MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

November 21, 2014

PERMIT TO INSTALL
51-08C

ISSUED TO
EES Coke Battery, LLC

LOCATED AT
1400 Zug Island
River Rouge, Michigan

IN THE COUNTY OF
Wayne

STATE REGISTRATION NUMBER
P0408

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

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203: **September 4, 2014**	
DATE PERMIT TO INSTALL APPROVED: **November 21, 2014**	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

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Common Abbreviations / Acronyms

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	BTU	British Thermal Unit
BACT	Best Available Control Technology	°C	Degrees Celsius
CAA	Clean Air Act	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	dscf	Dry standard cubic foot
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter
CO_2e	Carbon Dioxide Equivalent	°F	Degrees Fahrenheit
COM	Continuous Opacity Monitoring	gr	Grains
EPA	Environmental Protection Agency	Hg	Mercury
EU	Emission Unit	hr	Hour
FG	Flexible Group	H_2S	Hydrogen Sulfide
GACS	Gallon of Applied Coating Solids	hp	Horsepower
GC	General Condition	lb	Pound
GHGs	Greenhouse Gases	kW	Kilowatt
HAP	Hazardous Air Pollutant	m	Meter
HVLP	High Volume Low Pressure *	mg	Milligram
ID	Identification	mm	Millimeter
LAER	Lowest Achievable Emission Rate	MM	Million
MACT	Maximum Achievable Control Technology	MW	Megawatts
MAERS	Michigan Air Emissions Reporting System	ng	Nanogram
MAP	Malfunction Abatement Plan	NO_x	Oxides of Nitrogen
MDEQ	Michigan Department of Environmental Quality (Department)	PM	Particulate Matter
MSDS	Material Safety Data Sheet	PM10	PM with aerodynamic diameter ≤10 microns
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	PM with aerodynamic diameter ≤ 2.5 microns
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	psia	Pounds per square inch absolute
PTI	Permit to Install	psig	Pounds per square inch gauