oven Doors:

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
p.	40 CFR Part 63, Subpart L [40 CFR Part 63.304(b)(3)(ii)] 12/5/2024 Final rule: 40 CFR Part 63, Subpart L [40 CFR Part 63.302(a)(4)(ii)] (Pursuant to the presidential proclamation 10993 of November 21, 2025: these emissions limitations and related reporting requirements are exempt from compliance for a period of 2 years beyond the regulatory deadline of July 7, 2025.)	On and after January 1, 2010: There shall be no visible PE from more than 3.3 percent of the coke oven doors systems as a 30-day rolling average, as determined by the procedures in f)(1)e of these terms and conditions, except as provided by rule within Method 303. On and after July 7, 2027: There shall be no visible PE from more than 3.2 percent of the coke oven doors systems as a 30-day rolling average, as determined by the procedures in f)(1)e of these terms and conditions, except as provided by rule within Method 303. See b)(2)b.
q.	OAC rule 3745-31-05 (PTI 02-171)	The emission limitation specified in the PTI is less stringent than the emission limitation specified in 40 CFR Part 63, Subpart L [40 CFR Part 63.304(b)(3)(ii)]. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-08(B).
r.	OAC rule 3745-17-07(B)(2)(d)	The emission limitation specified by this rule is less stringent than the visible emission limitation specified in 40 CFR Part 63, Subpart L [40 CFR Part 63.304(b)(3)(ii)].
s.	OAC rule 3745-17-08(B)	The permittee shall employ RACM that are sufficient to minimize or eliminate VE of fugitive dust from the coke oven doors. See b)(2)b.iv.
t.	40 CFR Part 52.21 PSD Permit No. EPA-5-77-A-9	The emission limitation specified in the PSD permit is less stringent than the emission limitation specified in 40 CFR Part 63, Subpart L [40 CFR Part 63.304(b)(3)(ii)].

Pushing Operations:

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
u.	OAC rule 3745-31-05 (PTI 02-171)	Emissions from pushing operations shall not exceed 0.030 pound of PE per ton of coke pushed for not less than ninety percent



	For mobile scrubber exhaust	of the total emissions during the pushing operation.
v.	OAC rule 3745-17-07(B)(2)(e)	Visibles PE of fugitive dust during the pushing operations shall not exceed an average of 20% opacity read above the battery top. The duration of a pushing operation shall commence with the moving (or pushing) of the coke mass from an oven and shall conclude when the quench car enters the quench tower, except as provided by rule.
w.	OAC rule 3745-17-08(B)	The fugitive PE limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
x.	40 CFR Part 52.21 PSD Permit No. EPA-5-77-A-9	The requirements established in the PSD permit are equivalent to the requirements established pursuant to OAC rule 3745-31-05.
y.	40 CFR Part 63, Subpart CCCCC [40 CFR Part 63.7291]	The permittee shall meet each work practice standard for fugitive pushing emissions from the by-products coke oven battery with vertical flues. See d)(5).
z.	12/5/2024 Final rule: 40 CFR Part 63, Subpart CCCCC [40 CFR Part 63.7290(a)(4)] [40 CFR Part 63.7290(b)] [40 CFR Part 63.7290(c)] [40 CFR Part 63.7290(d)] [40 CFR Part 63.7290(e)] (Pursuant to the presidential proclamation 10993 of November 21, 2025: these emissions limitations and	On or after January 5, 2028: PM emissions from the exhaust of the mobile scrubber during pushing operations shall not exceed 0.04 lb/ton coke. On or after January 5, 2028: Hg emissions from the exhaust of the mobile scrubber during pushing operations shall not exceed 8.9E-7 lb/ton coke. On or after January 5, 2028: total acid gases from the exhaust of the mobile scrubber during pushing operations shall not exceed 0.013 lb/ton coke. On or after January 5, 2028: hydrogen cyanide from the exhaust of the mobile scrubber during pushing operations shall not exceed 0.0015 lb/ton coke. On or after January 5, 2028: polycyclic aromatic hydrocarbons (PAH) from the exhaust of the mobile scrubber during pushing operations shall not exceed 4.0E-4 lb/ton coke. See b)(2)b.



	related reporting requirements are exempt from compliance for a period of 2 years beyond the regulatory deadline of January 5, 2026.)	The PM emission limitation specified by this rule is less stringent than the PM emission limitation specified in OAC rule 3745-31-05(A)(3).
aa.	40 CFR 63.1 – 63.15 (40 CFR 63.7350)	Table 1 to Subpart CCCCC of 40 CFR Part 63 – Applicability of General Provisions to Subpart CCCCC shows which parts of the General Provisions in 40 CFR 63.1 – 63.15 apply.

Bypass Bleeder Flares:

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
bb.	40 CFR Part 63, Subpart L [40 CFR Part 63.307(c)]	The emergency bypass bleeder flare shall be operated with no VE, except for periods not to exceed 5 minutes during any 2 consecutive hours.

By-product coke oven battery stack (combustion stack):

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
cc.	OAC rule 3745-31-05 (PTI 02-171)	PM emissions from the combustion stack shall not exceed 0.030 grain per standard cubic foot of exhaust gases. The H ₂ S limit established in this PTI is less stringent than the H ₂ S limit established in PSD Permit No. EPA-5-77-A-9.
dd.	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the visible PE limitation established pursuant to pursuant to 40 CFR Part 63, Subpart CCCCC.
ee.	OAC rule 3745-17-10(C)(1)	The emission limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05(A)(3).
ff.	40 CFR Part 63, Subpart CCCCC [40 CFR 63.7296(a) and (b)]	Visible PE from the battery stack shall not exceed a daily average of 15% opacity on a normal coking cycle. Visible PE from the battery stack shall not exceed a daily average of 20% opacity for a battery on battery-wide extended coking.
gg.	12/5/2024 Final rule: 40 CFR Part 63, Subpart CCCCC [40 CFR Part 63.7296(c)]	On or after January 5, 2028: PM emissions from the combustion stack shall not exceed 0.13 grain per standard cubic foot of exhaust gases at 10 percent oxygen. On or after January 5, 2028: Hg emissions



	[40 CFR Part 63.7296(d)] [40 CFR Part 63.7296(e)] [40 CFR Part 63.7296(f)] (Pursuant to the presidential proclamation 10993 of November 21, 2025: these emissions limitations and related reporting requirements are exempt from compliance for a period of 2 years beyond the regulatory deadline of January 5, 2026.)	from the combustion stack shall not exceed 4.5E-5 lb/ton coke. On or after January 5, 2028: total acid gases from the combustion stack shall not exceed 0.16 lb/ton coke. On or after January 5, 2028: hydrogen cyanide emissions from the combustion stack shall not exceed 0.032 lb/ton coke. See b)(2)b.
hh.	40 CFR 63.1 – 63.15 (40 CFR 63.7350)	Table 1 to Subpart CCCCC of 40 CFR Part 63 – Applicability of General Provisions to Subpart CCCCC shows which parts of the General Provisions in 40 CFR 63.1 – 63.15 apply.
ii.	OAC rule 3745-18-06	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A).
jj.	40 CFR Part 52.21 PSD Permit No. EPA-5-77-A-9	No coke-oven gas from battery number 4 shall be burned unless it contains a concentration of sulfur compounds, expressed as H₂S, of less than 35 grains per 100 dscf of coke-oven gas produced. Included in this concentration are all sulfur compounds, expressed as H₂S, emitted from sulfur recovery equipment used to process the sulfur compounds removed from coke-oven gas. The PM limitation for the combustion stack established in the PSD permit No. EPA-5-77-A-9 is equivalent to the PM limitation established in PTI 02-171.

(2) Additional Terms and Conditions

- a. The permittee shall minimize or eliminate visible fugitive PE through the employment of RACM:
 - i. staged charging with a double collection main during charging operations;
 - ii. mechanical gooseneck cleaners for topside lids;
 - iii. magnetic lid lifters for topside lids; and



- iv. self-sealing doors and mechanical doors and jamb cleaners for coke oven doors.

Nothing in this paragraph shall prohibit the permittee from employing other equally effective control measures in addition to, or in lieu of, to ensure compliance.

- b. Pursuant to the presidential proclamation 10993 of November 21, 2025, this facility is exempt from the following requirements for a period of two years beyond the relevant compliance dates in the Coke Oven Rule, 89 FR 55684, published on July 5, 2024. The facility shall comply with emissions and compliance obligations under applicable standard(s) that existed prior to the Coke Oven Rule.

Exempted requirements:

- i. Fenceline monitoring, root and corrective action, and related reporting requirements (see 40 CFR 63.314 and 63.311(j) through (l));
 - ii. Limits on leaks from coke oven battery doors, lids, and offtakes and related reporting requirements (see 40 CFR 63.302(a)(4), 63.302(d), 63.304(b)(8), and 63.311 (h) through (i)); and
 - iii. New MACT and work practice standards for coke oven pushing and battery stacks and related performance testing and reporting requirements (see 40 CFR 63.7283(d), 63.7290, 63.7296(c) through (f), 63.7300(c)(4), 63.7320(a), 63.7321, 63.7333, and 63.7341(f)).
- c. Pursuant to 40 CFR Part 63, Subpart CCCCC, the permittee shall comply with the following additional terms and conditions for general compliance requirements and other requirements within this standard as applicable:

63.7310(a)	You must be in compliance with the emission limitations, work practice standards, operation and maintenance requirements in this subpart at all times. At all times, you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and
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	maintenance records, and inspection of the source.
63.7350	The applicability of the General Provisions in 40 CFR Part 63, Subpart A to units subject to Subpart CCCCC is identified in Table 1 to the subpart.

c) Operational Restrictions

- (1) The permittee shall comply with the applicable operation and maintenance requirements for the EU as specified in 40 CFR Part 63, Subpart L, including the following:
- a. In accordance with the requirements of 40 CFR Part 63.307, the emergency bypass bleeder flare shall comply with the following requirements:
 - i. the flare shall be able to control 120% of the normal gas flow generated by the battery;
 - ii. the flare shall be steam-assisted and shall be designed for a net heating value of 240 Btu/scf;
 - iii. the flare shall be operated with a continuously operable pilot flame monitored by a thermocouple (or equivalent device); and
 - iv. coke oven emissions shall not be vented to the atmosphere through the bypass bleeder stack, except through the flare system.
 - b. In accordance with 40 CFR Part 63.306, the permittee shall implement the work practice plan (see section d)(3)) for each emissions point, following the second independent exceedance of the visible emission limitation for the emission point in any consecutive 6-month period, by no later than 3 days after the receipt of written notification of the second such exceedance from the certified observer. The permittee shall continue to implement such plan provisions until the visible emission limitation for the emission point is achieved for 90 consecutive days.

[Authority for Term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart L]

- (2) The permittee shall comply with the applicable operation and maintenance requirements for this EU as required by 40 CFR Part 63, Subpart CCCCC, including the following, as applicable:

63.7323(b)	For a hot water scrubber applied to pushing emissions from a coke oven battery, establish site-specific operating limits for water pressure and water temperature according to the procedures in 40 CFR 63.7323(b)(1) and (2).
63.7290(f)(2), 63.7333(c)(1)	For each hot water scrubber applied to pushing emissions, you must maintain the daily average water pressure and water temperature at levels no lower than those established during the initial or subsequent performance test.
63.7323(c)	For a capture system applied to pushing emissions from a coke oven battery,



	establish a site-specific operating limit according to the procedures in 40 CFR 63.7323(c)(1), (2), or (3).
63.7290(f)(3), 63.7333(e)(1)(i), 63.7333(e)(2)(i) and 63.7333(e)(3)(i)	For each capture system applied to pushing emissions and subject to the operating limit in 63.7290(f)(3), you must demonstrate continuous compliance by meeting the requirements in paragraph (e)(1), (2), or (3) of this section: If you elect the operating limit for volumetric flow rate in 63.7290(f)(3): maintaining the daily average volumetric flow rate at the inlet of the control device at or above the minimum level established during the initial or subsequent performance test; or If you elect the operating limit for the fan motor amperages in 63.7290(f)(3)(i): maintaining the daily average fan motor amperages at or above the minimum level established during the initial or subsequent performance test; or If you elect the operating limit for static pressure or fan revolutions per minute (RPM) in 63.7290(f)(3)(ii): maintaining the daily average static pressure at the inlet to the control device at an equal or greater vacuum than established during the initial or subsequent performance test or the daily average fan RPM at or above the minimum level established during the initial or subsequent performance test.
63.7323(e)	You may change the operating limit for a capture system or mobile control device that captures emissions during pushing if you meet the requirements in 40 CFR 63.7323(e)(1) through (3).
63.7300(a)	As required by 63.7310(a), you must always operate and maintain your affected source, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.
63.7300(b), 63.7335(a)	Prepare and operate at all times according to a written operation and maintenance plan for the general operation and

	maintenance of the existing by-product coke oven batteries, addressing at a minimum the elements in 40 CFR 63.7300(b)(1) through (6).
63.7300(c)	Prepare and operate at all times according to a written operation and maintenance plan for each capture system and control device applied to pushing emissions from an existing coke oven battery, addressing at a minimum the elements in 40 CFR 63.7300(c)(1) through (4), as applicable.

[Authority for Term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart CCCCC]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall satisfy the H₂S monitoring and/or recordkeeping requirements for this EU through the H₂S monitoring and/or recordkeeping requirements established in this permit in sections d)(1), d)(2), d)(4) and d)(5) of EU P002.
- (2) The permittee shall comply with the applicable monitoring and record keeping requirements for this EU as required by 40 CFR Part 63, Subpart L, including the following:
 - a. VE performance test for the collecting mains:
 - i. The collecting mains shall be inspected at least daily for leaks in accordance with procedures in U. S. EPA Method 303 in Appendix A of 40 CFR Part 63.
 - ii. The permittee shall record the time and date each collecting main leak is first observed, the time and date the collecting main leak is temporarily sealed, and the time and date of repair. Any leak in the collecting main shall be temporarily sealed as soon as possible after detection, but no later than 4 hours after detection of the leak. The permittee shall initiate a collecting main repair as expeditiously as possible, but no later than 5 calendar days after initial detection of the leak. The repair shall be completed within 15 calendar days after initial detection of the leak unless an alternative schedule is approved by the Administrator.
 - b. Pressure performance test conducted by certified observer for the collecting mains:
 - i. After each VE performance test for the coke oven doors, topside lids, offtake systems and charging operations are completed for the by-product coke oven battery, the certified observer shall check and record the collecting main pressure(s) according to the procedures in Section 6.3 of Method 303 in Appendix A of 40 CFR Part 63.
 - ii. The permittee shall demonstrate pursuant to Method 303 the accuracy of the pressure measurement device upon request of the certified observer. The permittee shall not adjust the pressure to a level below the range of normal operation during or prior to the inspection.
 - c. VE performance tests for offtake systems, topside lids and oven doors:
 - i. A certified observer shall conduct one run each day (seven days per week) to observe and record visible emissions from each coke oven door, topside lid and offtake system in accordance with the procedures and requirements of

Method 303 in Appendix A of 40 CFR Part 63. The certified observer may perform additional VE performance tests (runs) as needed to obtain and record a visible emissions value (or set of values) for an emission point that is valid under U. S. EPA Method 303 in Appendix A of 40 CFR Part 63.

In no case shall the permittee knowingly block a coke oven door, or any portion of a door for the purpose of concealing emissions or preventing observations by the certified observer.

The VE performance test shall be based on representative performance (i.e., performance based on the entire range of normal operating conditions) of the affected by-products coke oven battery for the period being tested. Representative conditions exclude periods of startup and shutdowns. VE performance tests shall not be conducted during periods of malfunction. [12/5/2025 Final rule]

Process information shall be recorded by the certified observer during the VE performance test that is necessary to document operating conditions during the test and include in such a record an explanation to support that such conditions represent the entire range of normal operations, including operational conditions for maximum emissions if such emissions are not expected during maximum production. Such records shall be made available as may be necessary to determine the conditions of the VE performance tests. [12/5/2025 Final rule]

- ii. For each day on which a valid visible emission observation is obtained for the offtake systems, the certified observer shall calculate and record the daily 30-day rolling average for the offtake systems using these data and the 29 previous valid daily observations.
 - iii. For each day on which a valid visible emission observation is obtained for the topside lids, the certified observer shall calculate and record the daily 30-day rolling average for the topside lids using these data and the 29 previous valid daily observations.
 - iv. For each day on which a valid visible emission observation is obtained for the coke oven doors, the certified observer shall calculate and record the daily 30-day rolling average for the coke oven doors using these data and the 29 previous valid daily observations.
- d. VE performance test for charging operations:
- i. A VE performance test shall be conducted by a certified observer each day (7 days per week) to observe and record visible emissions per charge for 5 consecutive charges from charging operations in accordance with the procedures and requirements of Method 303 in Appendix A of 40 CFR Part 63. The observer may perform additional readings as needed to obtain and record a VE value (or set of values) for an emission point that is valid under U.S. EPA Method 303 in Appendix A of 40 CFR Part 63. Observations from fewer than 5 consecutive charges shall constitute a valid set of charging operations only in accordance with the procedures and conditions specified in Sections 11.1.8 and 11.1.9 of U. S. EPA Method 303 in Appendix A of 40 CFR Part 63.

The VE performance test shall be based on representative performance (i.e., performance based on the entire range of normal operating conditions) of the affected by-products coke oven battery for the period being tested. Representative conditions exclude periods of startup and shutdowns. VE performance tests shall not be conducted during periods of malfunction. [12/5/2025 Final rule]

Process information shall be recorded by the certified observer during the VE performance test that is necessary to document operating conditions during the test and include in such a record an explanation to support that such conditions represent the entire range of normal operations, including operational conditions for maximum emissions if such emissions are not expected during maximum production. Such records shall be made available such records as may be necessary to determine the conditions of the VE performance tests. [12/5/2025 Final rule]

- ii. For each day on which a valid daily set of visible emission observations is obtained for the charging operations, the certified observer shall calculate and record the daily 30-day rolling log average of seconds of VE from the charging operations using these data and the 29 previous valid daily sets of observations.
- e. VE performance tests for offtake systems, topside lids, oven doors and charging operations:
- i. If a valid VE value (or set of values) is not obtained for a performance test, there is no compliance determination for that day. Compliance determinations will resume on the next day that a valid VE value (or set of values) is obtained.
 - ii. The certified observer shall complete any reasonable safety training program offered by the permittee prior to conducting any performance test at a coke oven battery.
 - iii. The certified observer shall make available to the Ohio EPA, Northeast District Office, as well as to the permittee, a copy of the daily inspection results by the end of the day and shall make available the calculated daily 30-day rolling log average of seconds of VE from charging operations and the calculated daily 30-day rolling averages of VE from the coke oven doors, topside lids, and offtake systems to the owner or operator as soon as practicable following each performance test. The information provided by the certified observer is not a compliance determination. For the purpose of notifying a permittee of the results obtained by a certified observer, the person does not have to be certified.
 - iv. Compliance shall not be determined more often than the schedule provided for performance tests in these terms and conditions. If additional valid emissions observations are obtained (or in the case of charging, valid sets of emission observations), the arithmetic average of all values (or valid sets of values) obtained during the day shall be used in any computation performed

to determine compliance under f)(1)d through f)(1)f or d)(2) of these terms and conditions.

- v. No observations obtained during any program for training or for certifying observers for U.S. EPA Method 303 shall be used to determine compliance with the requirements of these terms and conditions.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart L]

- (3) The permittee shall maintain a written emission control work practice plan for the coke battery. In accordance with the requirements of Section 63.306 of 40 CFR Part 63, Subpart L, the plan shall be designed, implemented, and maintained to achieve compliance with the visible emission limitations for coke oven doors, topside lids, offtake systems and charging operations. The permittee shall organize the work practice plan so that the subjects required in accordance with d)(3)a through d)(3)e are clearly addressed.

- a. The work practice plan shall include procedures for initial and refresher training for all plant personnel and contractors with responsibilities that impact emissions. The training program shall include:
 - i. a list, by job title, of personnel that are required to be trained and the emission points associated with each job title;
 - ii. an outline of the subjects to be covered in the initial and refresher training for each group of personnel;
 - iii. a description of the training methods that will be used;
 - iv. a statement of the duration of initial training and the duration and frequency of refresher training;
 - v. a description of the methods used to demonstrate and document successful completion of the training program; and
 - vi. a description of the procedure to be used to document performance of plan requirements pertaining to daily operation of the coke oven battery including a copy of the form(s), if applicable, as required under the plan provisions implementing d)(3)f.
- b. The work practice plan shall include procedures for controlling emissions from oven doors including the following:
 - i. a program for the inspection, adjustment, repair, and replacement of coke oven door jambs, and any other equipment for controlling emissions from coke oven doors, including a defined frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances;
 - ii. procedures for identifying leaks that indicate a failure of the emissions control equipment to function properly, including a clearly defined chain of command for communicating information on leaks and procedures for corrective action;
 - iii. procedures for cleaning all sealing surfaces of each door and jamb, including identification of the equipment that will be used and a specified schedule or frequency for the cleaning of sealing surfaces;

- iv. for batteries equipped with self-sealing doors, procedures for the use of supplemental gasketing and luting materials, if the permittee elects to use such procedures as part of the program to prevent exceedances;
 - v. for batteries equipped with hand-luted doors, procedures for luting and reluting, as necessary, to prevent exceedances;
 - vi. procedures for maintaining an adequate inventory of the number of spare coke oven doors and jambs located on site; and
 - vii. procedures for monitoring and controlling collecting main back pressure, including corrective actions if pressure control problems occur.
- c. The work practice plan shall include procedures for controlling emissions from charging operations including the following:
 - i. procedures for equipment inspection, including the frequency of inspections, and the replacement or repair of equipment controlling emissions from charging, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances;
 - ii. procedures for ensuring that the larry car hoppers are filled properly with coal;
 - iii. procedures for the alignment of the larry car over the oven to be charged;
 - iv. procedures for filling the oven;
 - v. procedures for ensuring the coal is leveled properly in the oven; and
 - vi. procedures and schedules for inspection and cleaning of offtake systems, oven roofs, charging holes, topside lids, the steam supply system, and liquor sprays.
- d. The work practice plan shall include procedures for controlling emissions from topside lids including the following:
 - i. procedures for equipment inspection and replacement or repair of topside lids and port lid matting and sealing surfaces, including the frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances; and
 - ii. procedures for sealing topside lids after charging, for identifying topside port lids that leak, and procedures for resealing.
- e. The work practice plan shall include procedures for controlling emissions from oven offtake systems including the following:
 - i. procedures for equipment inspection and replacement or repair of offtake system components, including the frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances;



- ii. procedures for identifying offtake system components that leak and procedures for sealing leaks that are detected; and
 - iii. procedures for dampering off ovens prior to a push.
- f. The work practice plan shall include procedures for maintaining, for each emission point subject to visible emission limitations by this permit, a daily record of the performance of plan requirements pertaining to the daily operation of the coke oven battery and its emission control equipment, including:
 - i. procedures for recording the performance of such plan requirements; and
 - ii. procedures for certifying the accuracy of such records by the permittee.
- g. The permittee shall implement the work practice plan procedures after 2 independent exceedances of the visible emission limitations for an emission point within a 6-month period and within three days after the receipt of written notification from the Ohio EPA, Northeast District Office. For the purpose of this section d)(3)g, the second exceedance is "independent" if either of the following criteria is met:
 - i. the second exceedance occurs 30 days or more after the first exceedance;
 - ii. in the case of coke oven doors, topside port lids, and offtake systems, the 29-run average, calculated by excluding the highest value in the 30-day period, exceeds the value of the applicable emission limitation; or
 - iii. in the case of charging emissions, the 29-day logarithmic average, calculated in accordance with Method 303 in appendix A to this part by excluding the valid daily set of observations in the 30-day period that had the highest arithmetic average, exceeds the value of the applicable emission limitation.

The permittee shall continue the procedures of the work practice plan for 90 days after the most recent written notification. After the visible emission limitation for a particular emission point is achieved for 90 consecutive days, any exceedances prior to the beginning of the 90 days are not included in making a determination under this section d)(3)g.
- h. The permittee shall review and revise the work practice plan in accordance with the following:
 - i. The permittee may be required to review and revise the work practice plan for an emission point if there are 2 independent exceedances of a visible emission limitation within the consecutive 6-month period which begins 30 days after the permittee is required to implement the work practice plan.
 - ii. The permittee shall not be required to review and revise the work practice plan more than twice in any 12-month period for a particular emission point.
 - iii. If the certified observer calculates a second independent exceedance of the visible emission limitation has occurred for an emission point, the observer shall notify the permittee. Within 10 days of notification, the permittee shall notify the Administrator and the Director whether the work practices are related to the cause or solution of the problem.
 - iv. The permittee shall submit revised work practice plans within 60 days of notification from the Administrator, unless the Administrator grants an extension of time to submit the revised plan.



- v. If a work practice plan revision is required, the permittee may be required to address subjects not listed in these terms and conditions or 40 CFR Part 63.306(b) if there is reason to expect further exceedances of the visible emission limitations.
- vi. A work practice plan revision may be disapproved if the revised plan is not adequate to prevent future exceedances of the visible emission limitations.
- i. If the permittee is required to implement the provisions of the work practice plan for a particular emission point, the permittee shall maintain the following records regarding the implementation of plan requirements for that emission point during the implementation period:
 - i. copies of all written and audiovisual materials used in the training, the dates of each class, the names of the participants in each class, and documentation that all appropriate personnel have successfully completed the training required under d)(3)a of these terms and conditions;
 - ii. the records required to be maintained by the plan provisions implementing d)(3)f of these terms and conditions;
 - iii. records resulting from audits of the effectiveness of the work practice program for the particular emission point, as required under d)(3)b.i, d)(3)c.i, d)(3)d.i, or d)(3)e.i of these terms and conditions; and
 - iv. if the plan provisions for coke oven doors must be implemented, records of the inventory of doors and jambs as required under d)(3)b.vi of these terms and conditions.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart L]

- (4) The permittee shall maintain records of the design drawings and engineering specifications for the emergency bypass bleeder flare.

A thermocouple or equivalent device shall be used to determine pilot flame presence. The permittee shall maintain the existing automatic self-igniting pilot system.

The permittee shall initiate the observations and recordings of VE from the flaring of coke oven gas from the emergency bypass bleeder flare during daylight hours within 4 hours of the start of the event or within 4 hours of dawn. Visible emission observations shall be performed in accordance with the methods and procedures of U.S.EPA Method 22, Appendix A, 40 CFR Part 60 with an observation period of 2 hours. The visible emission observations shall be performed once per event when coke oven gas is flared to the emergency bypass bleeder flare.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart L]

- (5) The permittee shall comply with the applicable work practice standards for fugitive pushing emissions for by-product coke oven batteries with vertical flues as required by 40 CFR Part 63, Subpart CCCCC, including the following, as applicable:

63.7291(a)(1) and (a)(3)	Observation and recording of fugitive emissions from the pushing operation.
63.7291(a)(4)	Pushing schedule.
63.7291(a)(5)	Corrective action requirement and/or increase coking time.



63.7291(a)(6)(i), (ii), and (iii)	Demonstration requirement.
63.7291(a)(7)(i), (ii) and (iii)	Increase coking time until oven qualifies for decrease coking time.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart CCCCC]

- (6) The permittee shall comply with the applicable work practice standards for soaking emissions for by-product coke oven batteries as required by 40 CFR Part 63, Subpart CCCCC, including the following, as applicable:

63.7294(a)	Prepare and operate according to a written work practice plan.
63.7294(a)(1)	Train topside workers to identify soaking emissions that require corrective actions.
63.7294(a)(2)	Damper the oven off the collecting main prior to opening the standpipe cap.
63.7294(a)(3)	Determine the cause of soaking emissions that do not ignite automatically, including emissions that result from raw coke gas leaking from the collecting main through the damper, and emissions that result from incomplete coking.
63.7294(a)(4)	If soaking emissions are caused by leaks from the collecting main, take corrective actions to eliminate the soaking emissions. Corrective actions may include, but not limited to, reseating the damper, cleaning the flushing liquor piping, using aspiration, putting the oven back on the collecting main, or igniting the emissions.
63.7294(a)(5)	If soaking emissions are not caused by leaks from the collecting main, notify a designated responsible party. The responsible party must determine whether the soaking emissions are due to incomplete coking. If incomplete coking is the cause of the soaking emissions, you must put the oven back on the collecting main until it is completely coked or you must ignite the emissions.
63.7294(b)	As provided in 40 CFR 63.6(g), you may request to use an alternative to the work practice standard in paragraph 63.7294(a).

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart CCCCC]

- (7) The permittee shall comply with the additional monitoring and record keeping requirements for this EU as required by 40 CFR Part 63, Subpart CCCCC, including the following:



63.7334(a)(1) through (8), except (6)(ii)	Monitoring and record keeping requirements for demonstrating continuous compliance with fugitive pushing emission work practice standards for by-product coke oven battery with vertical flue.
63.7330(c)	For each hot water scrubber applied to pushing emissions, you must at all times monitor the water pressure and temperature using a CPMS according to the requirements in §63.7331(f).
63.7330(d)	For each capture system applied to pushing emissions, you must at all times monitor the volumetric flow rate according to the requirements in § 63.7331(g) or the static pressure or the fan RPM according to the requirements in § 63.7331(i).
63.7330(e) and 63.7333(f)(2)	For each by-product coke oven battery, you must monitor at all times the opacity of emissions exiting each stack using a continuous opacity monitoring system (COMS) according to the requirements in § CFR 63.7331(j).
63.7331(f)	For each hot water scrubber applied to pushing emissions, you must install, operate, and maintain CPMS to measure and record the water pressure and temperature during each push according to the requirements in paragraphs 63.7331(b) through (d) of this section, except as specified in paragraphs 63.7331(e)(1) through (3) of this section. (1) Each CPMS must complete a measurement at least once per push; (2) Each CPMS must produce valid data for all pushes; and (3) Each CPMS must determine and record the daily (24-hour) average of all recorded readings.
63.7333(d)	For each hot water scrubber applied to pushing emissions and subject to the operating limits in §63.7290(f)(2), you must demonstrate continuous compliance by meeting the requirements in paragraphs 63.7333(d)(1) through (3) of this section. (1) Maintaining the daily average water pressure and temperature at levels no lower



	than those established during the initial or subsequent performance test. (2) Operating and maintaining each CPMS according to §63.7331(b) and recording all information needed to document conformance with these requirements. (3) Collecting and reducing monitoring data for water pressure and temperature according to §63.7331(f).
63.7331(g)	If you elect the operating limit in § 63.7290(f)(3) for a capture system applied to pushing emissions, you must install, operate, and maintain a device to measure the total volumetric flow rate at the inlet of the control device according to the requirements in 40 CFR 63.7333(e)(1)(ii).
63.7331(i)	If you elect the operating limit in 40 CFR 63.7290(f)(3)(ii) for a capture system applied to pushing emissions, you must install, operate and maintain a device to measure static pressure at the inlet of the control device or the fan RPM according to the requirements in 40 CFR 63.7333(e)(3)(ii).
63.7333(e), 63.7333(e)(1), 63.7333(e)(2) and 63.7333(e)(3)	For each capture system applied to pushing emissions and subject to the operating limit in §63.7290(f)(3), you must demonstrate continuous compliance by meeting the requirements in paragraph 63.7333(e)(1), (2), or (3) of this section: (1) If you elect the operating limit for volumetric flow rate in §63.7290(f)(3): (i) Maintaining the daily average volumetric flow rate at the inlet of the control device at or above the minimum level established during the initial or subsequent performance test; and (ii) Checking the volumetric flow rate at least every 8 hours to verify the daily average is at or above the minimum level established during the initial or subsequent performance test and recording the results of each check.



	(2) If you elect the operating limit for fan motor amperes in §63.7290(f)(3)(i): (i) Maintaining the daily average fan motor amperages at or above the minimum level established during the initial or subsequent performance test; and (ii) Checking the fan motor amperage at least every 8 hours to verify the daily average is at or above the minimum level established during the initial or subsequent performance test and recording the results of each check. (3) If you elect the operating limit for static pressure or fan RPM in §63.7290(f)(3)(ii): (i) Maintaining the daily average static pressure at the inlet to the control device at an equal or greater vacuum than established during the initial or subsequent performance test or the daily average fan RPM at or above the minimum level established during the initial or subsequent performance test; and (ii) Checking the static pressure or fan RPM at least every 8 hours to verify the daily average static pressure at the inlet to the control device is at an equal or greater vacuum than established during the initial or subsequent performance test or the daily average fan RPM is at or above the minimum level established during the initial or subsequent performance test and recording the results of each check.
63.7331(j)	For each by-product coke oven battery, you must install, operate, and maintain a COMS to measure and record the opacity of emissions exiting each stack according to the requirements in 40 CFR 63.7331 (j)(1) through (5).
63.7333(f), 63.7333(f)(1) and 63.7333(f)(2)	You must demonstrate continuous compliance for each by-product coke oven battery subject to the opacity limit for stacks in §63.7296(a) by meeting the requirements



	in paragraphs 63.7333(f)(1) and (2) of this section: (1) Maintaining the daily average opacity at or below 15 percent for a battery on a normal coking cycle or 20 percent for a battery on batterywide extended coking; and (2) Operating and maintaining a COMS and collecting and reducing the COMS data according to §63.7331(j).
63.7331(b) through (d)	For each CPMS required in 40 CFR 63.7330, you must develop and make available for inspection upon request by the permitting authority a site-specific monitoring plan that addresses the requirements in paragraphs 63.7330(b)(1) through (6). You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan. You must operate and maintain the CPMS in continuous operation according to the site-specific monitoring plan.
63.7335(b)(1), (b)(2) and (d)	For each coke oven battery with a capture system or control device applied to pushing emissions, you must demonstrate continuous compliance with the operation and maintenance requirements in §63.7300(c) making monthly inspections of capture systems according to § 63.7300(c)(1) and recording all information needed to document conformance with these requirements; and performing preventative maintenance for each control device according to §63.7300(c)(2) and recording all information needed to document conformance with these requirements.
63.7332	Continuous monitoring and data collection requirements.
63.7342, 63.7334(d) and 63.7335(d)	Maintain specified records, as applicable.
63.7343	Form and duration for record keeping.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart CCCCC}



- (8) The permittee shall comply with the Fenceline monitoring and record keeping requirements for this EU as required by 40 CFR Part 63, Subpart L, as applicable:

63.314, 63.311(l)	(Pursuant to the presidential proclamation 10993 of November 21, 2025, the Fenceline monitoring, root cause and corrective action, and related reporting requirements are exempt from compliance for a period of 2 years beyond the regulatory compliance date of July 7, 2025.) Beginning no later than July 7, 2027, the permittee shall conduct sampling along the facility property boundary and analyze the samples in accordance with paragraphs (a) through (g) of this section (§63.314).
63.311(l) Fenceline monitoring recordkeeping:	
63.311(l)	For fenceline monitoring systems subject to §63.314, each owner or operator shall keep the records specified in paragraphs (l)(1) through (10) of this section on an ongoing basis. (1) Coordinates of all fenceline monitors, including co-located samplers and field blanks, and if applicable, the meteorological station. The owner or operator shall determine the coordinates using an instrument with an accuracy of at least 3 meters. The coordinates shall be in decimal degrees with at least five decimal places. (2) The start and stop times and dates for each sample, as well as the tube identifying information. (3) Sampling period average temperature and barometric pressure measurements. (4) For each outlier determined in accordance with Section 9.2 of Method 325A in appendix A to this part, the sampler location of and the concentration of the outlier and the evidence used to conclude that the result is an outlier. (5) For samples that will be adjusted for a background, the location of and the concentration measured simultaneously by the background sampler(s), and the perimeter samplers to which it applies. (6) Individual sample results, the calculated Δc for benzene for each sampling period and

	the two samples used to determine it, whether background correction was used, and the annual average Δc calculated after each sampling period. (7) Method detection limit for each sample, including co-located samples and blanks. (8) Documentation of the root cause analysis and any corrective action taken each time the action level was exceeded, including the dates the root cause analysis was initiated and the resulting correction action(s) were taken. (9) Any corrective action plan developed under §63.314(e). (10) Other records as required by Methods 325A and 325B in appendix A to this part. (11) If a near-field source correction is used as provided in §63.314(f), or if an alternative test method is used that provides time-resolved measurements, records of hourly meteorological data, including temperature, barometric pressure, wind speed and wind direction, calculated daily unit vector wind direction and daily sigma theta, and other records specified in the site-specific monitoring plan.
63.314 Fenceline monitoring provisions:	
63.314(a) (sampler deployment and VOC sample collection)	You must conduct sampling along the facility property boundary and analyze the samples in accordance with Methods 325A and 325B in appendix A to this part and paragraphs 63.314(a)(1) through (a)(2) of this section. The monitoring perimeter may be located within the facility, inside the facility property boundary. However, the monitoring perimeter must encompass all potential sources of benzene that are located within the facility's property boundary.
63.314(a)(1) (detection limit)	The target analyte is benzene. You must follow the procedure in Section 9.6 of Method 325B in appendix A to the part to determine the detection limit of benzene for each sampler used to collect samples and blanks.
63.314(a)(2), 63.314(a)(2)(i) through 63.314(a)(2)(iii)	You must use a sampling period and sampling frequency as specified in



(sampling period and sampling frequency)	paragraph 63.314(a)(2)(i) through (a)(2)(iii) of this section. (i) A 14-day sampling period must be used unless a shorter sampling period is determined to be necessary under paragraph (e) or (g) of this section. A sampling period is defined as the period during which a sampling tube is deployed at a specific sampling location with a diffusive sampling end cap in-place and does not include the time required to analyze the sample. For the purpose of this subpart, a 14-day sampling period may be no shorter than 13 calendar days and no longer than 15 calendar days, but the routine sampling period must be 14 calendar days. (ii) Except as provided in paragraph (a)(2)(iii) of this section, the frequency of the sample collection must be once each contiguous 14-day sampling period, such that the beginning of the next 14-day sampling period begins immediately upon the completion of the previous 14-day sampling period. (iii) When an individual monitor consistently achieves results for benzene at or below the level specified in paragraph (a) of this section, you may elect to use the applicable minimum sampling frequency specified in paragraphs (a)(2)(iii)(A) through (E) of this section for that monitoring site. When calculating Δc for the monitoring period when using this alternative for burden reduction, use zero for the lowest sampling result for each monitoring period where one or more samples was not taken and/or analyzed for benzene. (A) If every sample at a monitoring site is at or below the level specified in paragraph (a)(3) of this section for 2 years (52 consecutive samples), every other sampling period can be skipped for that monitoring site, <i>i.e.</i>, sampling will occur approximately once per month. (B) If every sample at a monitoring site that is monitored at the frequency specified in paragraph (a)(2)(iii)(A) of this section is at
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	or below the level specified in paragraph (a)(3) of this section for 2 years (<i>i.e.</i>, 26 consecutive “monthly” samples), five 14-day sampling periods can be skipped for that monitoring site following each period of sampling, <i>i.e.</i>, sampling will occur approximately once per quarter. (C) If every sample at a monitoring site that is monitored at the frequency specified in paragraph (a)(2)(iii)(B) of this section is at or below the level specified in paragraph (a)(3) of this section for 2 years (<i>i.e.</i>, 8 consecutive quarterly samples), twelve 14-day sampling periods can be skipped for that monitoring site following each period of sampling, <i>i.e.</i>, sampling will occur twice a year. (D) If every sample at a monitoring site that is monitored at the frequency specified in paragraph (a)(2)(iii)(C) of this section is at or below the level specified in paragraph (a)(3) of this section for 2 years (<i>i.e.</i>, 4 consecutive semiannual samples), only one sample per year is required for that monitoring site. For yearly sampling, samples shall occur at least 10 months but no more than 14 months apart. (E) If at any time a sample for a monitoring site that is monitored at the frequency specified in paragraph (a)(2)(iii)(A) through (D) of this section returns a result that is above the level specified in paragraph (a)(3) of this section, the sampling site must return to the original sampling requirements of contiguous 14-day sampling periods with no skip periods for one quarter (six 14-day sampling periods). If every sample collected during this quarter is at or below the level specified in paragraph (a)(3) of this section, the owner or operator may revert back to the reduced monitoring schedule applicable for that monitoring site prior to the sample reading exceeding the level specified in paragraph (a)(3) of this section. If any sample collected during this quarter is above the level specified in paragraph (a)(3) of this section, that monitoring site must return to the original sampling requirements of contiguous 14-day sampling periods with no
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	skip periods for a minimum of two years. The burden reduction requirements can be used again for that monitoring site once the requirements of paragraph (a)(2)(iii)(A) of this section are met again, <i>i.e.</i> , after 52 contiguous 14-day samples with no results above the level specified in paragraph (a)(3) of this section.
63.314(a)(3) (analyte concentration level for alternative sampling frequency of individual monitors)	To use the alternative sampling frequency outlined in paragraph 63.314(a)(2) of this section, an individual monitor must consistently achieve results for benzene at or below 0.7 µg/m ³ .
63.314(b), 63.314(b)(1) through 63.314(b)(3) (collection and record meteorological data)	The owner or operator shall collect and record meteorological data according to the applicable requirements in paragraphs 63.314(b)(1) through (3) of this section. (1) If a near-field source correction is used as provided in paragraph 63.314(f)(2) of this section and/or if an alternative test method is used that provides time-resolved measurements, the owner or operator must use an on-site meteorological station in accordance with section 8.3 of Method 325A in appendix A to this part. Collect and record hourly average meteorological data, including temperature, barometric pressure, wind speed and wind direction, and calculate daily unit vector wind direction and daily sigma theta. (2) For cases other than those specified in paragraph 63.314(b)(1) of this section, the owner or operator shall collect and record sampling period average temperature and barometric pressure using either an on-site meteorological station in accordance with section 8.3 of Method 325A in appendix A to this part or, alternatively, using data from a National Weather Service (NWS) meteorological station provided the NWS meteorological station is within 40 kilometers (25 miles) of the coke manufacturing facility. (3) If an on-site meteorological station is used, the owner or operator shall follow the calibration and standardization procedures for meteorological measurements in EPA-



	454/B-08-002 (incorporated by reference, see §63.14.
63.314(c), 63.314(c)(1) through 63.314(b)(3) (calculate Δc from sample pool)	Within 45 days of completion of each sampling period, the owner or operator shall determine whether the results are above or below the action level as follows. (1) The owner or operator must determine the facility impact on the benzene concentration (Δc) for each sampling period according to either paragraph (c)(1)(i) or (ii) of this section, as applicable. (i) Except when near-field source correction is used as provided in paragraph (c)(1)(ii) of this section, the owner or operator shall determine the highest and lowest sample results for benzene concentrations from the sample pool and calculate Δc as the difference in these concentrations. Co-located samples must be averaged together for the purposes of determining the benzene concentration for that sampling location, and, if applicable, for determining Δc. The owner or operator shall adhere to the following procedures when one or more samples for the sampling period are below the method detection limit for benzene: (A) If the lowest detected value of benzene is below detection, the owner or operator shall use zero as the lowest sample result when calculating Δc. (B) If all sample results are below the method detection limit, the owner or operator shall use the method detection limit as the highest sample result and zero as the lowest sample result when calculating Δc. (C) In the case of co-located samples, if one sample is above the method detection limit while the other sample is below the method detection limit, the owner or operator must use the method detection limit as the result for the sample that is below the method detection limit for purposes of averaging the results to determine the concentration at a particular sampling location, and, if applicable, for determining Δc.

	(ii) When near-field source correction is used as provided in paragraph 63.314(f)(2) of this section, the owner or operator must determine Δc using the calculation protocols outlined in paragraph 63.314(c)(1)(i) of this section except as provided in this paragraph 63.314(c)(1)(ii), and the additional requirements in paragraph 63.314(f)(2) of this section, as well as any additional requirements outlined in the approved site-specific monitoring plan. The Δc for the sampling period is equal to the higher of the values in paragraphs 63.314(c)(1)(ii)(A) and (B) of this section. (A) The highest corrected sample result from a sampling location where near-field source correction is used during the sampling period. (B) The difference in concentration between the highest sample result that was not corrected for a near-field source during the sampling period and the lowest sample result for the sampling period.
63.314(c)(2) (calculate an annual average Δc)	The owner or operator must calculate the annual average Δc based on the average of the 26 most recent 14-day sampling periods. The owner or operator must update this annual average value after receiving the results of each subsequent 14-day sampling period.
63.314(c)(3) (action level for annual average Δc)	The action level for benzene is $7 \mu\text{g}/\text{m}^3$ on an annual average basis. If the annual average Δc value for benzene is greater than $7 \mu\text{g}/\text{m}^3$, the concentration is above the action level, and the owner or operator must conduct a root cause analysis and corrective action in accordance with paragraph 63.314(d) of this section.
63.314(d), 63.314(d)(1) through 63.314(d)(6) (root cause analysis)	Once the action level in paragraph 63.314(c)(3) of this section has been exceeded, the owner or operator must take the following actions to bring the annual average Δc back below the action level. (1) Within 5 days of updating the annual average value as required in paragraph 63.14(c)(2) of this section and determining that the action level in paragraph



	63.314(c)(3) of this section has been exceeded (i.e., in no case longer than 50 days after completion of the sampling period), the owner or operator must initiate a root cause analysis to determine appropriate corrective action. A root cause analysis is an assessment conducted through a process of investigation to determine the primary underlying cause and all other contributing causes to an exceedance of the action level set forth in paragraph 63.314(c)(3) of this section. (i) Root cause analysis may include, but is not limited to: (A) Leak inspection using Method 21 in appendix A-7 to 40 CFR part 60, optical gas imaging, or handheld monitors. (B) Visual inspection to determine the cause of the high benzene emissions. (C) Employing progressively more frequent sampling, analysis and meteorology (e.g., using shorter sampling periods for Methods 325A and 325B in appendix A to this part, or using active sampling techniques, like those utilized as part of a site-specific monitoring plan). (D) Operator knowledge of process changes (e.g., a malfunction or release event). (ii) If the root cause cannot be identified using the type of techniques described in paragraph 63.314(d)(1)(i) of this section, the owner or operator must employ more frequent sampling and analysis to determine the root cause of the exceedance. (A) The owner or operator may first employ additional monitoring points and shorter sampling periods for Methods 325A and 325B in appendix A to this part for benzene to determine the root cause of the exceedance. (B) If the owner or operator has not determined the root cause of the exceedance within 30 days of determining that the action level has been exceeded, the owner or operator must employ the appropriate real-time sampling techniques (e.g., mobile gas
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	chromatographs, optical spectroscopy instruments, sensors) to locate the cause of the exceedance. If the root cause is not identified after 48 hours, either the real-time monitor must be relocated or an additional real-time monitor must be added. Relocation or addition of extra real-time monitors must continue after each 48-hour period of nonidentification until the owner or operator can identify the root cause of the exceedance. (2) If either the underlying primary or other contributing causes of the exceedance are deemed to be under the control of the owner or operator and subject to a regulation codified in 40 CFR part 63, except as provided in paragraph (c)(3) of this section, the owner or operator must take appropriate corrective action as expeditiously as possible to bring annual average fenceline concentrations back below the action level set forth in paragraph 63.314(c)(3) of this section and to prevent future exceedances from the same underlying cause(s). (3) If the underlying primary or other contributing cause of the exceedance is under the control of the owner or operator but not subject to a regulation codified in 40 CFR part 63, as evidenced through the root cause analysis in paragraph (d)(1) of this section and supported by appropriate real-time sampling techniques consistent with paragraph 63.314(d)(1)(ii)(B) of this section, the owner or operator is not required to take corrective action under this subpart at any portion of the facility not subject to a regulation codified in 40 CFR part 63. However, the owner or operator must add additional monitoring locations in accordance with section 8.2.1.3 of EPA Method 325A in appendix A to this part or update their site-specific monitoring plan to add additional real-time monitors to account and correct for this near-field source of emissions not subject to a regulation codified in 40 CFR part 63 within 60 days of determining the underlying cause.
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	(4) The root cause analysis must be completed and initial corrective actions, if applicable, taken no later than 45 days after determining there is an exceedance of an action level. (5) Except as noted in paragraph 63.314(d)(6) of this section, until the annual average Δc is below the action level again, following the completion of the initial corrective action, the owner or operator must conduct a new root cause analysis according to this paragraph 63.314(d), and if required, submit a corrective action plan under paragraph 63.314(e) of this section following any sampling period for which the Δc for the sampling period is greater than the action level in paragraph 63.314(c)(3) of this section. (6) This paragraph applies when an owner or operator is required under paragraph 63.314(d)(3) of this section to update the site-specific monitoring plan to account for an additional near-field emission source. Until the annual average Δc is below the action level again, following implementation of the approved revision to the site-specific monitoring plan, the owner or operator must conduct a new root cause analysis according to this paragraph 63.314(d), and if required, submit a corrective action plan under paragraph 63.314(e) of this section following any sampling period for which the Δc for the sampling period is greater than the action level in paragraph 63.314(c)(3) of this section.
63.314(e), 63.314(e)(1) through 63.314(e)(3) (develop corrective action plan)	An owner or operator must develop a corrective action plan if any of the conditions in paragraphs 63.314(e)(1) through (e)(3) of this section are met. The corrective action plan must describe the corrective action(s) completed to date, additional measures that the owner or operator proposes to employ to reduce annual average fenceline concentrations below the action level set forth in paragraph 63.314(c)(3) of this section, and a schedule for completion of these measures. The corrective action plan does not need to be approved by the Administrator. However, if upon review, the



	Administrator disagrees with the additional measures outlined in the plan, the owner or operator must revise and resubmit the plan within 7 calendar days of receiving comments from the Administrator. (1) Except as noted in paragraph 63.314(e)(3) of this section, if upon completion of the root cause analysis and initial corrective actions required under paragraph (d) of the section, the Δc value for the next sampling period, for which the sampling start time begins after the completion of the initial corrective actions, is greater than the level specified in paragraph 63.314(c)(3) of this section. The corrective action plan must include the implementation of real-time sampling techniques to locate the primary and other contributing causes of the exceedance. The owner or operator must submit the corrective action plan to the Administrator within 60 days after receiving the analytical results indicating that the Δc value for the sampling period following the completion of the initial corrective action is greater than the level specified in paragraph 63.314(c)(3) of this section. (2) The owner or operator must develop a corrective action plan if complete implementation of all corrective measures identified in the root cause analysis required by paragraph (e) of this section will require more than 45 days. The owner or operator must submit the corrective action plan to the Administrator no later than 60 days following the completion of the root cause analysis required in paragraph 63.314(d) of this section. (3) The owner or operator must develop a corrective action plan if upon completion of the root cause analysis and following implementation of the approved revision to the site-specific monitoring plan required under paragraph 63.314(d)(3) of this section, the Δc value for the next sampling period, for which the sampling start time begins after implementation of the approved revision to the site-specific monitoring plan, is greater than the level specified in paragraph 63.314(c)(3) of this section. The
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	corrective action plan must include the implementation of real-time sampling techniques to locate the primary and other contributing causes of the exceedance. The owner or operator must submit the corrective action plan to the Administrator within 60 days after receiving the analytical results indicating that the Δc value for the sampling period following the implementation of the approved revision to the site-specific monitoring plan is greater than the level specified in paragraph 63.314(c)(3) of this section.
63.314(f), 63.314(f)(1) through 63.314(f)(4) (site-specific monitoring plan)	An owner or operator may request approval from the Administrator for a site-specific monitoring plan to account for offsite upwind sources or onsite sources not subject to a regulation codified in 40 CFR part 63 according to the requirements in paragraphs 63.314(f)(1) through (4) of this section. (1) The owner or operator must prepare and submit a site-specific monitoring plan and receive approval of the site-specific monitoring plan prior to using the near-field source alternative calculation for determining Δc provided in paragraph 63.314(f)(2) of this section. The site-specific monitoring plan shall include, at a minimum, the elements specified in paragraphs 63.314(f)(1)(i) through (v) of this section. The procedures in section 12 of Method 325A in appendix A to this part are not required, but may be used, if applicable, when determining near-field source contributions. (i) Identification of the near-field source or sources. For onsite sources, specify that the onsite source is not subject to a regulation codified in 40 CFR part 63 and identify any federal regulation or federally enforceable permit condition the source is subject to. (ii) Identification of the fenceline monitoring locations impacted by the near-field source. If more than one near-field source is present, identify the near-field source or sources that are expected to contribute to the concentration at each monitoring location.



	(iii) A description of (including sample calculations illustrating) the planned data reduction; treatment of invalid data and data below detection limits; and calculations to determine the near-field source concentration contribution for each monitoring location. (iv) A detailed description of the measurement technique, measurement location(s), the standard operating procedures, measurement frequency, recording frequency, measurement detection limit, and data quality indicators to ensure accuracy, precision, and validity of the data. If you are accounting for on-site sources, you must use a real-time sampling technique (e.g., mobile gas chromatographs, optical spectroscopy instruments, sensors). (v) A detailed description of how data will be handled during periods of calm wind conditions (i.e., less than 2 miles per hour). (2) When an approved site-specific monitoring plan is used, the owner or operator shall determine Δc for comparison with action level according to paragraph 63.314(c) of this section. When determining the sample results for use in the Δc calculation, the concentration for any monitor that has been corrected using an approved site-specific monitoring plan will be corrected according to the procedures specified in paragraphs 63.314(f)(2)(i) and (ii) of this section. (i) For each monitoring location corrected using the site-specific monitoring plan, the corrected fenceline concentration at that monitoring station will be equal to the fenceline concentration measured with Methods 325A and 325B in appendix A to this part minus the near-field source contributing concentration at the measurement location determined using the additional measurements and calculation procedures included in the approved site-specific monitoring plan. (ii) If the fenceline concentration at the monitoring station is below the method detection limit for Methods 325A and 325B
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	in appendix A to this part, no near-field source contribution can be subtracted from that monitoring station for that sampling period. (3) The site-specific monitoring plan shall be submitted and approved as described in paragraphs 63.314(f)(3)(i) through (iv) of this section. (i) The site-specific monitoring plan must be submitted to the Administrator for approval. (ii) The site-specific monitoring plan shall also be submitted to the following address: U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Sector Policies and Programs Division, U.S. EPA Mailroom (D243-02), Attention: Metals and Inorganic Chemicals Group, 109 T.W. Alexander Drive, Research Triangle Park, NC 27711. Electronic copies in lieu of hard copies also may be submitted to fencelineplan@epa.gov. (iii) The Administrator shall approve or disapprove the plan in 120 days. The plan shall be considered approved if the Administrator either approves the plan in writing or fails to disapprove the plan in writing. The 120-day period shall begin when the Administrator confirms receipt of a complete site-specific monitoring plan. (iv) If the Administrator finds any deficiencies in the site-specific monitoring plan and disapproves the plan in writing, the owner or operator may revise and resubmit the site-specific monitoring plan following the requirements in paragraphs 63.314(f)(3)(i) and (ii) of this section. The 120-day period starts over with the resubmission of the revised monitoring plan. The Administrator may indicate in writing that a submitted plan is incomplete and specify the information necessary for completeness. (4) The approval by the Administrator of a site-specific monitoring plan will be based on the completeness, accuracy and reasonableness of the request for a site-specific monitoring plan. Factors that the Administrator will consider in reviewing the
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	request for a site-specific monitoring plan include, but are not limited to, those described in paragraphs 63.314(f)(4)(i) through (v) of this section. (i) The identification of the near-field source or sources and evidence of how the sources impact the fenceline concentration. (ii) The location(s) selected for additional monitoring to determine the near-field source concentration contribution. (iii) The identification of the fenceline monitoring locations impacted by the near-field source or sources. (iv) The appropriateness of the planned data reduction and calculations to determine the near-field source concentration contribution for each monitoring location, including the handling of invalid data, data below the detection limit, and data during calm periods. (v) The adequacy of the description of and the rationale for the measurement technique, measurement location(s), the standard operating procedure, the measurement and recording frequency, measurement detection limit, and data quality indicators proposed to ensure accuracy, precision, and validity of the data.
63.314(g)	The owner or operator shall comply with the applicable recordkeeping and reporting requirements in §63.311.
63.314(h) (request alternative test method)	As outlined in §63.7(f), the owner or operator may submit a request for an alternative test method. At a minimum, the request must follow the requirements outlined in paragraphs 63.314(h)(1) through (7) of this section.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart L]

e) Reporting Requirements



- (1) The permittee shall submit quarterly deviation (excursion) reports identifying all periods of time during which the coke oven battery exceeded the VE limitations for pushing operations, charging operations, offtake systems, topside lids and/or oven doors.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart L]

- (2) The permittee shall submit quarterly deviation (excursion) reports identifying any instance when the results of the Method 22 readings documented an exceedance of the emergency bypass bleeder flare visible emission limitation.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart L]

- (3) The permittee shall report the venting of coke oven gas through a bypass bleeder stack, that is not vented through the bypass bleeder flare system, as soon as practical but no later than 24 hours after the beginning of the event. These reports shall be submitted to the U. S. EPA Region 5 Administrator, with a copy to the Ohio EPA, Northeast District Office.

A written report which includes a description of the event and notification of a hazardous substance release shall be submitted within 30 days after each occurrence.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart L]

- (4) The permittee shall submit semiannual compliance certifications in accordance with the requirements of 40 CFR Part 63.311, which are signed by the permittee, certifying the following:

- a. no coke oven gas was vented, except through the bypass/bleeder stack flare system, during the reporting period or that a venting report has been submitted in accordance with e)(4) of this permit; and
- b. that work practices were implemented, as applicable, under the work practice plan required in d)(3) of this permit.

These semiannual certifications shall be submitted to the U.S. EPA Region 5 Administrator, with a copy to the Ohio EPA, Northeast District Office.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart L]

- (5) The permittee shall satisfy the reporting requirements for this EU through the reporting requirement established in this permit for EU P002, by submitting quarterly deviation (excursion) reports and quarterly reports that 1.) identify each day during which the concentration of H₂S in the desulfurized coke oven gas and the desulfurization tail gas, combined, was at or over 35 grains per 100 dscf of coke oven gas produced, and the actual H₂S content for each such day and the actual volume amount of coke oven produced, in dscf/day, for each such day; 2.) identify all periods during which the excess coke oven gas flare and/or monitoring equipment was/were not functioning properly; and 3.) identify each period of time (start time and date and end time and date) when coke oven gas is routed to the optional caustic scrubber.

[Authority for Term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), and 40 CFR Part 52.21 PSD Permit No. EPA-5-77-A-9]

- (6) The permittee shall comply with the applicable reporting requirements for this emission, unit as required by 40 CFR Part 63, Subpart CCCCC, including the following sections:

63.7336	You must report each instance in which you did not meet each emission limitation in 40 CFR Part 63 Subpart CCCCC that applies to
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	you. This includes periods of startup, shutdown, and malfunction. You must also report each instance in which you did not meet each work practice standard or operation and maintenance requirement 40 CFR Part 63 Subpart CCCCC that applies to you. These instances are deviations from the emission limitations (including operating limits), work practice standards, and operation and maintenance requirements in this subpart. These deviations must be reported according to the requirements in 40 CFR 63.7341. (a) In the event that an affected unit fails to meet an applicable standard, record the number of failures. For each failure, record the start date, start time and duration (in hours) of each failure. (b) For each failure to meet an applicable standard, record and retain a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions. (c) Record actions taken to minimize emissions in accordance with 63.7310(a), and any corrective actions taken to return the affected unit to its normal or usual manner of operation.
63.7291(a)(6)(iii)	If a corrective action and/or increased coking time was unsuccessful for meeting fugitive pushing emission limitations from a coke oven battery with vertical flues as described in 40 CFR 63.7291(a)(6)(ii), you must report to the permitting authority as a deviation each unsuccessful attempt at corrective action and/or increased coking time under 40 CFR 63.7291(a)(6)(ii) of this Section.
63.7291(a)(7)(iv)	For any oven placed on increased coking time as a result of fugitive pushing emissions that exceed 30 percent for a short battery, you must report to the permitting authority as a deviation the second and any subsequent consecutive unsuccessful attempts on the same oven to qualify for



	decreased coking time as described in 40 CFR 63.7291(a)(7)(iii).
63.7341(a) and (b)	Submit quarterly compliance reports to provide information on compliance with the emission limitations for battery stacks in 40 CFR 63.7296. The report must include the information in paragraphs 40 CFR 63.7341(c)(1) through (3), and as applicable, paragraphs (c)(4) through (8), to Ohio EPA for each calendar quarter. All quarterly compliance reports for battery stacks must be postmarked or delivered no later than one calendar month following the end of the quarterly reporting period.
63.7341(a) and (c)	Submit semiannual compliance reports to provide information on compliance with the emission limitations, work practice standards, and operation and maintenance requirements for all affected sources except battery stacks. The report must include information in paragraphs 40 CFR 63.7341(c)(1) through (3), and as applicable, paragraphs (c)(4) through (8), to Ohio EPA covering the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. All semiannual compliance reports must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.
63.7341(e) (Part 70 monitoring report)	For sources with a Title V Operating Permit pursuant to 40 CFR Part 70, you must report all deviations under 40 CFR Part 63, Subpart CCCCC in the Title V semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A). If you submit a compliance report for an affected source along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emission limitation or work practice standard in 40 CFR Part 63, Subpart CCCCC, submission of the compliance report satisfies any obligation to report the same



	deviations in the semiannual monitoring report. However, submission of a compliance report under 40 CFR Part 63, Subpart CCCCC does not otherwise affect any obligation you may have to report deviations from Title V permit requirements to Ohio EPA.
63.7340 (notifications)	You must submit all applicable notifications in accordance with requirements in 63.7340(a), (d), (e)(1) and (e)(2).
63.7341(f) (Electronic reporting of compliance reports)	Beginning on July 7, 2026 or when a report template for this subpart is available, submit reports via CEDRI.
63.7341(g) (Electronic reporting of performance tests)	Beginning on September 3, 2024, submit each performance test within 60 days after the date of the completion of the test.
63.7341(h) (Confidential business information (CBI))	For notifications and reports required to be submitted through CEDRI.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart CCCCC]

- (7) The permittee shall comply with the Fenceline monitoring reporting requirements for this EU as required by 40 CFR Part 63, Subpart L, as applicable:

63.311(j), 63.311(k)	(Pursuant to the presidential proclamation 10993 of November 21, 2025, the Fenceline monitoring, root cause and corrective action, and related reporting requirements are exempt from compliance for a period of 2 years beyond the regulatory compliance date of July 7, 2025.) Beginning no later than July 7, 2027, the permittee shall conduct sampling along the facility property boundary and analyze the samples in accordance with paragraphs (a) through (g) of this section (§63.314).
63.311(j) Fenceline monitoring reporting:	
63.311(j)	For fenceline monitoring systems subject to §63.314 of this subpart, each owner or operator must submit fenceline monitoring reports on a quarterly basis using the appropriate electronic template on the CEDRI website (https://www.epa.gov/electronic-reporting-air-emissions/cedri) for this subpart and following the procedure specified in §63.9(k), except any medium submitted through mail must be sent to the



	attention of the Coke Ovens Sector Lead. The first quarterly report must cover the period beginning on the compliance date that is specified in §63.314(a) of this subpart and ending on March 31, June 30, September 30 or December 31, whichever date is the first date that occurs after the owner or operator has completed at least one sampling period. Each subsequent quarterly report must cover one of the following reporting periods: Quarter 1 from January 1 through March 31; Quarter 2 from April 1 through June 30; Quarter 3 from July 1 through September 30; and Quarter 4 from October 1 through December 31. Each quarterly report must be electronically submitted no later than 45 calendar days following the end of the reporting period. (1) Facility name and address (including the county). (2) Year and reporting quarter (i.e., Quarter 1, Quarter 2, Quarter 3, or Quarter 4). (3) For each passive tube monitor: The latitude and longitude location coordinates; the sampler name; and identification of the type of sampler (i.e., regular monitor, extra monitor, duplicate, field blank, inactive). Coordinates must be in decimal degrees with at least five decimal places. (4) The beginning and ending dates for each sampling period. (5) Individual sample results for benzene reported in units of micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) for each monitor for each sampling period that ends during the reporting period. Results below the method detection limit shall be flagged as below the detection limit and reported at the method detection limit. Where individual sample results are corrected according to a site specific monitoring plan according to §63.314(f), both the original and the corrected results are reported. (6) Data flags that indicate each monitor that was skipped for the sampling period, if the owner or operator uses an alternative
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	sampling frequency under §63.314(a)(2)(iii). (7) Data flags for each outlier determined in accordance with section 9.2 of Method 325A in appendix A to this part. For each outlier, the owner or operator must submit the individual sample result of the outlier, as well as the evidence used to conclude that the result is an outlier. (8) The biweekly concentration difference (Δc) for benzene for each sampling period and, beginning the first quarterly report with sufficient data to calculate an annual average, the annual average Δc for benzene for each sampling period. (9) Indication of whether the owner or operator was required to develop a corrective action plan under §63.314(e) of this subpart.
63.311(k) (confidential business information)	Confidential business information (CBI). For notifications and reports required to be submitted to CEDRI: (1) The EPA will make all the information submitted through CEDRI available to the public without further notice to you. Do not use CEDRI to submit information you claim as CBI. Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim for some of the information submitted under paragraphs (h) or (i) of 63.311, you must submit a complete file, including information claimed to be CBI, to the EPA. (2) For performance test reports according to paragraph (j) of 63.311, the file must be generated using the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. (3) Clearly mark the part or all of the information that you claim to be CBI. Information not marked as CBI may be authorized for public release without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. (4) The preferred method to receive CBI is for it to be transmitted electronically using



	email attachments, File Transfer Protocol, or other online file sharing services. Electronic submissions must be transmitted directly to the OAQPS CBI Office at the email address oaqpscbi@epa.gov, and as described above, should include clear CBI markings. For performance test reports, the CBI should be flagged to the attention of the Group Leader, Measurement Policy Group; for all other reports and notifications, to the attention of the Coke Ovens Sector Lead. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if you do not have your own file sharing service, please email oaqpscbi@epa.gov to request a file transfer link. (5) If you cannot transmit the file electronically, you may send CBI information through the postal service to the following address: OAQPS Document Control Officer (C404-02), OAQPS, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, Attention Group Leader, Measurement Policy Group or Coke Oven Sector Lead as indicated in paragraph (k)(4) of this section. The mailed CBI material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope. (6) All CBI claims must be asserted at the time of submission. Anything submitted using CEDRI cannot later be claimed CBI. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available. (7) You must submit the same file submitted to the CBI office with the CBI omitted to the EPA via the EPA's CDX as described in paragraphs (h), (i), or (j) of 63.311.
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[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart L]

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

PM emissions from the coke oven battery combustion stack shall not exceed 0.030 grain per standard cubic foot of exhaust gases.

Applicable Compliance Method:

Compliance shall be demonstrated based upon emission tests performed in accordance with the requirements specified in f)(2).

[Authority for Term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05, and 40 CFR Part 52.21 PSD Permit No. EPA-5-77-A-9]

b. Emissions Limitations:

Visible PE from the coke oven battery combustion stack shall not exceed a daily average of 15% opacity on a normal coking cycle.

Visible PE from the battery stack shall not exceed a daily average of 20% opacity for a battery on battery-wide extended coking.

Applicable Compliance Method:

Compliance shall be determined by following the test methods and procedures and in f)(4) below:

- i. Using the continuous opacity monitoring system (COMS), measure and record the opacity of emissions from the battery stack for a 24-hour period;
- ii. Reduce the monitoring date to hourly averages; and
- iii. Compute and record the 24-hour (daily) average of the COMS data.

[Authority for Term: OAC rule 3745-77-07(C)(1), 40 CFR 63.7331(j) and 40 CFR 63.7324(b)(2)-(3)]

c. Emissions Limitation:

No coke-oven gas from battery number 4 shall be burned unless it contains a concentration of sulfur compounds, expressed as H₂S, of less than 35 grains per 100 dscf of coke-oven gas produced. Included in this concentration are all sulfur compounds, expressed as H₂S, emitted from sulfur recovery equipment used to process the sulfur compounds removed from coke-oven gas.

Applicable Compliance Method:

Compliance shall be demonstrated based on the monitoring and record keeping requirements in d)(1) and d)(2) and the reporting requirements in e)(1) for the desulfurization plant (EU P002).

[Authority for Term: OAC rule 3745-77-07(C)(1)]

d. Emissions Limitations:

On and after July 14, 2005: During charging operations, visible PE shall not exceed 12 seconds per charge over 5 consecutive charges systems as a logarithmic 30-day rolling average, except as provided by rule within Method 303.

On and after July 7, 2025: During charging operations, visible PE shall not exceed 12 seconds per charge over 5 consecutive charges systems as a logarithmic 30-day rolling average, except as provided by rule within Method 303. The compliance deadline has been extended 2 years beyond the compliance date of on and after July 7, 2025, in accordance with the Presidential Proclamation 10993 of November 21, 2025.

Applicable Compliance Method:

Using the observations obtained in accordance with d)(2) of these terms and conditions, compliance shall be demonstrated by calculating the logarithmic 30-day rolling average of the seconds of VE per charge using the equation in Section 12.4 of Method 303 in Appendix A of 40 CFR Part 63.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart L]

e. Emissions Limitations:

On and after July 14, 2005:

There shall be no visible PE from more than 2.5 percent of offtake systems systems as a 30-day rolling average, except as provided by rule within Method 303.

On and after July 14, 2005:

There shall be no visible PE from more than 0.4 percent of the topside lids systems as a 30-day rolling average, except as provided by rule within Method 303.

On and after January 1, 2010:

There shall be no visible PE from more than 3.3 percent of the coke oven doors systems as a 30-day rolling average, except as provided by rule within Method 303.

On and after July 7, 2027*:

There shall be no visible PE from more than 2.1 percent of offtake systems systems as a 30-day rolling average, except as provided by rule within Method 303.

On and after July 7, 2027*:

There shall be no visible PE from more than 0.32 percent of the topside lids systems as a 30-day rolling average, except as provided by rule within Method 303.

On and after July 7, 2027*:

There shall be no visible PE from more than 3.2 percent of the coke oven doors systems as a 30-day rolling average, except as provided by rule within Method 303.

*The compliance deadline has been extended 2 years beyond the compliance date of on and after July 7, 2025, in accordance with the Presidential Proclamation 10993 of November 21, 2025.

Applicable Compliance Method:

Using the observations obtained in accordance with d)(2) of these terms and conditions, compliance shall be demonstrated by calculating the 30-run rolling average of the percent leaking coke oven doors, topside lids, and offtake systems



using the equation in Sections 12.5.3.2, 12.6.2, and 12.7.2 of Method 303 in Appendix A of 40 CFR Part 63.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart L]

f. Emissions Limitation:

Visible PE of fugitive dust during the pushing operations shall not exceed an average of 20% opacity read above the battery top. The duration of a pushing operation shall commence with the moving (or pushing) of the coke mass from an oven and shall conclude when the quench car enters the quench tower.

Applicable Compliance Method:

Compliance shall be demonstrated based upon daily visible PE observations of fugitive pushing emissions performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(2)(d) and in Section 63.7334 of 40 CFR 63, Subpart CCCCC.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart CCCCC]

g. Particulate emissions limitation for mobile scrubber:

Emissions from pushing operations shall not exceed 0.030 pound of PE per ton of coke pushed for not less than ninety percent of the total emissions during the pushing operation.

Applicable Compliance Method:

Compliance shall be demonstrated based upon emission tests performed in accordance with the requirements specified in f)(2) and f)(4).

[Authority for Term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05, and 40 CFR Part 52.21 PSD Permit No. EPA-5-77-A-9]

h. Emissions Limitation:

The emergency bypass bleeder flare shall be operated with no VE, except for periods not to exceed 5 minutes during any 2 consecutive hours.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible PE observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 22.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart L]

i. Emissions limitations for the mobile scrubber:

PM emissions from the exhaust of the mobile scrubber during pushing operations shall not exceed 0.04 lb/ton coke.

Hg emissions from the exhaust of the mobile scrubber during pushing operations shall not exceed 8.9E-7 lb/ton coke.

Total acid gases from the exhaust of the mobile scrubber during pushing operations shall not exceed 0.013 lb/ton coke.

Hydrogen cyanide from the exhaust of the mobile scrubber during pushing operations shall not exceed 0.0015 lb/ton coke.



Polycyclic aromatic hydrocarbons (PAH) from the exhaust of the mobile scrubber during pushing operations shall not exceed 4.0E-4 lb/ton coke.

Applicable Compliance Method:

Compliance shall be demonstrated based upon emission tests performed in accordance with the requirements specified in f)(3) and f)(4).

j. Emissions limitations for the coke oven battery combustion stack:

PM emissions from the combustion stack shall not exceed 0.13 grain per standard cubic foot of exhaust gases at 10 percent oxygen.

Hg emissions from the combustion stack shall not exceed 4.5E-5 lb/ton coke.

Total acid gases from the combustion stack shall not exceed 0.16 lb/ton coke.

Hydrogen cyanide emissions from the combustion stack shall not exceed 0.032 lb/ton coke.

Applicable Compliance Method:

Compliance shall be demonstrated based upon emission tests performed in accordance with the requirements specified in f)(3) and f)(4).

(2) The permittee shall conduct, or have conducted, emission testing of the combustion stack and the pushing emission control system in accordance with the following requirements:

a. Emission testing of the coke battery combustion stack and the pushing emission control system (mobile scrubber) shall be conducted within 180 calendar days after the compliance date of January 5, 2028.

b. The emission testing shall be conducted to demonstrate compliance with the allowable emission rate(s) for PE.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Method 5 of 40 CFR Part 60, Appendix A.

d. During the emission testing, the EU shall be operated under operational conditions approved in advance by the Ohio EPA, Northeast District Office. Operational conditions that may need to be approved include, but are not limited to, the production rate and type of materials processed or establishing operational limitations (hot water scrubber's temperature and pressure, etc.). Testing shall be done under conditions most representative of normal operations. As part of the information provided in the "Intent to Test" notification form described below, the permittee shall provide a description of the EU operational conditions they will meet during the emissions testing and describe why they believe that conditions most representative of normal operations will be met. Failure to test under the approved conditions may result in Ohio EPA not accepting the test results as a demonstration of compliance.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the EU operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification

for review and approval prior to the test(s) may result in the Ohio EPA, Northeast District Office's refusal to accept the results of the emission test(s).

- f. Personnel from the Ohio EPA, Northeast DO/LAA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the EU and the testing procedures provide a valid characterization of the emissions from the EU and/or the performance of the control equipment.
- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northeast District Office within 30 days following completion of the test(s) unless the permittee requests and is granted additional time by the Ohio EPA, Northeast District Office for submission of the test report.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart CCCCC]

- (3) The permittee shall conduct, or have conducted, emission testing of the pushing emission control system (mobile scrubber) and the coke battery combustion stack in accordance with the following requirements:

- a. Initial emission testing shall be conducted within 180 calendar days after the compliance date of January 5, 2028.
- b. Except for PM for the pushing emission control system (mobile scrubber), subsequent emission testing shall be conducted every 5 years thereafter, each within 180 days prior to date in which 5 years elapsed from the date of the previously completed test.
- c. For PM for the pushing emission control system (mobile scrubber), subsequent emission testing shall be conducted every 5 years thereafter, each within 180 days prior to date in which 5 years elapsed from the date of the previously completed test or at the beginning of each term of your Title V operating renewal permit, whichever is less.
- d. Initial emission testing for the pushing emission control system (mobile scrubber) shall be conducted to demonstrate compliance with the allowable emission rate(s) for PM, Hg, total acid gases, HCN, and total PAH.
- e. Initial emission testing for the coke battery combustion stack shall be conducted to demonstrate compliance with the allowable emission rate(s) for PM, Hg, total acid gases, and HCN.
- f. Subsequent emission testing for the pushing emission control system (mobile scrubber) shall be conducted to demonstrate compliance with the allowable emission rate(s) for PM, Hg, total acid gases, and HCN.
- g. Subsequent emission testing for the coke battery combustion stack shall be conducted to demonstrate compliance with the allowable emission rate(s) for PM, Hg, total acid gases, and HCN.
- h. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

For PM: Methods 1-5 of 40 CFR Part 60, Appendix A.

For Hg: Method 29 of 40 CFR Part 60, Appendix A.



For total acid gases: Method 26 or 26A of 40 CFR Part 60, Appendix A or Method 320 of 40 CFR Part 63, Appendix A.

For HCN: Method 320 of 40 CFR Part 63, Appendix A.

For total PAH: Method 23 of 40 CFR Part 60, Appendix A.

- i. During the emission testing, the EU shall be operated under operational conditions approved in advance by the Ohio EPA, Northeast District Office. Operational conditions that may need to be approved include, but are not limited to, the production rate and type of materials processed or establishing operational limitations (hot water scrubber's temperature and pressure, etc.). Testing shall be done under conditions most representative of normal operations. As part of the information provided in the "Intent to Test" notification form described below, the permittee shall provide a description of the EU operational conditions they will meet during the emissions testing and describe why they believe that conditions most representative of normal operations will be met. Failure to test under the approved conditions may result in Ohio EPA not accepting the test results as a demonstration of compliance.
- j. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the EU operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Northeast District Office's refusal to accept the results of the emission test(s).
- k. Personnel from the Ohio EPA, Northeast DO/LAA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the EU and the testing procedures provide a valid characterization of the emissions from the EU and/or the performance of the control equipment.
- l. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northeast District Office within 30 days following completion of the test(s) unless the permittee requests and is granted additional time by the Ohio EPA, Northeast District Office for submission of the test report.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart CCCCC]

- (4) The permittee shall comply with the applicable testing requirements for this EU as required by 40 CFR Part 63, Subpart CCCCC, including the following sections:

63.7340(a) (general provisions - notifications)	You must submit all of the notifications in 40 CFR 63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e) and (f)(4), and 63.9(b) through (h) that apply to you by the specified dates.
63.7340(d) (notification of intent for performance testing))	If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is

	scheduled to begin as required in 40 CFR 63.7(b)(1).
63.7340(e) (notification of compliance status)	If you are required to conduct a performance test, opacity observation, or other initial compliance demonstration, you must submit a notification of compliance status according to 40 CFR 63.9(h)(2)(ii).
63.7341(f) (Electronic reporting of compliance reports)	Beginning on July 7, 2026 or when a report template for this subpart is available, submit reports via CEDRI.
63.7341(g) (Electronic reporting of performance tests)	Beginning on September 3, 2024, submit each performance test within 60 days after the date of the completion of the test.
63.7341(h) (Confidential business information (CBI))	For notifications and reports required to be submitted through CEDRI.
63.7321, 63.7333(a)(2) 12/5/2024 Final rule: 63.7321, 63.7333(a)(2)	For each control device subject to an emission limit for PM in 40 CFR 63.7290(a), you must conduct performance tests no less frequently than twice (at mid-term and renewal) during each term of your title V operating permit. The pushing emission control systems testing required in f)(2)b. can also satisfy this testing requirement for the pushing emission control system. For each control device subject to an emission limit for PM in 40 CFR 63.7290(a), you must conduct performance tests no less frequently than the beginning of your Title V operating permit or every 5 years, whichever is less. The pushing emission control systems testing required in f)(2)b. can also satisfy this testing requirement for the pushing emission control system.
63.7322(a) 12/5/2024 Final rule: 63.7322(a), 63.7326 (mobile scrubber and combustion stack limits)	You must conduct each performance test for emission limits that apply to your affected source according to the requirements in 40 CFR 63.7322(b). You must conduct each performance test for emission limits that apply to your affected source, based on representative performance (i.e., performance based on the entire range of normal operating conditions) of the affected source for the period being



	tested, according to the requirements in paragraph 40 CFR 63.7322(b) through (g). Representative conditions exclude periods of startup and shutdown. You shall not conduct performance tests during periods of malfunction. You must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent the entire range of normal operation, including operational conditions for maximum emission if such emissions are not expected during maximum production. You shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests
63.7324(a) 12/5/2024 Final rule: 63.7324(a) (combustion stack opacity limits)	You must conduct each performance test for opacity limits that apply to your affected source according to the requirements in 40 CFR 63.7324(b). You must conduct each performance test for opacity limits that apply to your affected source based on representative performance (i.e., performance based on the entire range of normal operating conditions) of the affected source for the period being tested, according to the requirements in 40 CFR 63.7324(b). Representative conditions exclude periods of startup and shutdown. You shall not conduct performance tests during periods of malfunction. You must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent the entire range of normal operation, including operational conditions for maximum emissions if such emissions are not expected during maximum production. You shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart L]

g) Miscellaneous Requirements

(1) None.

6. F001, Coal handling and processing

Operations, Property and/or Equipment Description:

Coal material handling and blending operations, including underground receiving bins, conveyor belts, conveyor belt transfer houses, coal preparation/blending building and loading operations.

- a) The following EU terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

- b) Applicable Emissions Limitations and/or Control Requirements

- (1) The specific operation(s), property, and/or equipment that constitute each EU along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17- 07(B)(8)(b)	Visible PE of fugitive dust from coke plant coal handling and processing shall not exceed 20% opacity, as a 3-minute average, except as provided by rule.
b.	OAC rule 3745-17- 08(B)	RACM that are sufficient to minimize or eliminate VE of fugitive dust (see b)(2)b through b)(2)d).

- (2) Additional Terms and Conditions

- a. The material handling operation(s) that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

- i. coal loading/unloading (mobile crane clamshell, truck, and front-end loader);
- ii. coal unloading (bottom dumping of railroad cars and truck dumping);
- iii. coal belt conveyors;
- iv. coal conveyor transfer points (belt to belt to loading bins); and
- v. coal handling (breaker, mixing floor and hammer mills).

- b. The permittee shall employ RACM for the above-identified material handling operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to perform the following control measure(s) to ensure compliance:

- i. Material handling operation: coal loading/unloading (mobile crane clamshell, truck, and front-end loader)

Apply water and/or any other suitable dust suppression chemicals, as needed, or minimize drop height distance.

- ii. Material handling operation: coal unloading (bottom dumping of railroad cars and truck dumping)
Employ and maintain the existing two-sided enclosure.
- iii. Material handling operation: coal belt conveyors
Employ and maintain the existing conveyor belt covers.
- iv. Material handling operation: coal conveyor transfer points (belt to belt to loading bins)
Employ and maintain the existing transfer point belt and bin partial enclosures.
- v. Material handling operation: coal handling (breaker, mixing floor and hammer mills)
Maintain the existing building enclosure. The dust control system on the mixing floor shall be used, as needed, to condition the coal and/or minimize VE of fugitive dust from the hammer mills.

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- c. For each material handling operation that is not adequately enclosed, the above-identified control measures shall be implemented if the permittee determines, as a result of the inspections conducted pursuant to the monitoring section of this permit, that the control measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measures is unnecessary.
- d. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s)	minimum inspection frequency
coal loading/unloading (mobile crane clamshell, truck, and front-end loader)	weekly
coal unloading (bottom dumping of railroad cars and truck dumping)	weekly
coal belt conveyors	weekly
coal conveyor transfer points (belt to belt to loading bins)	weekly



coal handling (breaker, mixing floor and hammer mills)	weekly
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[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (2) The above-mentioned inspections shall be performed during representative, normal operating conditions.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (3) The permittee may, upon receipt of written approval from the Ohio EPA, Northeast District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall maintain records of the following information:
- a. the date and reason any required inspection was not performed;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented.

The information in d)(4)d shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit semiannual deviation reports that identify any of the following occurrences:
- a. each week during which an inspection was not performed by the required frequency; and
 - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

Visible PE of fugitive dust from coke plant coal handling and processing shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

If required, compliance with the visible emission limitation for the material handling operation(s) identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

7. F002, Paved and unpaved roadways

Operations, Property and/or Equipment Description:

Paved and unpaved roadways and parking lots.

- a) The following EU terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

- b) Applicable Emissions Limitations and/or Control Requirements

- (1) The specific operation(s), property, and/or equipment that constitute each EU along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Paved Roadways and Parking Areas:

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(B)(8)	Visible PE are limited to 10% opacity for any paved roadway or parking area, as determined in accordance with OAC rule 3745-17-03(B)(3). A data set shall consist of twelve observations based on four uninterrupted vehicle passes, three observations per vehicle pass. See b)(2)j.
b.	OAC rule 3745-17-08(B), (B)(8), (B)(9)	RACM that are sufficient to minimize or eliminate VE of fugitive dust. See b)(2)c, b)(2)e and b)(2)g through b)(2)i.

Unpaved Roadways and Packing Areas:

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-07(B)(8)	Visible PE are limited to 10% opacity for any unpaved roadway or parking area, as determined in accordance with OAC rule 3745-17-03(B)(3). A data set shall consist of twelve observations based on four uninterrupted vehicle passes, three observations per vehicle pass. See b)(2)j.



d.	OAC rule 3745-17-08(B), (B)(2)	RACM that are sufficient to minimize or eliminate VE of fugitive dust. See b)(2)d through b)(2)f, b)(2)h and b)(2)i.
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(2) Additional Terms and Conditions

- a. The paved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

All paved roadways paved parking areas.
- b. The unpaved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

All unpaved roadways and unpaved parking areas.
- c. The permittee shall employ RACM on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by sweeping and flushing at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- d. The permittee shall employ RACM on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas with water or suitable dust suppression chemicals at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- e. The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- f. Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measure(s) specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.
- g. The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.

- h. Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
 - i. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.
 - j. The emission limitation and rule citation reflect the settlement agreement reached between Ohio EPA and the iron and steel production facilities concerning the iron and steel facilities' appeal to the Ohio ERAC of the 1991 revisions and additions to OAC Chapter 3745-17. The revised rule containing the limitation and rule citation was adopted by the Director of Ohio EPA in December, 1997. The USEPA and the iron and steel production facilities have agreed to consider the emission limitation and rule citation as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of the limitation and rule citation as a revision to the Ohio SIP for PM.
- c) Operational Restrictions
- (1) None.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall determine the need to perform cleaning or other dust abatement methods by inspecting a typical representative of each surface type for roadways and parking areas. If fugitive dust is found on a representative segment of roadways or parking area, then the main group represented shall be inspected and treated, if required. Except as otherwise provided in this section, the permittee shall perform inspections of roadway segments and parking area segments in accordance with the following schedule:

<u>paved roadways and parking areas</u>	<u>minimum inspection frequency</u>
all	Weekly
<u>unpaved roadways and parking areas</u>	<u>minimum inspection frequency</u>
all	Weekly

[Authority for Term: OAC rule 3745-77-07(C)(1)]
 - (2) The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions on days when the plant is operating. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

[Authority for Term: OAC rule 3745-77-07(C)(1)]
 - (3) The permittee may, upon receipt of written approval from the Ohio EPA, Northeast District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall maintain records of the following information:
- a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in d)(4)d shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit semiannual deviation reports that identify any of the following occurrences:
- a. each week during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitations:

Visible PE are limited to 10% opacity for any paved roadway or parking area, as determined in accordance with OAC rule 3745-17-03(B)(3).

Visible PE are limited to 10% opacity for any unpaved roadway or parking area, as determined in accordance with OAC rule 3745-17-03(B)(3).

Applicable Compliance Method:

If required, compliance with the emission limitation for the paved and unpaved roadways and parking areas identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraph (B)(3)(d) of OAC rule 3745-17-03.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

8. F004, Portable Paved Roadways and Parking Areas

Operations, Property and/or Equipment Description:

Portable Paved Roadways and Parking Areas

- a) The following EU terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

- b) Applicable Emissions Limitations and/or Control Requirements

- (1) The specific operation(s), property, and/or equipment that constitute each EU along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)(a)(ii) (PTI No. P0128314)	The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to PM ₁₀ emissions from this air contaminant source since the PTE is less than 10 tons per year.
b.	OAC rule 3745-17-07(B)(8)	Visible PE are limited to 10% opacity for any paved roadway or parking area, as determined in accordance with OAC rule 3745-17-03(B)(3). A data set shall consist of twelve observations based on four uninterrupted vehicle passes, three observations per vehicle pass. See b)(2)g.
c.	OAC rule 3745-17-08(B), (B)(8), (B)(9)	RACM that are sufficient to minimize or eliminate VE of fugitive dust. See b)(2)b through b)(2)f.

- (2) Additional Terms and Conditions

- a. The paved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

All paved roadways paved parking areas.
- b. The permittee shall employ RACM on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by sweeping and flushing at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- c. The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this

permit. Implementation of the control measures shall not be necessary for a paved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

- d. The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- e. Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- f. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.
- g. The emission limitation and rule citation reflect the settlement agreement reached between Ohio EPA and the iron and steel production facilities concerning the iron and steel facilities' appeal to the Ohio ERAC of the 1991 revisions and additions to OAC Chapter 3745-17. The revised rule containing the limitation and rule citation was adopted by the Director of Ohio EPA in December, 1997. The USEPA and the iron and steel production facilities have agreed to consider the emission limitation and rule citation as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of the limitation and rule citation as a revision to the Ohio SIP for PM.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall determine the need to perform cleaning or other dust abatement methods by inspecting a typical representative of each surface type for roadways and parking areas. If fugitive dust is found on a representative segment of roadways or parking area, then the main group represented shall be inspected and treated, if required. Except as otherwise provided in this section, the permittee shall perform inspections of roadway segments and parking area segments in accordance with the following schedule:

<u>paved roadways and parking areas</u>	<u>minimum inspection frequency</u>
all	weekly

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (2) The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions on days when the plant is operating. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (3) The permittee may, upon receipt of written approval from the Ohio EPA, Northeast District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall maintain records of the following information:
- the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - the dates the control measures were implemented; and
 - on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in d)(4)d shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

e) **Reporting Requirements**

- (1) The permittee shall submit semiannual deviation reports that identify any of the following occurrences:
- each week during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

f) **Testing Requirements**

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitations:

Visible PE are limited to 10% opacity for any paved roadway or parking area, as determined in accordance with OAC rule 3745-17-03(B)(3).

Applicable Compliance Method:

If required, compliance with the emission limitation for the paved and unpaved roadways and parking areas identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed

on July 1, 1996, and the modifications listed in paragraph (B)(3)(d) of OAC rule 3745-17-03.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

g) **Miscellaneous Requirements**

(1) At the discretion and following the approval of the Director (the Ohio EPA, Northeast District Office), the permittee may relocate the portable source within the State of Ohio without first obtaining a PTIO or a PTI, providing the appropriate notification and exemption requirements have been met. Pursuant to the permanent exemption for portable sources in OAC rule 3745-31-03(A)(1), the Director may issue a "Notice of Site Approval" for any pre-disclosed location if the portable source meets the requirements of OAC rule 3745-31-05(H), as follows:

- a. the portable source is operating pursuant to a currently effective PTI, PTIO, or has been approved for registration status and continues to comply with the requirements of the permit and any applicable state and/or federal rules;
- b. the portable source has been issued a PTIO or PTI and the permittee continues to comply with the requirements of the permit, including any applicable BAT determination;
- c. the portable source owner has identified and submitted the proposed site to the Ohio EPA;
- d. the permitting DO/LAA and the DO/LAA having jurisdiction over the new site (if different) have determined that the portable source will have an acceptable environmental impact at the proposed site;
- e. a public notice, meeting the requirements OAC rule 3745-47, is published in the county where the proposed site is located;
- f. the owner of the proposed site (if not the permittee) has provided the portable source owner with approval, or an equivalent declaration, that it is acceptable to move the portable source to the proposed site; and
- g. the permittee has provided the Ohio EPA with a minimum of a 15-day written notice of the relocation.

The portable source can be relocated upon receipt of the Director's "Notice of Site Approval" for the site. Any site approval issued by the Ohio EPA, pursuant to OAC rule 3745-31-05(H) is subject to expiration and renewal. Pursuant to OAC rule 3745-31-07(C)(3), any site approval for a portable source shall be issued for a period of time determined to be appropriate by the Director and the renewal will be reevaluated and subject to the same requirements above.

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3)]

(2) If the relocation of the portable source would result in the installation of a major source or the modification of a major source, as defined in OAC rule 3745-31-01, the permittee shall submit an application and obtain a PTIO or PTI (as applicable) for the new location prior to moving the portable source.

When a portable source is located at a stationary source or at a site with multiple portable sources, the potential emissions of the portable source may be required to be added to that of the facility, in order to determine the PTE for Title V and PSD applicability. Relocation of any portable source that results in the creation of a major source, as defined in OAC rule 3745-



77-01, must also meet all applicable requirements under the Title V program contained in OAC rule 3745-77, which may include the requirement to apply for a Title V permit.

The "Notice of Intent to Relocate" shall be submitted to the Ohio EPA DO/LAA responsible for issuing the permits for the portable source. Upon receipt of the notice, the permitting office shall notify the Ohio EPA, Northeast District Office having jurisdiction over the new site. Failure to submit said notification or failure to receive Ohio EPA approval prior to relocation of the portable source may result in fines and civil penalties.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

9. F005, Portable Stock Piles

Operations, Property and/or Equipment Description:

Portable Storage Piles

- a) The following EU terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
- (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each EU along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Storage Piles (load-in and load-out of storage piles):

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)(a)(ii) (PTI No. P0128314)	The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to PM ₁₀ emissions from this air contaminant source since the PTE is less than 10 tons per year.
b.	OAC rule 3745-17-07(B)(8)(b)	Visible PE of fugitive dust from any material handling operation (including loading coal into or loading coal out of any coal storage pile) shall not exceed 20% opacity, as a 3-minute average, except provided by rule.
c.	OAC rule 3745-17-08(B)	RACM that are sufficient to minimize or eliminate VE of fugitive dust. See b)(2)a and b)(2)b.

Storage Piles (pile working operations on top of storage piles, including compacting, grading or transporting materials):

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-07(B)(8)(c)	Visible PE of fugitive dust from the operation of vehicles on top of any material storage pile, where such vehicles are employed for the purpose of compacting, grading or transporting materials, shall not exceed 10% opacity. A data set shall consist of twelve observations based on four uninterrupted vehicle passes, three observations per vehicle pass.



e.	OAC rule 3745-17-08(B)	RACM that are sufficient to minimize or eliminate VE of fugitive dust. See b)(2)c and b)(2)d.
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Storage Piles (wind erosion from storage piles):

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
f.	OAC rule 3745-17-07(B)(8)(d)	Visible PE of fugitive dust from wind erosion of any material storage pile shall not exceed 10% opacity, as a 3-minute average.
g.	OAC rule 3745-17-08(B)	RACM that are sufficient to minimize or eliminate VE of fugitive dust. See b)(2)e and b)(2)f.

Material Handling (loading materials into train cars, trucks, and etc.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
h.	OAC rule 3745-17-07(B)(1)	Visible PE of fugitive dust from loading materials into train cars, trucks and etc. shall not exceed 20% opacity, as a 3-minute average.
i.	OAC rule 3745-17-08(B), (B)(6)	RACM that are sufficient to minimize or eliminate VE of fugitive dust. See b)(2)g and b)(2)h.

(2) Additional Terms and Conditions

- a. The permittee shall employ RACM on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to maintain minimal drop heights for stackers and front-loaders, and chemical stabilization/dust suppressants and/or watering/sprinkling systems at sufficient treatment frequencies to ensure compliance. The operator shall avoid dragging any front-end loader bucket along the ground. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- b. The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.
- c. The permittee shall employ RACM to control visible PE of fugitive dust from the operation of vehicles on top of any material storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the application, the permittee has committed to perform one or more of the following:



chemical stabilization and/or watering/sprinkling systems/hoses, covering the storage piles, at sufficient treatment to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- d. The above-mentioned control measure(s) shall be employed for each storage pile (vehicles operating atop piles) if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.
- e. The permittee shall employ RACM for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the application, the permittee has committed to perform one or more of the following: chemical stabilization and/or watering/sprinkling systems/hoses, covering the storage piles, at sufficient treatment to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- f. The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.
- g. The permittee shall employ RACM for material handling operations for loading railcars, trucks and etc. for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to maintain minimal drop heights for stackers and front-loaders, and watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- h. The above-mentioned control measure(s) shall be employed for material handling operations (loading railcars, trucks and etc.) if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.
- i. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, the permittee shall perform inspections of each load-in operation at each storage pile while operating in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-in inspection frequency</u>
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all	daily
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[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (2) Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-out inspection frequency</u>
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all	daily
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[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (3) Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum wind erosion inspection frequency</u>
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all	daily
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[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (4) Except as otherwise provided in this section, the permittee shall perform inspections of the operation of vehicles on top of any material storage pile in accordance with the following frequencies:

<u>vehicle identification</u>	<u>minimum inspection frequency</u>
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all	daily
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[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (5) Except as otherwise provided in this section, the permittee shall perform inspections of the loading of materials into railcars, trucks and etc. in accordance with the following frequencies:

<u>vehicle identification</u>	<u>minimum inspection frequency</u>
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all	daily
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[Authority for Term: OAC rule 3745-77-07(C)(1)]

No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (6) The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, operation of vehicles on top of material storage pile, and wind erosion from the surface of a storage pile.

The inspections shall be performed during representative, normal storage pile operating conditions.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (7) The permittee shall maintain records of the following information:
- the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - the dates the control measures were implemented; and
 - on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in d)(7)d shall be kept separately for (i) the load-in operations, (ii) the load-out operations, (iii) operation of vehicles on top of material storage piles, (iv) the pile surfaces (wind erosion) and loading railcar/trucks, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) None The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
- each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

Visible PE of fugitive dust from any material handling operation (including loading coal into or loading coal out of any coal storage pile) shall not exceed 20% opacity, as a 3-minute average, except provided by rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based on VE of fugitive dust observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(3).

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-07(B)(8)]

b. Emissions Limitation:



Visible PE of fugitive dust from the operation of vehicles on top of any material storage pile, where such vehicles are employed for the purpose of compacting, grading or transporting materials, shall not exceed 10% opacity.

Applicable Compliance Method:

If required, compliance shall be demonstrated based on VE of fugitive dust observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(3).

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-07(B)(8)]

c. Emissions Limitation:

Visible PE of fugitive dust from wind erosion of any material storage pile shall not exceed 10% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated based on VE of fugitive dust observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(3).

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-07(B)(8)]

d. Emissions Limitation (material handling, loading materials into train cars, trucks and etc.):

Visible PE of fugitive dust from material handling operations shall not exceed 20% opacity, as a three-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated based on VE of fugitive dust observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(3).

[Authority for term: OAC rule 3745-77-07(C)(1), and OAC rule 3745-17-07(B)]

g) **Miscellaneous Requirements**

(1) At the discretion and following the approval of the Director (the Ohio EPA, Northeast District Office), the permittee may relocate the portable source within the State of Ohio without first obtaining a PTIO or a PTI, providing the appropriate notification and exemption requirements have been met. Pursuant to the permanent exemption for portable sources in OAC rule 3745-31-03(A)(1), the Director may issue a "Notice of Site Approval" for any pre-disclosed location if the portable source meets the requirements of OAC rule 3745-31-05(H), as follows:

- a. the portable source is operating pursuant to a currently effective PTI, PTIO, or has been approved for registration status and continues to comply with the requirements of the permit and any applicable state and/or federal rules;
- b. the portable source has been issued a PTIO or PTI and the permittee continues to comply with the requirements of the permit, including any applicable BAT determination;
- c. the portable source owner has identified and submitted the proposed site to the Ohio EPA;



- d. the permitting DO/LAA and the DO/LAA having jurisdiction over the new site (if different) have determined that the portable source will have an acceptable environmental impact at the proposed site;
- e. a public notice, meeting the requirements OAC rule 3745-47, is published in the county where the proposed site is located;
- f. the owner of the proposed site (if not the permittee) has provided the portable source owner with approval, or an equivalent declaration, that it is acceptable to move the portable source to the proposed site; and
- g. the permittee has provided the Ohio EPA with a minimum of a 15-day written notice of the relocation.

The portable source can be relocated upon receipt of the Director's "Notice of Site Approval" for the site. Any site approval issued by the Ohio EPA, pursuant to OAC rule 3745-31-05(H) is subject to expiration and renewal. Pursuant to OAC rule 3745-31-07(C)(3), any site approval for a portable source shall be issued for a period of time determined to be appropriate by the Director and the renewal will be reevaluated and subject to the same requirements above.

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3)]

- (2) If the relocation of the portable source would result in the installation of a major source or the modification of a major source, as defined in OAC rule 3745-31-01, the permittee shall submit an application and obtain a PTIO or PTI (as applicable) for the new location prior to moving the portable source.

When a portable source is located at a stationary source or at a site with multiple portable sources, the potential emissions of the portable source may be required to be added to that of the facility, in order to determine the PTE for Title V and PSD applicability. Relocation of any portable source that results in the creation of a major source, as defined in OAC rule 3745-77-01, must also meet all applicable requirements under the Title V program contained in OAC rule 3745-77, which may include the requirement to apply for a Title V permit.

The "Notice of Intent to Relocate" shall be submitted to the Ohio EPA DO/LAA responsible for issuing the permits for the portable source. Upon receipt of the notice, the permitting office shall notify the Ohio EPA, Northeast District Office having jurisdiction over the new site. Failure to submit said notification or failure to receive Ohio EPA approval prior to relocation of the portable source may result in fines and civil penalties.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

10. F011, Boiler Ash Handling

Operations, Property and/or Equipment Description:

No. 1 Boiler (B010) ash handling. Ash is pneumatically conveyed into two ash silos. Fly ash is pneumatically conveyed into semi-truck. Bottom ash is loaded into truck. This EU was acquired from BDM/RG Steel Warren on January 1, 2013. BDM/RG Steel Warren's EU ID was F011.

- a) The following EU terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

- b) Applicable Emissions Limitations and/or Control Requirements

- (1) The specific operation(s), property, and/or equipment that constitute each EU along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(B)(1)	Visible PE shall not exceed 20% opacity as a 3-minute average.
b.	OAC rule 3745-17-08(B)	The permittee shall employ RACM that are sufficient to minimize or eliminate VE of fugitive dust. See b)(2)b through b)(2)d.

- (2) Additional Terms and Conditions

- a. The material handling operations that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are fly ash and bottom ash handling operations including pneumatic conveying from the fly ash silo to trucks and bottom ash transfer to trucks for disposal.
- b. The permittee shall employ RACM for the above-identified material handling operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the RACM currently consist of:

Material handling operations:	Control measures:
pneumatic conveying from the fly ash to trucks	wet suppression at all times during conveying
bottom ash transfer to trucks	wet suppression at all times during transfer

Nothing in this paragraph shall prohibit the permittee from employing other, equally effective, control measures to ensure compliance.

- c. For each material handling operation that is not adequately enclosed, the above-identified control measures shall be implemented if the permittee determines, as a

result of the inspections conducted pursuant to the monitoring section of this permit, that the control measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during the operation of the material handling operations until further observation confirms that use of the control measures are unnecessary.

- d. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) None Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations while operating in accordance with the following minimum frequencies:

Material handling operations:	Minimum inspection frequency:
pneumatic conveying from the fly ash to trucks	weekly
bottom ash transfer to trucks	weekly

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (2) The above-mentioned inspections shall be performed during representative, normal operating conditions.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (3) The permittee may, upon receipt of written approval from the Ohio EPA, Northeast District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall maintain records of the following information:

- the date and reason any required inspection was not performed;
- the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
- the dates the control measures were implemented; and
- on a calendar quarter basis, the total number of days the control measures were implemented.

The information in d)(4)d shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
- a. each week during which an inspection was not performed by the required frequency; and
 - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

Visible PE shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

If required, compliance with the visible PE limitation of the material handling operations identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-07(B)(1)]

g) Miscellaneous Requirements

- (1) None.

11. F013, Coke Screening Station

Operations, Property and/or Equipment Description:

Coke Screening Station

- a) The following EU terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

- b) Applicable Emissions Limitations and/or Control Requirements

- (1) The specific operation(s), property, and/or equipment that constitute each EU along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)(a)(ii) PTI P0138244	The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to this air contaminant source because the calculated emission rates for PM ₁₀ and PM _{2.5} are each less than 10 TPY.
b.	OAC rule 3745-17-08(B)	See b)(2)a and b)(2)b.
c.	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity as a 3-minute average.

- (2) Additional Terms and Conditions

- a. The material handling operation(s) that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:
- i. conveyors and drop points; and
 - ii. screener.
- b. The permittee shall employ RACM for the above-identified material handling operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to perform the following control measure(s) to ensure compliance:

Material handling operation(s)	Control measure(s)
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All conveyors and drop points	Use of material with sufficient moisture content (application of water when necessary); minimize drop height.
Screener	Use of material with sufficient moisture content (application of water when necessary); minimize drop height.

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- c. For each material handling operation that is not adequately enclosed, the above-identified control measures shall be implemented if the permittee determines, as a result of the inspections conducted pursuant to the monitoring section of this permit, that the control measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measures is unnecessary.
- d. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

Material handling operation(s)	Minimum inspection frequency
All Conveyors and drop points	Monitoring once per week during daylight hours.
Screener	Monitoring once per week during daylight hours.

The inspections shall be performed during representative, normal operating conditions.

- (2) The permittee may, upon receipt of written approval from Ohio EPA, Northeast District Office, modify the inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the requirements of d)(1) of this permit.
- (3) For material handling operations, the permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates that the additional control measure(s) was (were) implemented;

- d. a description of the additional controls implemented; and
- e. on a calendar quarter basis, the total number of days the control measures were implemented.

The information in d)(3)e shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
 - a. each week during which an inspection was not performed by the required frequency; and
 - b. each instance when an additional control measure, that was to be performed as a result of an inspection, was not implemented.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emissions Limitation
Visible PE from any fugitive dust source shall not exceed 20% opacity as a 3-minute average.
Applicable Compliance Method
If required, compliance with the allowable visible emission limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(3).

g) Miscellaneous Requirements

- (1) None.

12. P001, No. 4 coke oven battery quenching station with baffles

Operations, Property and/or Equipment Description:

No. 4 Coke oven battery quenching station

- a) The following EU terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

- b) Applicable Emissions Limitations and/or Control Requirements

- (1) The specific operation(s), property, and/or equipment that constitute each EU along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05 (PTI 02-324)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 63, Subpart CCCCC.
b.	OAC rule 3745-17-11	PM emissions from the No. 4 coke oven battery quenching station shall not exceed 51.3 lbs/hr based on Table I of OAC rule 3745-17-11. Figure II of OAC rule 3745-17-11 does not apply because the uncontrolled mass rate of emission cannot be ascertained. See b)(2)a.
c.	OAC rule 3745-17-07(A)	Visible PE from the No. 4 coke oven battery quenching station shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
d.	40 CFR Part 63, Subpart CCCCC (40 CFR 63.7280 – 63.7352) [In accordance with 40 CFR 63.7295, this EU is a quench station at an existing Coke Ovens: Pushing, Quenching, and Battery Stacks subject to the emission limitations and control measures specified in this section.]	See b)(2)b, c)(1), d)(1) and e)(1).

- (2) Additional Terms and Conditions

- a. Emissions of particulates from this EU shall be controlled by limiting the TDS content of the quench water and by employing an adequate baffle system within the quench tower.

- b. Pursuant to 40 CFR Part 63, Subpart CCCCC, the permittee shall comply with the following additional terms and conditions for general compliance requirements and other requirements within this standard:

63.7310(a)	You must be in compliance with the emission limitations, work practice standards, operation and maintenance requirements in this subpart at all times. At all times, you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
63.7350	The applicability of the General Provisions in 40 CFR Part 63, Subpart A to units subject to Subpart CCCCC is identified in Table 1 to the subpart.

c) Operational Restrictions

- (1) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart CCCCC, including the following sections:

63.7295(a)(1), 63.7333(h)(1) and/or 63.7333(i)(1).	Concentration of TDS in the water used for quenching must not exceed 1,100 milligrams per liter (mg/L); or The sum of the concentrations of benzene, benzo(a)pyrene, and naphthalene in the water used for quenching must not exceed the applicable site-specific limit approved by the permitting authority.
63.7295(a)(2)	Acceptable makeup water for the quenching, as defined in 40 CFR 63.7352, must be used.

63.7295(b)(1)	Equip quench tower with baffles such that no more than 5% of the cross-sectional area of the tower may be uncovered or open to the sky.
63.7295(b)(2)	The baffles within the tower must be washed once each day, except for following: Highest measured ambient temperature remains less than 30 degrees Fahrenheit. If the measured ambient temperature rises to 30 degrees Fahrenheit or more, the daily washing must resume according to the schedule in operation and maintenance plan; and Continuously record the ambient temperature on days that the baffles were not washed.
63.7295(c)	As provided in 40 CFR 63.3(g), an alternative to the work practice standard in 40 CFR 63.7295(b) may be requested.
63.7300(b) and 63.7335(a)	Prepare and operate at all times according to a written operation and maintenance plan for the general operation and maintenance of the existing by-product coke oven batteries, addressing at a minimum the elements in 40 CFR 63.7300(b)(1) through (6).

[Authority for Term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart CCCCC]

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall comply with the applicable monitoring and record keeping requirements required under 40 CFR Part 63, Subpart CCCCC, including the following sections:

63.7333(h)(2) (for TDS limit, weekly sampling)	If the TDS limit for quench water in 63.7295(a)(1)(i) was elected, determine the TDS content of the quench water at least weekly according to the requirements in 63.7325(a) and recording the sample results.
63.7325(a) (for TDS limit, performance testing)	If the TDS limit for quench water in 63.7295(a)(1)(i) was elected, each performance test must be conducted based on representative performance (i.e., performance based on the entire range of normal operating conditions) of the affected source for the period being tested, in accordance with the conditions specified in (a)(1) and (a)(2) of 63.7325.



	Representative conditions exclude periods of startup and shutdown. You shall not conduct performance tests during periods of malfunction. You must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent the entire range of normal operation, including operational conditions for maximum emissions if such emissions are not expected during maximum production. You shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.
63.7325(b) (for constituent limit, establish site-specific constituent limit)	If at any time you elect to meet the alternative requirements for quench water in 63.7295(a)(1)(ii), you must establish a site-specific constituent limit in accordance with procedures in b)(1) through b)(4) of 63.7325(b).
63.7333(i)(2) (for constituent limit, monthly sampling)	If the constituent limit for quench tower in 63.7295(a)(1)(ii) was elected, determine the sum of the constituent concentrations at least monthly according to the requirements in 40 CFR 63.7325(c) and recording the sample results.
63.7325(c) (for constituent limit, performance testing)	If the constituent limit for quench tower in 63.7295(a)(1)(ii) was elected, each performance test must be conducted in accordance with the conditions in paragraph (c)(1) and (2) of 63.7325.
63.7295(b)(3)	Inspect the quench tower on a monthly basis for damaged or missing baffles and blockage.
63.7295(b)(4)	Initiate repair or replacement of damaged or missing baffles within 30 days and complete as soon as practicable.
63.7295(c)	As provided in 40 CFR 63.3(g), an alternative to the work practice standard in 40 CFR 63.7295(b) may be requested.
63.7342 and 63.7335(d)	Maintain specified records, as applicable.
63.7334(e)(1) through (3)	Demonstrate continuous compliance by maintaining the following: Maintain baffles in quench tower, not more than 5% of the cross-sectional area of the



	tower is uncovered or open to the sky as required in 40 CFR 7295(b)(1); Maintain records the document conformance with the washing, inspection, and repair requirements in 40 CFR 63.7295(b)(2), including records of the ambient temperature on any day that the baffles were not washed; and Maintain records of makeup water to document conformance with the requirement for acceptable makeup water in 40 CFR 63.7295(a)(2).
63.7343	Form and duration for record keeping.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart CCCCC]

e) Reporting Requirements

- (1) The permittee shall comply with the applicable reporting requirements required under 40 CFR Part 63, Subpart CCCCC, including the following sections:

63.7336	You must report each instance in which you did not meet each emission limitation in 40 CFR Part 63 Subpart CCCCC that applies to you. This includes periods of startup, shutdown, and malfunction. You must also report each instance in which you did not meet each work practice standard or operation and maintenance requirement 40 CFR Part 63 Subpart CCCCC that applies to you. These instances are deviations from the emission limitations (including operating limits), work practice standards, and operation and maintenance requirements in this subpart. These deviations must be reported according to the requirements in 40 CFR 63.7341. (a) In the event that an affected unit fails to meet an applicable standard, record the number of failures. For each failure, record the start date, start time and duration (in hours) of each failure. (b) For each failure to meet an applicable standard, record and retain a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions.
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	(c) Record actions taken to minimize emissions in accordance with 63.7310(a), and any corrective actions taken to return the affected unit to its normal or usual manner of operation.
63.7341(a) and (c)	Submit semiannual compliance reports for all affected sources other than battery stacks including the information in paragraphs 40 CFR 63.7341(c)(1) through (3), and as applicable, paragraphs (c)(4) through (8), to Ohio EPA covering the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. All semiannual compliance reports must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.
63.7341(e) (Part 70 monitoring report)	For sources with a Title V Operating Permit pursuant to 40 CFR Part 70, you must report all deviations under 40 CFR Part 63, Subpart CCCCC in the Title V semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A). If you submit a compliance report for an affected source along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emission limitation or work practice standard in 40 CFR Part 63, Subpart CCCCC, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report under 40 CFR Part 63, Subpart CCCCC does not otherwise affect any obligation you may have to report deviations from Title V permit requirements to Ohio EPA.
63.7340(e)	If you are required to conduct a performance test, opacity observation, or other initial compliance demonstration, you must submit a notification of compliance status according to 40 CFR 63.9(h)(2)(ii).

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

Visible PE from the No. 4 coke oven battery quenching station shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible PE observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-07(A)]

b. Emissions Limitation:

PM emissions from the No. 4 coke oven battery quenching station shall not exceed 51.3 lbs/hr based on Table I of OAC rule 3745-17-11. Figure II of OAC rule 3745-17-11 does not apply because the uncontrolled mass rate of emission cannot be ascertained (see b)(2)a).

Applicable Compliance Method:

Compliance shall be demonstrated through weekly testing for TDS in the quench water, as required in c)(1), and by maintaining compliance with the TDS limit of 1100 mg/l in the quench water, as required by 40 CFR Part 63, Subpart CCCCC.

[Authority for Term: OAC rule 3745-77-07(C)(1), OAC rule 3745-17-11, and 40 CFR Part 63 Subpart CCCCC]

g) Miscellaneous Requirements

- (1) None.

13. P002, Desulfurization Plant

Operations, Property and/or Equipment Description:

Coke oven gas desulfurization system, recovering elemental sulfur from hydrogen sulfide by use of multi-step Claus Process, controlled by a tailgas incinerator.

- a) The following EU terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

- b) Applicable Emissions Limitations and/or Control Requirements

- (1) The specific operation(s), property, and/or equipment that constitute each EU along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05 (PTI 02-171)	The H ₂ S limit established in this PTI is less stringent than the H ₂ S limit established in PSD Permit No. EPA-5-77-A-9.
b.	OAC rule 3745-17-07(A)	Visible PE from the excess coke gas flare shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
c.	OAC rule 3745-17-11	See b)(2)c.
d.	OAC rule 3745-18-06	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	40 CFR Part 52.21 PSD Permit No. EPA-5-77-A-9	No coke-oven gas from battery number 4 shall be burned unless it contains a concentration of sulfur compounds, expressed as H ₂ S, of less than 35 grains per 100 dscf of coke-oven gas produced. Included in this concentration are all sulfur compounds, expressed as H ₂ S, emitted from sulfur recovery equipment used to process the sulfur compounds removed from coke-oven gas.

- (2) Additional Terms and Conditions

- a. The permittee shall maintain a written quality assurance/quality control plan for the continuous monitoring systems, designed to ensure continuous valid and representative readings of total reduced sulfur and SO₂ emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and logbook dedicated to the total reduced sulfur monitoring system and the SO₂ monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct RATAs in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

- b. The continuous monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.
- c. The uncontrolled mass rate of PE from this EU is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.

c) **Operational Restrictions**

- (1) The average temperature at the tail gas thermal incinerator outlet, for any 3-hour block of time when the EU is in operation and when any tail gas is diverted to the tail gas thermal incinerator, shall not be less than 1000 degrees Fahrenheit.

[Authority for Term: OAC rule 3745-77-07(A)(1)]

- (2) The permittee shall vent all excess desulfurized coke oven gas to the excess coke oven gas flare.

[Authority for Term: OAC rule 3745-77-07(A)(1)]

d) **Monitoring and/or Recordkeeping Requirements**

- (1) When EU(s) B901 and/or P002, is/are in operation, the permittee shall operate and maintain the existing equipment to continuously monitor and record the concentration of SO₂ from exhaust gases of the tail gas thermal incinerator, when any tail gas is diverted to the tail gas thermal incinerator, and total reduced sulfur in the desulfurized coke oven gas, expressed as H₂S in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

[Authority for Term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), and 40 CFR Part 52.21 PSD Permit No. EPA-5-77-A-9]

- (2) When EU(s) B901 and/or P002, is/are in operation, the permittee shall maintain records of all data obtained by the continuous SO₂ and total reduced sulfur monitoring systems including, but not limited to, the grains of H₂S per 100 dscf of coke-oven gas produced. For determining this concentration (gr H₂S/100 dscf), the permittee shall use the following, unless otherwise approved by Ohio EPA.

For the total reduced sulfur monitor system (sweet gas outlet contactor):

$$S_s = \frac{0.061952(\text{TRS})}{(1 - X_{\text{H}_2\text{O}})^*}$$

where:

S_s = grains of H₂S equivalent per 100 dscf of sweet gas;

$$\text{TRS} = X_{\text{H}_2\text{S}} + X_{\text{COS}} + 2X_{\text{CS}_2}$$

where, X_i = volume of species present (expressed in PPM)



X_{H_2O} = volume percent of water present (expressed as a fraction); and

* When TRS is being measured on a dry basis, this part of the equation should not be included in the calculation.

For the tail gas SO₂ monitor system, when the tail gas is diverted to tail gas thermal incinerator:

$$S_t = \frac{(3.27 \times 10^7)(Q_t)(X_{SO_2})}{V_s(460 + T_t)}$$

where:

S_t = grains of H₂S equivalent per 100 dscf of sweet gas;

Q_t = tail gas flow rate (acfm);

V_s = sweet gas flow rate (dscfm), as determined below;

X_{SO_2} = volume of SO₂ present (expressed as a fraction); and

T_t = tail gas temperature (°F).

$$V_s = \frac{(17.65)(Q_s)(P_s)(1 - X_{H_2O})}{(460 + T_s)}$$

where:

Q_s = sweet gas flow rate (acfm);

P_s = sweet gas pressure (in Hg);

X_{H_2O} = volume percent of H₂O present (expressed as a fraction); and

T_s = sweet gas temperature (°F).

Total sulfur concentration (sweet and tail gas):

$$ST = S_s + S_t$$

where:

ST = grains of H₂S equivalent per 100 dscf of coke-oven gas produced, calculated as a one-hour block average.

Data collected by each continuous monitoring systems shall be used to calculate one-hour block averages in accordance with the monitoring requirements in 40 CFR 60.13(h).

The permittee shall calculate a daily average from the calculated one-hour block averages, for the purpose of demonstrating compliance with the emissions limit of that no coke-oven gas from battery number 4 shall be burned unless it contains a concentration of sulfur compounds, expressed as H₂S, of less than 35 grains per 100 dscf of coke-oven gas produced.

[Authority for Term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), and 40 CFR Part 52.21 PSD Permit No. EPA-5-77-A-9]

- (3) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature at the tail gas thermal incinerator outlet when any tail gas is diverted to the tail gas thermal incinerator. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.



The permittee shall collect and record the following information for each day:

- a. all 3-hour blocks of time during which the average temperature at the tail gas thermal incinerator outlet, when any tail gas was diverted to the tail gas thermal incinerator, was less than 1000 degrees Fahrenheit; and
- b. a log of the downtime for the tail gas thermal incinerator and/or monitoring equipment, when any tail gas was diverted to the tail gas thermal incinerator.

[Authority for Term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), and 40 CFR Part 52.21 PSD Permit No. EPA-5-77-A-9]

- (4) The permittee shall observe the excess coke oven gas flare and record the following information each shift:

- a. observations during which the coke oven gas flare was functioning properly and excess coke oven gas was vented and flared;
- b. observations during which the coke oven gas flare was functioning properly and excess coke oven gas was not vented; and
- c. observations during which the coke oven gas flare was not functioning properly and excess coke oven gas was vented, but was not flared.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (5) When EU(s) B901 and/or P002, is/are in operation, the permittee shall maintain records of each period of time (start time and date and end time and date) when coke oven gas is routed to the optional caustic scrubber.

e) **Reporting Requirements**

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify 1.) each day during which the concentration of H₂S in the desulfurized coke oven gas and the desulfurization tail gas, combined, was at or over 35 grains per 100 dscf of coke- oven gas produced, as a daily average, based on one-hour block averages from the actual hours of operation of producing coke oven gas at EU B901 during each day and the actual H₂S content for each such day; 2.) the actual volume amount of coke oven produced for each such day, in dscf/day; and 3.) if coke oven gas was routed to the optional caustic scrubber for each such day and the period of time

[Authority for Term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), and 40 CFR Part 52.21 PSD Permit No. EPA-5-77-A-9]

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time during which the average temperature at the tail gas thermal incinerator outlet did not comply with the temperature limitation specified above, when tail gas was diverted to the tail gas thermal incinerator and then exhausted to the battery stack.

[Authority for Term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), and 40 CFR Part 52.21 PSD Permit No. EPA-5-77-A-9]

- (3) The permittee shall submit quarterly deviation (excursion) reports that identify all periods during which the excess coke oven gas flare and/or monitoring equipment was/were not functioning properly. The reports shall include the date, time, and duration of each such period.

[Authority for Term: OAC rule 3745-77-07(C)(1).

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

No coke-oven gas from battery number 4 shall be burned unless it contains a concentration of sulfur compounds, expressed as H₂S, of less than 35 grains per 100 dscf of coke-oven gas produced. Included in this concentration are all sulfur compounds, expressed as H₂S, emitted from sulfur recovery equipment used to process the sulfur compounds removed from coke-oven gas.

Applicable Compliance Method:

Compliance shall be demonstrated based on the monitoring and record keeping requirements in d)(1), d)(2) and the reporting requirements in e)(1).

[Authority for Term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), and 40 CFR Part 52.21 PSD Permit No. EPA-5-77-A-9]

b. Emissions Limitation:

Visible PE from the excess coke gas flare shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated by visible PE observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-07(A)]

g) Miscellaneous Requirements

- (1) None.

14. P801, Light Oil Recovery System

Operations, Property and/or Equipment Description:

By-Product Collection: Light Oil Recovery, including any process vessels (light-oil condensers, light-oil decanters, wash-oil decanters, wash-oil circulation tanks), light-oil storage tanks, and other equipment in benzene service, including but limited to, exhausters, light oil sumps, pumps, valves, sampling connectors and control systems.

- a) The following EU terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

- b) Applicable Emissions Limitations and/or Control Requirements

- (1) The specific operation(s), property, and/or equipment that constitute each EU along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	40 CFR Part 61, Subpart L (National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants)	No detectable fugitive VOC emissions from the light oil recovery system including equipment in benzene service. See c)(2).
b.	40 CFR Part 61, Subpart V [National Emission Standard for Equipment Leaks (Fugitive Emission Sources)]	LDAR program for fugitive VOC emissions from the light oil recovery system including equipment in benzene service. See b)(2)b through b)(2)j.
c.	OAC rule 3745-21-09(DD)	LDAR program for fugitive VOC emissions from equipment in VOC service. See b)(2)a.

- (2) Additional Terms and Conditions

- a. A LDAR program for the light oil recovery system in benzene service shall be implemented in accordance with the requirements specified in d)(19)a through d)(19)j of this permit.
- b. Pressure relief devices in gas/vapor service (40 CFR 61.242-4):
- Except during pressure releases, the pressure relief device shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background, as measured by the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code.
 - No later than 5 calendar days after a pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions in accordance with the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code.

- iii. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions as soon as practicable, but no later than 5 calendar days after the pressure release, except for a delay of repair as provided in b)(2)h of this permit.
 - iv. Excluded from the requirements of b)(2)b.i through b)(2)b.iii of this permit is any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing transporting leakage from the pressure relief device to a control device and complies with the requirements specified in b)(2)g of this permit.
- c. Sampling connection system (40 CFR 61.242-5):
 - i. Except as otherwise provided in b)(2)c.iii of this permit, any sampling connection system in the process unit shall comply with the requirements specified in b)(2)c.ii of this permit.
 - ii. The sampling connection system shall be equipped with a closed purge system or a closed vent system that meets one of the following requirements:
 - (a) the purged process fluid is returned directly to the process line with zero VOC emissions to the ambient air;
 - (b) the purged process fluid is collected and recycled with zero VOC emissions to the ambient air; or
 - (c) the closed purge system or closed vent system is designed and operated to capture and transport all the purged process fluid to control equipment that meet the requirements specified in b)(2)g of this permit.
 - iii. Excluded from the requirements of b)(2)c.ii of this permit is any sampling connection system that is an in-situ sampling system.
- d. Open-ended valves or lines (40 CFR 61.242-6):
 - i. Any open-ended valve or line in the process unit shall be equipped with a cap, blind flange, plug, or second valve and shall comply with the requirements specified in b)(2)d.ii through b)(2)d.iv of this permit.
 - ii. Except during operations requiring the flow of process fluid through the open-ended valve or line, the cap, blind flange, plug, or second valve shall seal the open end of the open-ended valve or line.
 - iii. If equipped with a second valve, the open-ended valve or line shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.
 - iv. If a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves, but shall comply with b)(2)d.ii of this permit at all other times.
- e. Equipment designated for no detectable emissions:
 - i. Any equipment (pump or valve) designated for no detectable emissions pursuant to d)(19)c.i or d)(19)c.iii of this permit shall comply with the requirements specified in b)(2)e.ii through b)(2)e.iv of this permit.

- ii. The equipment shall be operated with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background as measured by paragraph (F) of rule 3745-21-10 of the Administrative Code.
- iii. The equipment shall be tested for compliance with b)(2)e.ii of this permit initially upon designation and annually.
- iv. The designation of the equipment shall be signed by the owner or operator of the equipment in the log kept pursuant to d)(18)a.ii of this permit.
- f. Closed vent systems:
 - i. Any closed vent system that is used to comply with the requirements of d)(19)c.ii or b)(2)b.iv of this permit shall comply with the requirements specified in b)(2)f.ii through b)(2)f.iv of this permit.
 - ii. The closed vent system shall be designed and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background, as measured by the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code.
 - iii. The closed vent system shall be tested for compliance with b)(2)f.ii of this permit annually.
 - iv. The closed vent system shall be operated at all times when emissions may be vented to it.
- g. Control equipment:
 - i. Any control equipment that is used to comply with the requirements of d)(19)c.ii, b)(2)b.iv, b)(2)c.ii.(c), or b)(2)h.iv.(b) of this permit shall comply with the requirements specified in b)(2)g.ii through b)(2)g.iv of this permit.
 - ii. If the control equipment is a vapor recovery system, it shall be designed and operated to recover VOC emissions vented to it with an efficiency of at least 95% by weight.
 - iii. The owner or operator of the control equipment shall monitor the control equipment to ensure that it is operated and maintained in conformance with its design.
 - iv. The control equipment shall be operated at all times when emissions may be vented to it.
- h. Delay of repair:
 - i. A delay of repair that is employed pursuant to d)(19)g or b)(2)b.iii of this permit shall be allowed only as provided in b)(2)h.ii through b)(2)h.vi of this permit of this rule.
 - ii. A delay of repair shall be allowed if the repair is technically infeasible without a process unit shutdown. However, the repair shall occur before the end of the next process unit shutdown.
 - iii. A delay of repair shall be allowed for a piece of equipment that is isolated from the process and that does not remain in VOC service (for example, isolated from the process and properly purged).
 - iv. A delay of repair for a valve shall be allowed if:

- (a) the owner or operator of the valve demonstrates that the emission of purged material resulting from immediate repair is greater than the emission likely to result from delay of repair; and
 - (b) when repair procedures are effected, the purged material is collected and recovered in control equipment that meets the requirements specified in b)(2)g of this permit.
 - v. A delay of repair for a pump shall be allowed if:
 - (a) the repair requires the use of a dual mechanical seal system and associated barrier fluid system; and
 - (b) the repair is completed as soon as practicable, but no later than 6 months after the leak was detected.
 - vi. A delay of repair beyond a process unit shutdown shall be allowed for a valve if a valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. A delay of repair beyond the next process unit shutdown shall not be allowed for that valve unless the next process unit shutdown occurs sooner than six months after the first process unit shutdown.
- i. Alternative monitoring schedule for valves based on a skip period:
 - i. The permittee may elect to implement an alternative monitoring schedule in lieu of the monitoring requirements specified in d)(19)a.ii and d)(7) of this permit of this rule, as provided in d)(19)b.iii of this permit. The alternative monitoring schedule shall be based on skipping quarterly monitoring periods provided the percentage of valves leaking is no more than 2.0. The owner or operator who elects to implement an alternative monitoring schedule shall comply with the requirements specified in b)(2)i.ii through b)(2)i.viii of this permit.
 - ii. The permittee must notify the director prior to implementing this alternative monitoring schedule. Such notification must identify which valves will be subject to this alternative monitoring schedule and which work practice within b)(2)i.v of this permit will be implemented. Any valve in vacuum service, in heavy liquid service, or not in VOC service, shall be excluded from this alternative monitoring schedule.
 - iii. Any valve subject to this alternative monitoring schedule shall comply initially with the monitoring requirements specified in d)(19)a.ii of this permit.
 - iv. Any valve subject to this alternative monitoring schedule shall continue to be subject to the requirements specified in d)(19)e through d)(19)j of this permit.
 - v. One of the following two alternative work practices for skipping monitoring periods may be implemented:
 - (a) After 2 consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2.0, a monitoring program may begin in which the first quarter of every two consecutive quarterly leak detection periods is skipped.

- (b) After 5 consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2.0, a monitoring program may begin in which the first three quarters of every four consecutive quarterly periods is skipped.
- vi. If the percentage of valves leaking is greater than 2.0, the owner or operator shall comply with the monitoring requirements as specified in d)(19)a.ii of this permit, but may again elect to use this alternative monitoring schedule.
- vii. The percentage of valves leaking shall be determined for the valves subject to this alternative monitoring schedule as the sum of the number of those valves found leaking during any portion of the current monitoring period and the number of those valves found leaking during a previous monitoring period for which repair has been delayed during the current monitoring period, divided by the total number of valves, and multiplied by 100.
- viii. The following information pertaining to valves subject to this alternative monitoring schedule shall be recorded in a log that is kept in a readily accessible location:
 - (a) a schedule of monitoring; and
 - (b) the percentage of valves leaking during each monitoring period.
- j. Alternative monitoring standard for valves based on the allowable percentage of valves leaking:
 - i. The permittee may elect to implement an alternative monitoring standard in lieu of the monitoring requirements specified in d)(19)a.ii and d)(7) of this permit, as provided in d)(19)c.iv of this permit. The alternative monitoring standard shall be based on maintaining the percentage of valves leaking at 2.0 or less. Any owner or operator who elects to implement an alternative monitoring standard shall comply with the requirements specified in b)(2)j.ii through b)(2)j.vii of this permit.
 - ii. The permittee must notify the director prior to implementing this alternative monitoring standard.
 - iii. All valves in gas/vapor service or in light liquid service in the process unit shall be subject to this alternative monitoring standard, except for those valves which are designated as unsafe to monitor as provided in d)(19)b.ii of this permit, those valves not in VOC service, and those valves in vacuum service.
 - iv. The percentage of valves leaking, as determined in accordance with b)(2)j.vi of this permit, shall not exceed 2.0. If the percentage of valves leaking is greater than 2.0, the owner or operator shall comply with the monitoring requirements as specified in d)(19)a.ii of this permit, but may again elect to use this alternative monitoring standard.
 - v. All valves subject to this alternative monitoring standard shall be tested for compliance with b)(2)j.iv of this permit initially upon implementation and annually.
 - vi. A compliance test shall be conducted in the following manner:

- (a) All valves subject to this alternative monitoring standard shall be monitored for leaks within a one-week period by the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code.
 - (b) If an instrument reading of 10,000 ppmv or greater is measured, a leak is detected.
 - (c) The percentage of valves leaking shall be determined as the number of valves for which a leak is detected, divided by the number of valves monitored, and multiplied by 100.
 - vii. When a leak is detected as described in b)(2)j.vi.(b) of this permit, the leaking valve shall be repaired in accordance with d)(19)f and d)(19)h of this permit.
- c) Operational Restrictions
 - (1) The permittee shall enclose and seal all openings on each light oil recovery system process vessel in accordance with 40 CFR 61.132. The permittee shall enclose and seal the liquid surface in each light oil sump to form a closed system to contain emissions in accordance with 40 CFR 61.133.
[Authority for Term: OAC rule 3745-77-07(A)(1), 40 CFR Part 61, Subpart L]
 - (2) The permittee shall duct gases from each process vessel to the gas collection system, gas distribution system, or other enclosed point in the by-product recovery process where the benzene gas will be recovered or destroyed. This control system shall be designed and operated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and visual inspections. This system can be designed as a closed, positive pressure, gas blanketing system in accordance with the requirements of 40 CFR 61.132.
[Authority for Term: OAC rule 3745-77-07(A)(1), 40 CFR Part 61, Subpart L]
 - (3) Each piece of light oil recovery equipment in benzene service to which 40 CFR Part 61, Subparts L and V, apply shall be clearly marked so that it can be distinguished readily from other equipment in benzene service in accordance with 40 CFR 61.135(c).
[Authority for Term: OAC rule 3745-77-07(A)(1), 40 CFR Part 61, Subparts L and V]
 - (4) The permittee may elect to install, operate, and maintain a pressure relief device, vacuum relief device, an access hatch, and a sampling port on each process vessel and light oil sump in the light oil recovery system. Each access hatch and sampling port must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use in accordance with 40 CFR 61.132 and 40 CFR 61.133.
[Authority for Term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 61, Subpart L]
 - (5) The permittee shall equip each sampling connection system in the light oil recovery system with a closed-purge system or a closed-vent system. [40 CFR 61.242-5]
[Authority for Term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 61, Subpart V]
 - (6) The permittee shall equip each open-ended valve of light oil recovery equipment in benzene service with a cap, blind flange, plug or a second valve. [40 CFR 61.242-6]
[Authority for Term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 61, Subpart V]
 - (7) The permittee may delay in the repair of equipment leaks in the light oil recovery system only if the following requirements are met:



- a. Delay of repair of equipment for which leaks have been detected will be allowed if the repair is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.
- b. Delay of repair of equipment for which leaks have been detected will be allowed for equipment that is isolated from the process and that does not remain in benzene service.
- c. Delay of repair for valves will be allowed if:
 - i. the permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair; and
 - ii. when repair procedures are effected, the purged material is collected and recovered in a control system complying with 40 CFR 61.242-11.
- d. Delay of repair for pumps will be allowed if:
 - i. the repair requires the use of a dual mechanical seal system and associated barrier fluid system; and
 - ii. repair is completed as soon as practicable but not later than 6 months after the leak was detected.
- e. Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

[Authority for Term: OAC rule 3745-77-07(A)(1), 40 CFR Part 61, Subpart V, and OAC rule 3745-21-09(DD)]

- (8) Control systems for the light oil recovery equipment in benzene service used to comply with 40 CFR Part 61, Subpart V shall comply with 40 CFR 61.242-11 as follows:
- a. Vapor recovery systems (for example, condensers and adsorbers) shall be designed and operated to recover the organic vapors vented to them with an efficiency of 95 percent or greater.
 - b. Closed-vent systems shall be designed for and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and by visual inspections, as determined by the methods specified as 40 CFR 61.245(c).
 - c. Closed-vent systems shall be monitored to determine compliance with this section initially in accordance with 40 CFR 61.05, annually, and at other times requested by the Director and/or Administrator.
 - d. Leaks, as indicated by an instrument reading greater than 500 ppm and visual inspections, shall be repaired as soon as practicable, but not later than 15 calendar days after the leak is detected.
 - e. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.
 - f. Closed-vent systems used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

[Authority for Term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 61, Subpart V.]

d) Monitoring and/or Recordkeeping Requirements

- (1) Semiannually, or at any time after the control systems are re-pressurized with gas blanketing following the removal of a cover or the opening of an access hatch, the permittee shall monitor connections and seals on each control system per 40 CFR Part 60, Appendix A, Method 21 and procedures specified in 40 CFR 61.245(c), and visually inspect the light oil recovery system and control system ductwork for evidence of visible defects such as gaps and tears. A leak is detected when emissions are greater than 500 ppm above background levels, as measured by Method 21, or a visible defect is observed. Leaks detected shall be repaired within 15 days with the first attempt at repair no later than 5 days after leak detection. [40 CFR 61.132(b)]

[Authority for Term: OAC rule 3745-77-07(C)(1), 40 CFR Part 61, Subpart L and OAC rule 3745-21-09(DD)]

- (2) Monitoring for VOC emissions for the light oil recovery equipment in benzene service required by 40 CFR Part 61, Subparts L and V, and these terms and conditions shall be conducted in accordance with 40 CFR Part 60, Appendix A, Method 21. The detection instrument shall meet the performance criteria of Method 21 and shall be calibrated prior to use on each day. The calibration gases shall be zero air and a mixture of methane or n-hexane and air at a concentration of approximately, but not less than, 10,000 ppm methane or n-hexane.

[Authority for Term: OAC rule 3745-77-07(C)(1), 40 CFR Part 61, Subparts L and V, and OAC rule 3745-21-09(DD)]

- (3) The permittee shall conduct a maintenance inspection of the control systems on an annual basis for evidence of system abnormalities, such as blocked or plugged lines, sticking valves, plugged condensate traps, and other maintenance defects that could result in abnormal system operation. The owner or operator shall make a first attempt at repair within 5 days, with repair within 15 days of detection. [40 CFR 61.132(c)]

[Authority for Term: OAC rule 3745-77-07(C)(1), 40 CFR Part 61, Subpart L]

- (4) The permittee shall monitor each coke oven gas exhauster on a quarterly basis to detect leaks. A leak is detected if an instrument reading of 10,000 ppm or greater is measured. Leaks detected shall be repaired within 15 days with the first attempt at repair within 5 days. [40 CFR 61.135(d)]

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]

- (5) The permittee shall identify light oil recovery system leaking equipment with weatherproof, readily visible identification including the equipment identification. Following the repair of a leaking valve, the identification on a valve may be removed after 2 successive months of monitoring and no leak has been detected. The identification on the equipment other than valves may be removed after the repair is complete. [40 CFR 61.246(b)]

[Authority for Term: OAC rule 3745-77-07(C)(1), 40 CFR Part 61, Subpart V, and OAC rule 3745-21-09(DD)]

- (6) In accordance with 40 CFR 61.242-4 (a) and (b), except during pressure releases, each pressure relief device in light oil recovery system gas service shall be operated with no detectible emissions (less than 500 ppm above background). After each pressure release, the pressure relief device shall return to a state of no detectible emissions as soon as possible,



but not later than 5 days after the pressure release, except as provided in 40 CFR 61.242-10. The pressure relief device shall be monitored for no detectible emissions within 5 days after a pressure release.

[Authority for Term: OAC rule 3745-77-07(C)(1), 40 CFR Part 61, Subpart V, and OAC rule 3745-21-09(DD)]

- (7) In accordance with 40 CFR 61.242-7, the permittee shall monitor each valve in the light oil recovery system in benzene service on a monthly basis, except as provided d)(16) and d)(17). If an instrument reading is greater than 10,000 ppm, then a leak is detected. Repairs shall be made as soon as practical, but no later than 15 calendar days with the first attempt to repair within 5 days. Valves monitored for 2 successive months with no leak detected shall be monitored on the first month of every quarter until such time when a leak is detected and monthly monitoring is resumed. Valves which are designated as no detectible emissions per 61.246(e)(2) and which meet the requirements of Section 61.242-7(f) shall be tested annually.

[Authority for Term: OAC rule 3745-77-07(C)(1), 40 CFR Part 61, Subpart V, and OAC rule 3745-21-09(DD)]

- (8) The permittee shall monitor any light oil recovery system pressure relief devices in liquid service, flanges and other connectors within 5 days if evidence of a potential leak is found visually, audibly or olfactorily. A monitored leak is detected if an instrument reading of 10,000 ppm or greater is measured. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242-10. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 61.242-7(e). [40 CFR 61.242-8]

[Authority for Term: OAC rule 3745-77-07(C)(1), 40 CFR Part 61, Subpart V, and OAC rule 3745-21-09(DD)]

- (9) The permittee shall visually inspect pumps in the light oil recovery system weekly and monitor pumps monthly by methods specified in 40 CFR 61.245(b) unless a pump is exempt pursuant to 40 CFR 61.242-2. A monitored leak is detected if an instrument reading of 10,000 ppm or greater is measured, or liquids are visible dripping from the seal. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242-10. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. If pumps are designated as no detectible emissions per 40 CFR 61.246(e)(2), then annual monitoring is required.

[Authority for Term: OAC rule 3745-77-07(C)(1), 40 CFR Part 61, Subpart V, and OAC rule 3745-21-09(DD)]

- (10) In accordance with 40 CFR 61.138(b), the following information pertaining to sources subject to 40 CFR 61.132 shall be recorded and maintained for 2 years following each semiannual (and other) inspection and each annual maintenance inspection:
- The date of the inspection and the name of the inspector.
 - A brief description of each visible defect in the light oil recovery system or control system and the method and date of repair of the defect.
 - The presence of a leak, as measured using the method described in 40 CFR 61.245(c). The record shall include the date of attempted and actual repair and method of repair of the leak.

- d. A brief description of any control system abnormalities found during the annual maintenance inspection, the repairs made, the date of attempted repair, and the date of actual repair.

[Authority for Term: OAC rule 3745-77-07(C)(1), 40 CFR Part 61, Subpart L]

- (11) In accordance with 40 CFR 61.246(c), the permittee shall record and maintain the following for a minimum of 2 years for each leak detected for the light oil recovery equipment in benzene service:

- a. the instrument identification number, operator identification, and equipment identification;
- b. the date detected and the date of each attempt to repair;
- c. the repair methods at each attempt to repair;
- d. "Above 10,000" if the instrument reading of emissions is equal to or greater than 10,000 ppm;
- e. "Repair Delayed" and the reason for delay, if the leak is not repaired within 15 calendar days after discovery of the leak;
- f. the signature of the permittee or designate whose decision it was that a repair could not be completed without a process shutdown;
- g. the expected date of successful repair if not repaired within 15 days;
- h. the dates of process unit shutdowns that occur while the equipment is unrepaired; and
- i. the date of successful repair.

[Authority for Term: OAC rule 3745-77-07(C)(1), 40 CFR Part 61, Subpart V, and OAC rule 3745-21-09(DD)]

- (12) In accordance with 40 CFR 61.138(a) and 61.246(d), the permittee shall record and maintain the following information pertaining to the control systems for the light oil recovery equipment in benzene service:

- a. detailed schematics, design specifications, piping and instrumentation diagrams, and the dates and descriptions of any changes made to the systems;
- b. the periods when the closed vent systems are not operating properly; and
- c. the dates of startup and shutdowns of the closed vent systems.

[Authority for Term: OAC rule 3745-77-07(C)(1), 40 CFR Part 61, Subparts L and V, and OAC rule 3745-21-09(DD)]

- (13) In accordance with 40 CFR 61.246(e), the permittee shall record and maintain the following information:

- a. a list of identification numbers for light oil recovery pumps, exhausters, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, flanges or other connectors, product accumulator vessels in benzene service, and any control systems required by 40 CFR Part 61, Subpart V;
- b. a list of identification numbers for light oil recovery pressure relief equipment subject to 40 CFR 61.242-4(a);



- c. a list of identification numbers designated as no detectable emissions for light oil recovery equipment per 40 CFR 61.246(e)(2), signed by the permittee;
- d. the dates of compliance tests, the background level during compliance tests, the maximum reading for each piece of light oil recovery equipment during compliance tests; and
- e. a list of light oil recovery equipment in vacuum service.

[Authority for Term: OAC rule 3745-77-07(C)(1), 40 CFR Part 61, Subpart V, and OAC rule 3745-21-09(DD)]

- (14) In accordance with 40 CFR 61.246(f), the permittee shall record and maintain the following information pertaining to light oil recovery valves in benzene service:

- a. a list of identification numbers for valves that are designated unsafe to monitor, an explanation of why the valve is unsafe to monitor, and the alternate plan for monitoring the valve; and
- b. a list of identification numbers for valves that are designated difficult to monitor, an explanation of why the valve is difficult to monitor, and the alternate plan for monitoring the valve.

[Authority for Term: OAC rule 3745-77-07(C)(1), 40 CFR Part 61, Subpart V, and OAC rule 3745-21-09(DD)]

- (15) The permittee shall record and maintain the information and data used to demonstrate a piece of light oil recovery equipment is not in benzene service and is kept in a readily accessible location. [40 CFR 61.246(j)]

[Authority for Term: OAC rule 3745-77-07(C)(1), 40 CFR Part 61, Subpart V, and OAC rule 3745-21-09(DD)]

- (16) Alternative monitoring schedule for light oil recovery system valves in benzene service and VOC service based on a skip period:

The permittee may elect to implement an alternative monitoring schedule in lieu of the monitoring requirements specified in d)(7) of this permit. The alternative monitoring schedule shall be based on skipping quarterly monitoring periods provided the percentage of valves leaking is no more than 2.0. If the permittee elects to implement an alternative monitoring schedule, they shall comply with the requirements specified in b)(2)i.ii through b)(2)i.viii of this permit.

[Authority for Term: OAC rule 3745-77-07(C)(1), 40 CFR Part 61, Subpart V, and OAC rule 3745-21-09(DD)]

- (17) Alternative monitoring standard for light oil recovery system valves in benzene service and VOC service based on the allowable percentage of valves leaking:

The permittee may elect to implement an alternative monitoring standard in lieu of the monitoring requirements specified in d)(7) of this permit. The alternative monitoring standard shall be based on maintaining the percentage of valves leaking at 2.0 or less. If the permittee elects to implement an alternative monitoring standard, they shall comply with the requirements specified in b)(2)j.ii through b)(2)j.vii of this permit.

[Authority for Term: OAC rule 3745-77-07(C)(1), 40 CFR Part 61, Subpart V, and OAC rule 3745-21-09(DD)]

- (18) The permittee shall comply with the record keeping requirements for the light oil recovery system specified in OAC rule 3745-21-09(DD) as follows:
- a. The following information shall be recorded and kept in a readily accessible location:
 - i. A list of identification numbers for equipment subject to the requirements of b)(2)a through b)(2)j of this permit.
 - ii. A list of identification numbers for equipment designated for no detectable emissions as provided in b)(2)e of this permit, and a signature of the permittee authorizing such designation.
 - iii. A list of identification numbers for pressure relief devices subject to b)(2)b of this permit.
 - iv. A list of identification numbers for closed vent systems subject to b)(2)f of this permit.
 - v. For compliance tests required under b)(2)b.ii, b)(2)e.iii and b)(2)f.iii of this permit:
 - (a) the date of each compliance test;
 - (b) the background level measured during each compliance test; and
 - (c) the maximum instrument reading measured at the equipment during each compliance test.
 - b. The following information pertaining to valves subject to an alternative monitoring schedule, as provided in d)(19)b of this permit, shall be recorded in a log that is kept in a readily accessible location:
 - i. a list of identification numbers for valves designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve;
 - ii. a list of identification numbers for valves designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the schedule for monitoring each valve; and
 - iii. a list of identification numbers for valves subject to the alternative monitoring schedule based on a skip period, a schedule for monitoring, and the percentage of valves leaking during each monitoring period.
 - c. The following information pertaining to closed vent systems and control equipment described in b)(2)f and b)(2)g of this permit shall be recorded and kept in a readily accessible location:
 - i. detailed schematics, design specifications, and piping and instrumentation diagrams;
 - ii. the dates and descriptions of any changes in the design specifications;
 - iii. periods when the closed vent systems are not operated as designed; and
 - iv. dates of startups and shutdowns of the closed vent systems.

[Authority for Term: OAC rule 3745-77-07(C)(1), 40 CFR Part 61, Subpart V, and OAC rule 3745-21-09(DD)]

- (19) Leak Monitoring and Detection:

- a. Except as otherwise provided in d)(19)b and d)(19)c of this permit, light oil recovery equipment in VOC service shall be monitored for leaks in accordance with the method specified in paragraph (F) of OAC rule 3745-21-10 of the Administrative Code, as follows:
 - i. Any pump in light liquid service shall be monitored monthly.
 - ii. Any valve in gas/vapor service or in light liquid service shall be monitored monthly, except that quarterly monitoring may be employed any time after no leaks are detected during two consecutive months. The quarterly monitoring shall begin with the next calendar quarter following the two consecutive months of no detected leaks and shall be conducted in the first month of each calendar quarter. The quarterly monitoring may continue until a leak is detected, at which time monthly monitoring shall be employed again.
 - iii. Any of the following equipment shall be monitored within 5 calendar days after evidence of a leak or potential leak from the equipment by visual, audible, olfactory, or other detection method:
 - (a) any pump in heavy liquid service;
 - (b) any valve in heavy liquid service;
 - (c) any pressure relief device in light liquid service or in heavy liquid service; and
 - (d) any flange or other connector.
 - iv. Any equipment in which a leak is detected as described in d)(19)e of this permit shall be monitored within 5 working days after each attempt to repair, unless the owner or operator believes that the equipment was not successfully repaired.
- b. For any valve in gas/vapor service or in light liquid service, an alternative monitoring schedule may be employed in lieu of the monitoring schedule specified in d)(19)a.ii of this permit as follows:
 - i. The valve is designated as difficult to monitor and is monitored each calendar year, provided the following conditions are met:
 - (a) Construction of the process unit commenced prior to May 9, 1986.
 - (b) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than six feet above a support surface.
 - (c) The owner or operator of the valve has a written plan that requires monitoring of the valve at least once per year.
 - ii. The valve is designated as unsafe to monitor and is monitored as frequently as practical during safe to monitor times, provided the following conditions are met:
 - (a) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of monitoring on a monthly basis.

- (b) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practical during safe to monitor times.
- iii. The valve is subject to an alternative monitoring schedule based on a skip period as specified in b)(2)i of this permit.
- c. Excluded from the monitoring requirements of d)(19)a of this permit are the following equipment:
 - i. any pump that has no externally actuated shaft penetrating the pump housing and that is designated for no detectable emissions as provided in b)(2)e of this permit;
 - ii. any pump that is equipped with a closed vent system capable of capturing any leakage from the pump seal provided the closed vent system complies with the requirements specified in b)(2)f of this permit;
 - iii. any valve that has no externally actuated stem penetrating the valve and that is designated for no detectable emissions as provided in b)(2)e of this permit; and
 - iv. any valve that is subject to the alternative monitoring standard for valves based on the percentage of valves leaking as provided in b)(2)j of this permit.
- d. Any pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal, unless the pump is equipped with a closed vent system capable of capturing any leakage from the pump seal and the closed vent system complies with the requirements specified in b)(2)f of this permit.
- e. A leak is detected:
 - i. when a concentration of 10,000 ppmv or greater is measured from a potential leak interface of any equipment that is monitored for leaks using the method in paragraph (F) of rule 3745-21-10 of the Administrative Code; and
 - ii. when there is an indication of liquids dripping from the seal of a pump in light liquid service.
- f. When a leak is detected as described in d)(19)e of this permit, the following procedures shall be followed:
 - i. A weatherproof and readily visible identification tag, marked with the equipment identification number, is immediately attached to the leaking equipment.
 - ii. A record of the leak and any attempt to repair the leak is entered into the leak repair log kept pursuant to d)(19)i of this permit.
 - iii. The identification tag attached to the leaking equipment, other than a valve that is monitored pursuant to d)(19)a.ii of this permit, may be removed after the leaking equipment is repaired.
 - iv. The identification tag attached to a leaking valve that is monitored pursuant to d)(19)a.ii of this permit may be removed after the leaking valve is repaired, monitored for leaks for two consecutive months as specified in d)(19)a.ii of

this permit, and found to have no detected leaks during those two consecutive months.

- g. When a leak is detected as described in d)(19)e of this permit, the leaking equipment shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except for a delay of repair as provided in b)(2)h of this permit. Leaking equipment shall be deemed repaired if the maximum concentration measured pursuant to d)(19)a.iv of this permit is less than 10,000 ppmv.
- h. When a leak is detected as described in d)(19)e of this permit, a first attempt at repair shall be made no later than 5 calendar days after the leak is detected; and the first attempts at repair shall include, but are not limited to, the following best practices where practicable:
 - i. tightening of bonnet bolts;
 - ii. replacement of bonnet bolts;
 - iii. tightening of packing gland nuts; and
 - iv. injection of lubricant into lubricated packing.
- i. When a leak is detected as described in d)(19)e of this permit, the following information shall be recorded in a leak repair log:
 - i. The identification number of the leaking equipment and, for leaks based on monitoring, the identification numbers of the leak detection instrument and its operator.
 - ii. The basis for the detection of the leak; for example, monitoring, visual inspection, or sensor.
 - iii. The date on which the leak was detected and the date of each attempt to repair the leaking equipment.
 - iv. The methods of repair applied in each attempt to repair the leaking equipment.
 - v. One of the following entries within 5 working days after each attempt to repair the leaking equipment:
 - (a) "not monitored," denoting the leaking equipment was presumed to still be leaking and it was not monitored; or
 - (b) if the leaking equipment was monitored with a leak detection instrument, the maximum concentration that was measured as follows:
 - (i) the actual reading in ppmv; or
 - (ii) "below 10,000," denoting less than 10,000 ppmv; or
 - (iii) "above 10,000," denoting not less than 10,000 ppmv.
 - vi. If the leak is not repaired within 15 calendar days after the date on which it was detected:
 - (a) "repair delayed" and the reason for the delay;
 - (b) if repair is being delayed until the next process unit shutdown due to technical infeasibility of repair, the signature of the owner or operator

whose decision it was that repair is technically infeasible without a process unit shutdown;

- (c) the expected date of successful repair of the leak; and
- (d) the dates of process unit shutdowns that occur while the leaking equipment is unrepaired.

vii. The date on which the leak was successfully repaired.

- j. The leak repair log shall be retained by the owner or operator of the process unit in a readily accessible location for a minimum of two years after the date on which the record was made.

[Authority for Term: OAC rule 3745-77-07(C)(1), 40 CFR Part 61, Subpart V, and OAC rule 3745-21-09(DD)]

e) Reporting Requirements

- (1) None In accordance with 40 CFR 61.138(f) and 40 CFR 61.247(b), the permittee shall submit semiannual reports which include the following information:

- a. a description of visible defects observed in the light oil recovery system or control system ductwork;
- b. the number of leaks detected and repaired;
- c. a description of any control system abnormalities found during each annual maintenance inspection which occurred in the reporting period and the repairs made;
- d. a statement signed by the permittee stating whether all provisions of 40 CFR Part 61, Subpart L have been fulfilled during the semiannual reporting period;
- e. the number of exhausters for which leaks were detected, the number of exhausters for which leaks were repaired, and the results of any performance tests determining compliance with 40 CFR 61.135(g);
- f. the process unit identification;
- g. for each month during the reporting period, the number of light oil recovery system valves and pumps for which leaks were detected, the number of valves and pumps for which leaks were not repaired, and the facts explaining why a process shutdown was not feasible and therefore delaying repair;
- h. the dates of process unit shutdowns during the reporting period;
- i. the changes to the light oil recovery system or control systems which have occurred since the initial report or the last revision; and
- j. the results of performance tests and monitoring to determine compliance with the no detectable emissions limitation within the semiannual reporting period.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]

- (2) The permittee shall submit revisions to the initial statement which was submitted in compliance with 40 CFR 61.138(e) on a semiannual basis. [40 CFR 61.138(f)(6)]

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]

- (3) All semiannual reports required under 40 CFR 61.138 and 40 CFR 61.247 shall be submitted to the Ohio EPA, Northeast District Office by the first day of February and August and shall include information for the preceding semiannual period.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subparts L and V]

- (4) The permittee shall comply with the reporting requirements for the light oil recovery system specified in OAC rule 3745-21-09(DD) as follows:
- a. For compliance tests required under b)(2)e.iii and b)(2)f.iii of this permit, the requirements of paragraphs (A)(3) and (A)(4) of rule 3745-21-10 of the Administrative Code (pertaining to notification of intent to test) shall be met. The results of such compliance tests shall be reported to the Ohio EPA, Northeast District Office within thirty days after the test date.
 - b. The results of compliance tests required under b)(2)b.ii of this permit shall be reported semiannually to the Ohio EPA, Northeast District Office. The semiannual reports shall be submitted by the first day of February and August and shall include information for the preceding semiannual period.
 - c. Semiannual reports for the monitoring and record keeping in d)(19) of this permit shall be submitted to the Ohio EPA, Northeast District Office by the first day of February and August and shall include the following information for the preceding semiannual periods:
 - i. The process unit identification.
 - ii. The number of pumps in light liquid service excluding those pumps designated for no detectable emissions under the provision of d)(19)c.i of this permit.
 - iii. The number of valves in gas/vapor service or in light liquid service excluding those valves designated for no detectable emission under the provision of d)(19)c.iii of this permit and those valves subject to the alternative standard for monitoring under the provision of d)(19)c.iv of this permit.
 - iv. For each month during the semiannual period:
 - (a) the number of pumps in light liquid service for which leaks were detected as described in d)(19)e of this permit;
 - (b) the number of pumps in light liquid service for which leaks were not repaired within 15 calendar days after the date of leak detection;
 - (c) the number of valves in gas/vapor service or in light liquid service for which leaks were detected as described in d)(19)e of this permit;
 - (d) the number of valves in gas/vapor service or in light liquid service for which leaks were not repaired within 15 calendar days after the date of leak detection; and
 - (e) the facts that explain each delay of repair allowed pursuant to b)(2)h of this permit.
 - v. The dates of process unit shutdowns that occurred within the semiannual period.

[Authority for Term: OAC rule 3745-77-07(C)(1), 40 CFR Part 61, Subpart V, and OAC rule 3745-21-09(DD)]

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
- a. Emissions Limitation:
No detectible fugitive VOC emissions from the light oil recovery system including equipment in benzene service. [40 CFR Part 61, Subpart L]
Applicable Compliance Method:
Compliance shall be demonstrated based on the requirements in b)(2) and the reporting requirements in e)(1) through e)(3).
[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]
- b. Emissions Limitation:
LDAR program for fugitive VOC emissions from the light oil recovery system including equipment in benzene service. [40 CFR Part 61, Subpart V]
Applicable Compliance Method:
Compliance shall be demonstrated based on the requirements in b)(2)b through b)(2)j and the reporting requirements in e)(1) through e)(3).
[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart V]
- c. Emissions Limitation:
LDAR program for fugitive VOC emissions from equipment in VOC service. [OAC rule 3745-21-09(DD)]
Applicable Compliance Method:
Compliance shall be demonstrated based on the LDAR program specified in b)(2)a, required monitoring and record keeping specified in d)(19)a through d)(19)j and the reporting requirements in e)(4).
[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(DD)]
- g) Miscellaneous Requirements
- (1) None.

15. P802, Tar Recovery System

Operations, Property and/or Equipment Description:

By-Product Collection: Tar Recovery, including Tar Decanter Nos. 1, 2 and 3, flushing liquor collection tanks, exhauster drain seal pots (Nos. 1, 2 and 3).

- a) The following EU terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

- b) Applicable Emissions Limitations and/or Control Requirements

- (1) The specific operation(s), property, and/or equipment that constitute each EU along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	40 CFR Part 61, Subpart L (National Emission Standard for Benzene Emissions from Coke By-Product Plants)	No detectible fugitive VOC emissions from the tar recovery system. See b)(2)a, b)(2)b and b)(2)c.

- (2) Additional Terms and Conditions

- a. The permittee shall enclose and seal all openings on each tar recovery system process vessel in accordance with 40 CFR 61.132. The permittee may elect to leave open to the atmosphere the portion of the liquid surface in each tar decanter necessary to permit operation of a sludge conveyor in accordance with 40 CFR 61.132(a)(2)(ii). If the permittee elects to maintain an opening on part of the liquid surface of the tar decanter, the permittee shall install, operate, and maintain a water leg seal on the tar decanter roof near the sludge discharge chute to ensure enclosure of the major portion of liquid surface not necessary for the operation of the sludge conveyor.
- b. The permittee shall duct gases from each process vessel and tar-intercepting sump to the gas collection system, gas distribution system, or other enclosed point in the by-product recovery process where the benzene in the gas will be recovered or destroyed. This control system shall be designed and operated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and visual inspections. This system can be designed as a closed, positive pressure, gas blanketing system in accordance with the requirements of 40 CFR 61.132.
- c. The permittee may elect to install, operate, and maintain a pressure relief device, vacuum relief device, an access hatch, and a sampling port on each tar recovery system process vessel. Each access hatch and sampling port must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.

- c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) Semiannually, or at any time after the control system is re-pressurized with gas blanketing following the removal of a cover or the opening of an access hatch; the permittee shall monitor connections and seals on the affected control system per 40 CFR Part 60, Appendix A, Method 21 and procedures specified in 40 CFR 61.245(c), and visually inspect the tar recovery system and control system ductwork for evidence of visible defects such as gaps and tears. A leak is detected when emissions are greater than 500 ppm above background levels, as measured by Method 21, or a visible defect is observed. Leaks detected shall be repaired within 15 days with the first attempt at repair no later than 5 days after leak detection. [40 CFR 61.132(b)].

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]

(2) The permittee shall conduct a maintenance inspection of the control system on an annual basis for evidence of system abnormalities, such as blocked or plugged lines, sticking valves, plugged condensate traps, and other maintenance defects that could result in abnormal system operation. The owner or operator shall make a first attempt at repair within 5 days, with repair within 15 days of detection. [40 CFR 61.132(c)]

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]

(3) In accordance with 40 CFR 61.138(a), the following information pertaining to the design of the control system shall be recorded and kept in a readily accessible location:

- a. Detailed schematics, design specifications, and piping and instrumentation diagrams.
- b. The dates and descriptions of any changes in the design specifications.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]

(4) In accordance with 40 CFR 61.138(b), the following information pertaining to sources subject to 40 CFR 61.132 shall be recorded and maintained for 2 years following each semiannual (and other) inspection and each annual maintenance inspection:

- a. The date of the inspection and the name of the inspector.
- b. A brief description of each visible defect in the tar recovery system or control system and the method and date of repair of the defect.
- c. The presence of a leak, as measured using the method described in 40 CFR 61.245(c). The record shall include the date of attempted and actual repair and method of repair of the leak.
- d. A brief description of any control system abnormalities found during the annual maintenance inspection, the repairs made, the date of attempted repair, and the date of actual repair.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]

e) Reporting Requirements

(1) None In accordance with 40 CFR 61.138(f), the permittee shall submit semiannual reports which include the following information:

- a. a brief description of visible defects observed in the tar recovery system or control system ductwork;

- b. the number of leaks detected and repaired;
- c. a description of any control system abnormalities found during each annual maintenance inspection which occurred in the reporting period and the repairs made; and
- d. a statement signed by the permittee stating whether all provisions of 40 CFR Part 61, Subpart L, have been fulfilled during the semiannual reporting period.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]

- (2) The permittee shall submit revisions to the initial statement which was submitted in compliance with 40 CFR 61.138(e) on a semiannual basis if changes have occurred since the initial report or subsequent revisions to the initial report. [40 CFR 61.138(f)(6)]

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]

- (3) All semiannual reports shall be submitted to the Ohio EPA, Northeast District Office by the first day of February and August and shall include information for the preceding semiannual period.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emissions Limitation:

No detectible fugitive VOC emissions from the tar recovery system. [40 CFR Part 61, Subpart L]

Applicable Compliance Method:

Compliance shall be demonstrated based on the monitoring and record keeping requirements specified in d)(4).

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]

g) Miscellaneous Requirements

- (1) None.

16. P901, Coke handling

Operations, Property and/or Equipment Description:

Coke material handling, including unloading coke from quench car to wharf, truck unloading, conveyor belts, conveyor belt transfer houses, and railroad car and/or truck loading.

- a) The following EU terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

- b) Applicable Emissions Limitations and/or Control Requirements

- (1) The specific operation(s), property, and/or equipment that constitute each EU along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(B)(8)(b)	Visible PE of fugitive dust from any material handling operation associated with this EU shall not exceed 20% opacity, as a 3-minute average, except as provided by rule.
b.	OAC rule 3745-17-08(B)	RACM that are sufficient to minimize or eliminate VE of fugitive dust. See b)(2)b through b)(2)d).

- (2) Additional Terms and Conditions

- a. The material handling operation(s) that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

- i. coke unloading (quench car to wharf);
- ii. coke unloading (truck unloading);
- iii. coke belt conveyors (no's. 3, 4, 5, 7, 8 & 9);
- iv. coke conveyor transfer points (belt to belt); and
- v. coke loading (railroad car and/or truck).

- b. The permittee shall employ RACM for the above-identified material handling operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has identified the following control measure(s) as RACM:

- i. Material handling operation: coke unloading (quench car to wharf)
Adequate quenching with water of the hot coke.
- ii. Material handling operation: coke unloading (truck unloading)
Adequate quenching with water of the hot coke.
- iii. Material handling operation: coke belt conveyors (no's. 3, 4, 5, 7, 8 & 9)



Employing and maintaining the existing partial enclosures and conveyor belt covers.

- iv. Material handling operation: coke conveyor transfer points (belt to belt)

Employing and maintaining the existing belt transfer point partial enclosures.

- v. Material handling operation: coke loading (railroad car and/or truck)

Employing and maintaining the existing building partial enclosure.

Nothing in this paragraph shall prohibit the permittee from employing other equally effective control measures in addition to, or in lieu of, to ensure compliance.

- c. For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspections conducted pursuant to the monitoring section of this permit, that the control measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during the operation of the material handling operations until further observation confirms that use of the control measures is unnecessary.
- d. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

<u>material handling operation(s)</u>	<u>minimum inspection frequency</u>
coke unloading (quench car to wharf)	monthly
coke unloading (truck unloading)	monthly
coke belt conveyors (no's. 3, 4, 5, 7, 8 & 9)	monthly
coke conveyor transfer points (belt to belt)	monthly
coke loading (railroad car and/or truck)	monthly

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (2) The above-mentioned inspections shall be performed during representative, normal operating conditions.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (3) The permittee may, upon receipt of written approval from the Ohio EPA, Northeast District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall maintain records of the following information:
- the date and reason any required inspection was not performed;
 - the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - the dates the control measures were implemented; and
 - on a calendar quarter basis, the total number of days the control measures were implemented.

The information in d)(4)d shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit semiannual deviation reports that identify any of the following occurrences:
- each day during which an inspection was not performed by the required frequency; and
 - each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
- Emissions Limitation:
Visible PE of fugitive dust from any material handling operation associated with this EU shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance with the visible emission limitation for the material handling operation(s) identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-07(B)(8)(b)]

g) Miscellaneous Requirements

- (1) None.

17. T001, Tar Tank T-1/ Back-up ammonia liquor tank

Operations, Property and/or Equipment Description:

350,000-gallon, No. 1 Tar Tank, including associated day tank. Tank also serves as back-up emergency ammonia liquor storage.

- a) The following EU terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

- b) Applicable Emissions Limitations and/or Control Requirements

- (1) The specific operation(s), property, and/or equipment that constitute each EU along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	40 CFR Part 61, Subpart L (National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants)	No detectable fugitive VOC emissions from tar storage tank T-1 when the tank contains tar or "unstripped" NH ₃ liquor. See b)(2)a, b)(2)b, b)(2)c and b)(2)e.
b.	OAC rule 3745-21-07(D)	The requirements established pursuant to this rule are less stringent than the requirements of 40 CFR Part 61, Subpart L.
c.	OAC rule 3745-31-05(A)(3) PTI 02-14333	VOC emissions shall not exceed 4.2 TPY. The requirements of this rule also include compliance with the requirements of 40 CFR Part 61, Subpart L.
d.	40 CFR Part 60, Subpart Ka	Exempt. See b)(2)d.

- (2) Additional Terms and Conditions

- a. The permittee shall enclose and seal all openings on tar tank T-1 and the associated day tank when the tank contains tar or 'unstripped' NH₃ liquor.
- b. The permittee shall operate and maintain a closed, positive pressure, gas blanketing control system for tar tank T-1 when the tank contains "unstripped" NH₃ liquor and the associated day tank in accordance with the requirements of 40 CFR 61.132. The gas blanketing control system shall be designed and operated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and visual inspections.
- c. The permittee may operate and maintain a pressure relief device, vacuum relief device, an access hatch, and a sampling port on tar tank T-1 when the tank contains "unstripped" NH₃ liquor and the associated day tank. Each access hatch and sampling port must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.

- d. The requirements of 40 CFR Part 60, Subpart Ka do not apply to this EU based upon the exemption in 40 CFR 60.110a(b).
 - e. The conditions listed in sections b)(1)a, b)(2)a, b)(2)b, b)(2)c, d), e) and f)(1)a do not apply when the EU does not contain a material regulated by 40 CFR Part 61, Subpart L.
- c) Operational Restrictions
- (1) None.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall monitor the connections and seals on the gas blanketing system to determine if it is operating with no detectable emissions, using Reference Method 21 (40 CFR Part 60, Appendix A) and procedures specified in 40 CFR 61.245(c), and shall visually inspect each source (including sealing materials) and the ductwork of the control system for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted on a semiannual basis and at any other time after the control system is re-pressurized with blanketing gas following removal of the cover or opening of the access hatch.
 - a. If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Reference Method 21, a leak is detected.
 - b. If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.
 - c. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.
 - d. A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]
 - (2) The permittee shall conduct a maintenance inspection of the control system on an annual basis for evidence of system abnormalities, such as blocked or plugged lines, sticking valves, plugged condensate traps, and other maintenance defects that could result in abnormal system operation. The owner or operator shall make a first attempt at repair within 5 days, with repair within 15 days of detection. [40 CFR 61.132(c)]

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]
 - (3) In accordance with 40 CFR 61.138(a), the permittee shall record and maintain the following information pertaining to the gas blanketing control system for tar tank T-1 and the associated day tank:
 - a. detailed schematics, design specifications, piping and instrumentation diagrams; and
 - b. the dates and descriptions of any changes in the design specifications.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]
 - (4) In accordance with 40 CFR 61.138(b), the following information pertaining to sources subject to 40 CFR 61.132 shall be recorded and maintained for 2 years following each semiannual (and other) inspection and each annual maintenance inspection:
 - a. The date of the inspection and the name of the inspector.



- b. A brief description of each visible defect in the tar recovery system or control system and the method and date of repair of the defect.
- c. The presence of a leak, as measured using the method described in 40 CFR 61.245(c). The record shall include the date of attempted and actual repair and method of repair of the leak.
- d. A brief description of any control system abnormalities found during the annual maintenance inspection, the repairs made, the date of attempted repair, and the date of actual repair.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]

- (5) The permittee shall record and maintain in a log the information and data used to demonstrate a piece of tar tank T-1 and the associated day tank equipment is not in benzene service.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]

e) Reporting Requirements

- (1) In accordance with 40 CFR 61.138(f), the permittee shall submit semiannual reports which include the following information:
 - a. a description of visible defects observed in tar tank T-1, associated day tank, gas blanketing control system or ductwork;
 - b. the number of tar tank T-1, associated day tank, gas blanketing control system and ductwork leaks detected and repaired;
 - c. a description of tar tank T-1, associated day tank and gas blanketing control system abnormalities found during each annual maintenance inspection that occurred in the reporting period and the repairs made; and
 - d. a statement signed by the permittee stating whether all provisions of 40 CFR Part 61, Subpart L have been fulfilled during the semiannual reporting period.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]

- (2) The permittee shall submit revisions to the initial statement that was submitted in compliance with 40 CFR 61.138(e) on a semiannual basis [40 CFR 61.138(f)(6)].

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]

- (3) All semiannual reports shall be submitted to the Ohio EPA, Northeast District Office by the first day of February and August and shall include information for the preceding semiannual period.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

No detectible fugitive VOC emissions from tar storage tank T-1 when the tank contains tar or "unstripped" NH₃ liquor.

Applicable Compliance Method:

Compliance shall be demonstrated based on the monitoring and record keeping requirements specified in d).

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]

b. Emissions Limitation:

VOC emissions shall not exceed 4.2 TPY.

Applicable Compliance Method:

To demonstrate compliance with the annual limit of 4.2 TPY for VOC, the permittee shall calculate the annual VOC emissions in tons per year using AP-42, Section 7.1.3 (September 1997) or Tanks 4.0, a program for estimating tank emissions developed by the American Petroleum Institute, or future editions of AP-42 and the Tanks software. The permittee may also calculate emissions by alternate methods with prior approval from the Ohio EPA, Northeast District Office.

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3)]

g) Miscellaneous Requirements

(1) None.

18. Emissions Unit Group - 9.9 MMBtu/hr Boilers: B004, B006 and B007.

EU ID	Operations, Property and/or Equipment Description
B004	9.9 MMBtu/hr hot oil heater fired with coke oven gas (COG) and/or natural gas.
B006	9.9 MMBtu/hr boiler fired with coke oven gas (COG) and/or natural gas.
B007	9.9 MMBtu/hr boiler fired with coke oven gas (COG) and/or natural gas.

- a) The following EU terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

- b) Applicable Emissions Limitations and/or Control Requirements

- (1) The specific operation(s), property, and/or equipment that constitute each EU along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)(a)(ii) (PTI Nos. P0127991, P0127992)	The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to this air contaminant source because the uncontrolled PTE for PM ₁₀ and PM _{2.5} , SO ₂ , NO _x , VOC, and CO are less than 10 tons per year.
b.	OAC rule 3745-17-07(A)(1)	Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
c.	OAC rule 3745-17-10(B)(1)	PM emissions shall not exceed 0.020 lb/MMBtu of actual heat input.
d.	OAC rule 3745-18-06	See b)(2)a and b)(2)b.
e.	40 CFR Part 63, Subpart DDDDD the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters. [40 CFR Part 63, Subpart DDDDD does not apply to the extent this boiler acts as a control device to comply with 40 CFR Parts 60, 61, 63, or 65 and at least 50 percent of the average annual heat input was derived from COG, or any other regulated gas stream, during any 3 consecutive calendar years per 40 CFR 63.7491(i)]	This boiler combusts only NG and coke oven gas (COG) and therefore is not subject to any emission limitations specified in Table 2 of Subpart DDDDD. See b)(2)c.

(2) Additional Terms and Conditions

- a. This EU is exempt from OAC rule 3745-18-06(B) when using coke oven gas as fuel.
- b. This EU is exempt from OAC rule 3745-18-06(A) when using NG as fuel.
- c. If this EU does not combust COG for at least 50 percent of the average annual heat input during any 3 consecutive calendar years as provided in 40 CFR 63.7491(i), the permittee shall follow the additional terms and conditions for this EU specified in 40 CFR Part 63, Subpart DDDDD, as follows:

40 CFR 63.7500 (a)(1); 40 CFR 63.7495; 40 CFR 63.7510(e); and 40 CFR Part 63, Subpart DDDDD, Table 3.	For each existing Gas 1 boiler other than limited use units, a one-time energy assessment must be performed by a qualified energy assessor no later than the compliance date identified in 40 CFR 63.7495. The requirements for the energy assessment are identified in 40 CFR 63.7575 and Table 3. [A one-time energy assessment has been completed on December 14, 2015.]
40 CFR 63.7500(a)(1), (b), (e); 40 CFR 63.7495; 40 CFR 63.7510(e); 40 CFR 63.7515(d), (g); 40 CFR 63.7540(a)(11), (13); and 40 CFR Part 63, Subpart DDDDD, Table 3.	For each existing Gas 1 boiler, an initial tune-up must be completed no later than the compliance date identified in 40 CFR 63.7495 unless the boiler is not in operation at that time, where a tune-up must be completed within 30 days after the re-start of the boiler. Following the initial compliance date, tune-ups must be conducted for each boiler within the applicable 2-year schedule as specified in 40 CFR 63.7500(a), (b), (e), 40 CFR 63.7540(a)(11), (13), and Table 3 to the subpart, unless alternative work practice standards are approved pursuant to 40 CFR 63.6(g). Each subsequent biennial tune-up must occur no more than 25 months after the previous tune-up. If the boiler is not in operation at the time of its scheduled tune-up, the permittee is not required to perform the tune-up at that time but must complete the tune-up within 30 days after the re-start of the boiler.
40 CFR Part 63, Subpart DDDDD, Table 10	The applicability of the General Provisions in 40 CFR Part 63, Subpart A to boilers subject to Subpart DDDDD is identified in Table 10 to the subpart.

c) Operational Restrictions

- (1) The permittee shall burn only NG and/or coke oven gas in this EU.

[Authority for Term: OAC rule 3745-77-07(A)(1)]

- (2) If this EU does not combust COG for at least 50 percent of the average annual heat input during any 3 consecutive calendar years as provided in 40 CFR 63.7491(i), the permittee shall follow the operating requirements for this EU specified in 40 CFR Part 63, Subpart DDDDD, as follows:

40 CFR 63.7500(a)(3)	The boiler and associated air pollution control and monitoring equipment must be operated and maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions.
40 CFR 63.7540(a)(12)	Boilers in the Gas 1 subcategory may elect to install an oxygen trim system that maintains an optimum air-to-fuel ratio to reduce the frequency of required tune-ups to once every 5 years per 40 CFR 63.7540(a)(12).

[Authority for Term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart DDDDD]

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than NG and/or coke oven gas, the permittee shall maintain a record of the type and quantity of fuel burned in this EU.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (2) If this EU does not combust COG for at least 50 percent of the average annual heat input during any 3 consecutive calendar years as provided in 40 CFR 63.7491(i), the permittee shall follow the operating requirements for this EU specified in 40 CFR Part 63, Subpart DDDDD, as follows:

40 CFR 63.7555(a), (g)-(h); 40 CFR 63.7560; and 40 CFR 63.10(b)(1).	The applicable records required by the NESHAP are identified in 40 CFR 63.7555(a), (g)-(h) and they must be kept for at least 5 years following the date of the record or report submitted. Records must be accessible from on-site for at least two years after the date of the record and may be located off-site for the remaining three years.
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[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart DDDDD]

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than NG and/or coke oven gas was burned in this EU. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for Term: OAC rule 3745-77-07(C)(1)]



- (2) If this EU does not combust COG for at least 50 percent of the average annual heat input during any 3 consecutive calendar years as provided in 40 CFR 63.7491(i), the permittee shall follow the reporting requirements for this EU specified in 40 CFR Part 63, Subpart DDDDD, as follows:

40 CFR 63.7495(d); 40 CFR 63.7530(e)-(g); and 40 CFR 63.7545.	The notification requirements identified in 40 CFR 63.7(b), 40 CFR 63.8(e), (f)(4), (6), 40 CFR 63.9(b)-(f), (h), (j), 40 CFR 63.7545, and 40 CFR 63.7530(e)-(g), as applicable, shall be submitted to the Ohio EPA, Northeast District Office no later than the date identified in 40 CFR 63.7545.
40 CFR 63.7550(a)-(b); and 40 CFR Part 63, Subpart DDDDD, Table 9.	The owner/operator must submit each biennial compliance report identified in Table 9 to the NESHAP that is applicable to the boiler, according to the requirements identified in 40 CFR 63.7550(b). Each biennial compliance report must be postmarked or delivered no later than January 31. Each subsequent compliance report must be submitted in accordance with the same applicable schedule and cover the applicable 2-year periods from January 1 to December 31.
40 CFR 63.7550(c), (h)	The information identified in 40 CFR 63.7550(c)(1), (c)(5)(i)-(iv), (xiv) shall be submitted in accordance with 40 CFR 63.7550(h).

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart DDDDD]

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible PE observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

[Authority for Term: OAC rule 3745-77-07I(1) and OAC rule 3745-17-07(A)(1)]

b. Emissions Limitation:

PM emissions shall not exceed 0.020 lb/MMBtu of actual heat input.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(9).

[Authority for Term: OAC rule 3745-77-07I(1), OAC rule 3745-31-05(A)(3), and OAC rule 3745-17-10(B)(1)]

g) Miscellaneous Requirements

(1) None.

19. Emissions Unit Group – Boilers (M1, M2): B019 and B020.

EU ID	Operations, Property and/or Equipment Description
B019	98 MMBtu/hr coke oven gas/natural gas fired boiler. Boiler 9
B020	98 MMBtu/hr coke oven gas/natural gas fired boiler. Boiler 10.

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

- b) Applicable Emissions Limitations and/or Control Requirements

- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) ORC 3704.03(T) (PTI No. P0134387)	Source design characteristic: NO _x emissions shall not exceed 0.08 lb/MMBtu of actual heat input. CO emissions shall not exceed 0.08 lb/MMBtu of actual heat input. Monthly allowable: For each boiler SO ₂ emissions shall be less than 6.33 tons per month averaged over a 12-month rolling period.
b.	OAC rule 3745-31-05(A)(3)(ii)	See b)(2)a.
c.	OAC rule 3745-31-05(D)	See c)(3).
d.	OAC rule 3745-17-07(A)(1)	Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
e.	OAC rule 3745-17-10(B)(1)	PM emissions shall not exceed 0.020 lb/MMBtu of actual heat input.
f.	OAC rule 3745-110	For a mid-size boiler: NO _x emissions shall not exceed 0.08 lb/MMBtu of actual heat input.
g.	40 CFR Part 60, Subpart Dc	Fuel usage record keeping requirements. See d(2).
h.	40 CFR Part 63, Subpart DDDDD	This boiler combusts only NG and COG and therefore is not subject to any emission



		limitations specified in Table 2 of Subpart DDDDD. See b)(2)b.
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(2) Additional Terms and Conditions

- a. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to PE and VOC emissions from this air contaminant source since the uncontrolled PTE for each pollutant is each less than 10 TPY.
- b. If this EU does not combust COG for at least 50 percent of the average annual heat input during any 3 consecutive calendar years as provided in 40 CFR 63.7491(i), the permittee shall follow the operating requirements for this EU specified in 40 CFR Part 63, Subpart DDDDD, as follows:

40 CFR 63.7500(a)(1), (b); 40 CFR 63.7495; 40 CFR 63.7510(g); 40 CFR 63.7515(d), (g); 40 CFR 63.7540(a)(10), (13); and 40 CFR Part 63, Subpart DDDDD, Table 3.	For each new Gas 1 boiler, tune-ups must be conducted for each boiler within the applicable annual schedule as specified in 40 CFR 63.7500(a), (b), 40 CFR 63.7540(a)(10), (13), and Table 3 to the subpart, unless alternative work practice standards are approved pursuant to 40 CFR 63.6(g). Each subsequent annual tune-up must occur no more than 13 months after the previous tune-up. If the boiler is not in operation at the time of its scheduled tune-up, the permittee is not required to perform the tune-up at that time but must complete the tune-up within 30 days after the re-start of the boiler.
40 CFR Part 63, Subpart DDDDD, Table 10	The applicability of the General Provisions in 40 CFR Part 63, Subpart A to boilers subject to Subpart DDDDD is identified in Table 10 to the subpart.

[Authority for Term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart DDDDD]

c) Operational Restrictions

- (1) The permittee shall burn only NG or COG in this EU.

[Authority for Term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3)]

- (2) If this emissions unit does not combust COG for at least 50 percent of the average annual heat input during any 3 consecutive calendar years as provided in 40 CFR 63.7491(i), the permittee shall follow the operating requirements for this emissions unit specified in 40 CFR Part 63, Subpart DDDDD, as follows:

40 CFR 63.7500(a)(3)	The boiler and associated air pollution control and monitoring equipment must be operated and maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions.
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40 CFR 63.7540(a)(12)	Boilers in the Gas 1 subcategory may elect to install an oxygen trim system that maintains an optimum air-to-fuel ratio to reduce the frequency of required tune-ups to once every 5 years per 40 CFR 63.7540(a)(12).
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[Authority for Term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart DDDDD]

- (3) The permittee is prohibited from operating more than three of four boilers, emissions units B001, B019, B020, B021 at any given time.

B021 is a rental boiler, which may be installed and operated in an event of a failure of either of the other boilers. B021 is permitted under PBR21613.

[Authority for Term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3)]

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than NG or COG, the permittee shall maintain a record of the type and quantity of fuel burned in this EU.

[Authority for Term: OAC rule 3745-77-07I(1)]

- (2) The permittee shall maintain monthly records of the following information for this EU:

- the type of fuel combusted in this EU;
- the quantity of each fuel type combusted in this EU; and
- the monthly SO₂ emissions, in tons per month, averaged over a 12-month rolling period using CEM data recorded from emissions unit P002, fuel usage amounts from d)(2)b above, and equations in f)(1)c.

[Authority for Term: OAC rule 3745-77-07I(1)]

- (3) If this emissions unit does not combust COG for at least 50 percent of the average annual heat input during any 3 consecutive calendar years as provided in 40 CFR 63.7491(i), the permittee shall follow the monitoring and/or record keeping requirements for this emissions unit specified in 40 CFR Part 63, Subpart DDDDD, as follows:

40 CFR 63.7555(a), (g)-(h); 40 CFR 63.7560; and 40 CFR 63.10(b)(1).	The applicable records required by the NESHAP are identified in 40 CFR 63.7555(a), (g)-(h) and they must be kept for at least 5 years following the date of the record or report submitted. Records must be accessible from on-site for at least two years after the date of the record and may be located off-site for the remaining three years.
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[Authority for Term: OAC rule 3745-77-07I(1) and 40 CFR Part 63, Subpart DDDDD]

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than NG or COG was burned in this EU. Each report shall be submitted within 30 days after the deviation occurs

[Authority for Term: OAC rule 3745-77-07I(1)]



- (2) If this emissions unit does not combust COG for at least 50 percent of the average annual heat input during any 3 consecutive calendar years as provided in 40 CFR 63.7491(i), the permittee shall follow the reporting requirements for this emissions unit specified in 40 CFR Part 63, Subpart DDDDD, as follows:

40 CFR 63.7495(d); 40 CFR 63.7530I-(g); and 40 CFR 63.7545.	The notification requirements identified in 40 CFR 63.7(b), (c), 40 CFR 63.8I, (f)(4), (6), 40 CFR 63.9(b)-(h), (j), 40 CFR 63.7545, and 40 CFR 63.7530I-(g), as applicable, shall be submitted to the Ohio EPA, Northeast District Office no later than the date identified in 40 CFR 63.7545.
40 CFR 63.7550(a)-(b); and 40 CFR Part 63, Subpart DDDDD, Table 9.	The owner/operator must submit each compliance report identified in Table 9 to the NESHAP that is applicable to the boiler, either annually or every 5 years according to the requirements identified in 40 CFR 63.7550(b). Each annual or 5-year compliance report must be postmarked or delivered no later than January 31. Each subsequent compliance report must be submitted in accordance with the same applicable schedule and cover the applicable 1- or 5-year periods from January 1 to December 31.
40 CFR 63.7550I, (h)	The information identified in 40 CFR 63.7550I(1), I(5)(i)-(iv), (xiv) shall be submitted in accordance with 40 CFR 63.7550(h).

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart DDDDD]

- (3) The permittee shall submit quarterly deviation (excursion) reports that identify each month when the SO₂ emission rate was not less than 6.33 tons/month averaged over a 12-month rolling period and the SO₂ emission rate (tons/month, averaged over a 12-month rolling period) for each such month.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall submit quarterly deviation (excursion) reports that identify all times when all four boilers, emissions units B001, B019, B020, and B021 (Rental Boiler), are operated at the same time, and the type and amount of fuel burned in each boiler.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:



NO_x emissions shall not exceed 0.08 lb/MMBtu of actual heat input.

Applicable Compliance Method:

Compliance was demonstrated on November 15, 2024 through emission testing performed in accordance with the requirements of Method 7E of 40 CFR Part 60, Appendix A.

[Authority for Term: OAC rule 3745-77-07(C)(1), OAC rule 3745-110 and OAC rule 3745-31-05(A)(3)]

b. Emissions Limitation:

CO emissions shall not exceed 0.08 lb/MMBtu of actual heat input.

Applicable Compliance Method:

The permittee shall employ good combustion practices and the boiler shall be equipped with proper burner design in order to meet the CO emission rate which satisfies the BAT source design characteristic requirement. The permittee shall follow the manufacturer's maintenance procedures to ensure that the boiler is operated as designed.

If required, the permittee shall verify the designed emission rate through a one-time performance test in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10, and any additional approved USEPA methods as applicable.

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3)]

c. Emissions Limitation:

SO₂ emissions shall be less than 6.33 tons per month averaged over a 12-month rolling period.

Applicable Compliance Method:

- i. To determine the actual, monthly SO₂ emission rate from burning a mixture of NG and COG, the following equation shall be used:

$$E \text{ (ton/month)} = (A*B + (C/100*D*F)) \div 2000 \text{ lb/ton}$$

where:

E = SO₂ emission rate from burning a mixture of NG and COG, in lb/month;

A = 0.6 lb/1,000,000 scf (emission factor for SO₂ from burning NG from AP-42, Section 1.4, NG Combustion, Table 1.4-2, 7/98);

B = amount of NG fired, in cubic feet/month;

C = grains of H₂S in 100 dscf of COG (gr H₂S/100 dscf, as a monthly average, which will be generated by daily averages from CEM monitoring system at P002) (sulfur concentration derived from desulfurized sweet COG);

D = (1 lb/7000 grains)*(64 SO₂/34 H₂S); and

F = amount of coke oven gas fired, in cubic feet/month.

- ii. To determine the actual SO₂ emission rate from burning a mixture of NG and COG expressed as, tons per month averaged over a 12-month rolling period, the following equation shall be used:

E (tons/month) = add the most recent actual monthly SO₂ emissions (as determined in f)(1)c.i.) to the previous 11 consecutive months of actual monthly SO₂ emissions (as determined in f)(1)c.i.). Then divide this amount by 12.

where:

E = SO₂ emission rate from burning a mixture of NG and COG, in tons/month, averaged over a 12-month rolling period.

- iii. If required, the permittee shall demonstrate compliance with this emission rate while burning COG in accordance with 40 CFR Part 60, Appendix A, Methods 6 and 6C and the procedures in OAC rule 3745-18-04.

[Authority for Term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3)]

d. Emissions Limitation:

PM emissions shall not exceed 0.020 lb/MMBtu of actual heat input.

Applicable Compliance Method:

Compliance with the lb/MMBtu emission limitation shall be determined by multiplying the maximum hourly gas burning capacity of the EU (0.18 MMcf/hr) by AP-42, Section 1.4 Table 1.4-2 (7/98) emission factor for particulates (1.9 lbs/mmcf) and dividing by the maximum hourly heat input capacity of the EU (98 MMBtu/hr).

If required, the permittee shall demonstrate compliance with the emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 5.

[Authority for Term: OAC rule 3745-77-07(C)(1), OAC rule 3745-17-10(B)(1) and OAC rule 3745-31-05(A)(3)]

e. Emissions Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible PE observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

[Authority for Term: OAC rule 3745-77-07(C)(1), OAC rule 3745-17-07(A)(1) and OAC rule 3745-31-05(A)(3)]

g) **Miscellaneous Requirements**

- (1) None.

20. Emissions Unit Group - Chemico Landbase Water Heaters: B002 and B003.

EU ID	Operations, Property and/or Equipment Description
B002	12 MMBtu/hr water heater fired with coke oven gas (COG) and/or natural gas. This heater is part of the Chemico hot water scrubber pushing emission control system.
B003	12 MMBtu/hr water heater fired with coke oven gas (COG) and/or natural gas. This heater is part of the Chemico hot water scrubber pushing emission control system.

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

- b) Applicable Emissions Limitations and/or Control Requirements

- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05 (PTI 02-171)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-17-10(B)(1) and OAC rule 3745-17-07(A).
b.	OAC rule 3745-17-07(A)	Visible PE from the water heater stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
c.	OAC rule 3745-17-10(B)(1)	PM emissions shall not exceed 0.020 lb/MMBtu of actual heat input.
d.	40 CFR Part 63, Subpart DDDDD NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters.	This boiler is exempt from Subpart DDDDD pursuant to 40 CFR 63.7491(h) which exempts boilers and process heaters used as control devices.

- (2) Additional Terms and Conditions

a. None.

- c) Operational Restrictions

- (1) The permittee shall burn only NG and/or coke oven gas in this EU.

[Authority for Term: OAC rule 3745-77-07(A)(1)]

- d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than NG and/or coke oven gas, the permittee shall maintain a record of the type and quantity of fuel burned in this EU.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than NG and/or coke oven gas was burned in this EU. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

Visible PE from the water heater stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible PE observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

[Authority for Term: OAC rule 3745-77-07(C)(1), OAC rule 3745-17-07(A)(1), and OAC rule 3745-31-05(A)(3)]

b. Emissions Limitation:

PM emissions shall not exceed 0.020 lb/MMBtu of actual heat input.

Applicable Compliance Method:

For the use of NG, compliance shall be based upon multiplying the maximum hourly gas burning capacity of the EU (12,000 scf / hr) by the emission factor from AP-42, Fifth edition, Section 1.4, July' 98 version for NG combustion (1.9 lbs particulate/1,000,000 scf), and dividing by the maximum hourly heat input capacity of the EU (12 MMBtu/hr).

For the use of coke oven gas, compliance shall be based upon the AP-42 emission factor (AP-42, Fifth edition, Section 12.5, October' 86 version) for coke oven gas of (0.012 lb particulate / 1,000,000 Btu).

If required, compliance with this emission limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).

[Authority for Term: OAC rule 3745-77-07(C)(1), OAC rule 3745-17-10(B)(1), and OAC rule 3745-31-05(A)(3)]

g) Miscellaneous Requirements

- (1) None.

21. Emissions Unit Group – Tar Tanks: T002, T003 and T004.

EU ID	Operations, Property and/or Equipment Description
T002	500,000-gallon, No. 2 Tar Storage Tank, back-up for storing unstripped ammonia liquor or non-regulated 40 CFR Part 61, Subpart L materials.
T003	250,000-gallon, No. 3 Tar Storage Tank, back-up for storing unstripped ammonia liquor or non-regulated 40 CFR Part 61, Subpart L materials.
T004	250,000-gallon, No. 4 Tar Storage Tank, back-up for storing unstripped ammonia liquor or non-regulated 40 CFR Part 61, Subpart L materials.

- a) The following EU terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

- b) Applicable Emissions Limitations and/or Control Requirements

- (1) The specific operation(s), property, and/or equipment that constitute each EU along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	40 CFR Part 61, Subpart L (National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants)	No detectable fugitive VOC emissions from each tar storage tank when the tank contains tar or "unstripped" NH ₃ liquor. See b)(2)a, b)(2)b, b)(2)c and b)(2)d.
b.	OAC rule 3745-21-07(D)	The requirements established pursuant to this rule are less stringent than the requirements of 40 CFR Part 61, Subpart L.

- (2) Additional Terms and Conditions

- a. The permittee shall enclose and seal all openings on each tar tank when the tank contains tar or "unstripped" NH₃ liquor.
- b. The permittee shall operate and maintain a closed, positive pressure gas blanketing control system for each tar tank in accordance with the requirements of 40 CFR 61.132 when the tank contains tar or "unstripped" NH₃ liquor. The gas blanketing control system shall be designed and operated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and visual inspections.
- c. The permittee may operate and maintain a pressure relief device, vacuum relief device, an access hatch, and a sampling port on each tar tank when the tank contains tar or "unstripped" NH₃ liquor. Each access hatch and sampling port must be

equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.

- d. The conditions listed in sections b)(1)a, b)(2)a, b)(2)b, b)(2)c, d), e) and f) do not apply when the EU does not contain a material regulated by 40 CFR Part 61, Subpart L.
- c) Operational Restrictions
- (1) None.
- d) Monitoring and/or Recordkeeping Requirements
- (1) For each day during which the permittee burns a fuel other than NG and/or coke oven gas, the permittee shall maintain a record of the type and quantity of fuel burned in this EU. The permittee shall monitor the connections and seals on the gas blanketing system to determine if it is operating with no detectable emissions, using Reference Method 21 (40 CFR part 60, appendix A) and procedures specified in 61.245(c), and shall visually inspect each source (including sealing materials) and the ductwork of the control system for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted on a semiannual basis and at any other time after the control system is re-pressurized with blanketing gas following removal of the cover or opening of the access hatch.
 - a. If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Reference Method 21, a leak is detected.
 - b. If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.
 - c. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.
 - d. A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.
 - [Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]
 - (2) The permittee shall conduct a maintenance inspection of the control system on an annual basis for evidence of system abnormalities, such as blocked or plugged lines, sticking valves, plugged condensate traps, and other maintenance defects that could result in abnormal system operation. The owner or operator shall make a first attempt at repair within 5 days, with repair within 15 days of detection. [40 CFR 61.132(c)]
 - [Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]
 - (3) In accordance with 40 CFR 61.138(a), the permittee shall record and maintain the following information pertaining to the gas blanketing control system for each tar tank:
 - a. detailed schematics, design specifications, piping and instrumentation diagrams; and
 - b. the dates and descriptions of any changes in the design specifications.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]

- (4) In accordance with 40 CFR 61.138(b), the following information pertaining to sources subject to 40 CFR 61.132 shall be recorded and maintained for 2 years following each semiannual (and other) inspection and each annual maintenance inspection:
- a. The date of the inspection and the name of the inspector.
 - b. A brief description of each visible defect in the tar recovery system or control system and the method and date of repair of the defect.
 - c. The presence of a leak, as measured using the method described in 40 CFR 61.245(c). The record shall include the date of attempted and actual repair and method of repair of the leak.
 - d. A brief description of any control system abnormalities found during the annual maintenance inspection, the repairs made, the date of attempted repair, and the date of actual repair.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]

e) Reporting Requirements

- (1) In accordance with 40 CFR 61.138(f), the permittee shall submit semiannual reports which include the following information:
- a. a description of visible defects observed to any tar tank, gas blanketing control system or ductwork;
 - b. the number of tar tank, gas blanketing control system and ductwork leaks detected and repaired for each tar tank;
 - c. a description of each tar tank and gas blanketing control system abnormalities found during each annual maintenance inspection that occurred in the reporting period and the repairs made; and
 - d. a statement signed by the permittee stating whether all provisions of 40 CFR Part 61, Subpart L, have been fulfilled during the semiannual reporting period.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]

- (2) The permittee shall submit revisions to the initial statement that was submitted in compliance with 40 CFR 61.138(e) on a semiannual basis if changes have occurred since the initial report or subsequent revisions to the initial report. [40 CFR 61.138(f)(6)]

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]

- (3) All semiannual reports shall be submitted to the Ohio EPA, Northeast District Office by the first day of February and August and shall include information for the preceding semiannual period.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

No detectible fugitive VOC emissions from each tar storage tank when the tank contains tar or "unstripped" NH₃ liquor.

Applicable Compliance Method:

Compliance shall be demonstrated based on the monitoring and record keeping requirements specified in d).

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]

g) Miscellaneous Requirements

(1) None.

22. Emissions Unit Group – Un-stripped NH₃ WWTP Tanks: T011 and T012.

EU ID	Operations, Property and/or Equipment Description
T011	T0NH3-1 Wastewater Treatment Tank (300,000-gallon "Un-stripped" ammonia wastewater treatment storage tank, fixed roof, equipped with vapor collection system)
T012	T0NH3-2 Wastewater Treatment Tank (300,000-gallon "Un-stripped" ammonia wastewater treatment storage tank, fixed roof, equipped with vapor collection system)

- a) The following EU terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

- b) Applicable Emissions Limitations and/or Control Requirements

- (1) The specific operation(s), property, and/or equipment that constitute each EU along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	40 CFR Part 61, Subpart L (National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants)	No detectible fugitive VOC emissions from each "unstripped" NH ₃ wastewater treatment storage tank. See b)(2)a, b)(2)b, b)(2)c and b)(2)d.

- (2) Additional Terms and Conditions

- a. The permittee shall enclose and seal all openings on each "unstripped" NH₃ wastewater treatment storage tank when a tank(s) contain(s) "unstripped" NH₃ wastewater.
- b. The permittee shall operate and maintain a closed, positive pressure gas blanketing control system for each tank in accordance with the requirements of 40 CFR 61.132 when a tank(s) contain(s) "unstripped" NH₃ wastewater. The gas blanketing control system shall be designed and operated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and visual inspections.
- c. The permittee may operate and maintain a pressure relief device, vacuum relief device, an access hatch, and a sampling port on each "unstripped" NH₃ wastewater treatment tank when a tank(s) contain(s) "unstripped" NH₃ wastewater. Each access hatch and sampling port must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.
- d. The conditions listed in sections b)(1)a, b)(2)a, b)(2)b, b)(2)c, d), e) and f) do not apply when the EU does not contain a material regulated by 40 CFR Part 61, Subpart L.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall monitor the connections and seals on the gas blanketing system to determine if it is operating with no detectable emissions, using Reference Method 21 (40 CFR Part 60, Appendix A) and procedures specified in 61.245(c), and shall visually inspect each source (including sealing materials) and the ductwork of the control system for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted on a semiannual basis and at any other time after the control system is re-pressurized with blanketing gas following removal of the cover or opening of the access hatch.

- a. If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Reference Method 21, a leak is detected.
- b. If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.
- c. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.
- d. A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]

(2) The permittee shall conduct a maintenance inspection of the control system on an annual basis for evidence of system abnormalities, such as blocked or plugged lines, sticking valves, plugged condensate traps, and other maintenance defects that could result in abnormal system operation. The owner or operator shall make a first attempt at repair within 5 days, with repair within 15 days of detection. [40 CFR 61.132(c)]

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]

(3) In accordance with 40 CFR 61.138(a), the permittee shall record and maintain the following information pertaining to the gas blanketing control system for each "unstripped" NH₃ wastewater treatment storage tank:

- a. detailed schematics, design specifications, piping and instrumentation diagrams; and
- b. the dates and descriptions of any changes in the design specifications.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]

(4) In accordance with 40 CFR 61.138(b), the following information pertaining to sources subject to 40 CFR 61.132 shall be recorded and maintained for 2 years following each semiannual (and other) inspection and each annual maintenance inspection:

- a. The date of the inspection and the name of the inspector.
- b. A brief description of each visible defect in the tar recovery system or control system and the method and date of repair of the defect.
- c. The presence of a leak, as measured using the method described in 40 CFR 61.245(c). The record shall include the date of attempted and actual repair and method of repair of the leak.

- d. A brief description of any control system abnormalities found during the annual maintenance inspection, the repairs made, the date of attempted repair, and the date of actual repair.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]

e) Reporting Requirements

- (1) In accordance with 40 CFR 61.138(f), the permittee shall submit semiannual reports which include the following information:

- a. a description of visible defects observed with any tank, gas blanketing control system or ductwork;
- b. the number of tank, gas blanketing control system and ductwork leaks detected and repaired;
- c. a description of each tank and gas blanketing control system abnormalities found during each annual maintenance inspection that occurred in the reporting period and the repairs made; and
- d. a statement signed by the permittee stating whether all provisions of 40 CFR Part 61, Subpart L, have been fulfilled during the semiannual reporting period.

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]

- (2) The permittee shall submit revisions to the initial statement that was submitted in compliance with 40 CFR 61.138(e) on a semiannual basis if changes have occurred since the initial report or subsequent revisions to the initial report. [40 CFR 61.138(f)(6)]

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]

- (3) All semiannual reports shall be submitted to the Ohio EPA, Northeast District Office by the first day of February and August and shall include information for the preceding semiannual period.

[Authority for Term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emissions Limitation:

No detectible fugitive VOC emissions from each "unstripped" NH₃ wastewater treatment storage tank.

- a. Applicable Compliance Method:

Compliance shall be demonstrated based on the monitoring and record keeping requirements specified in d).

[Authority for Term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 61, Subpart L]

g) Miscellaneous Requirements

(1) None.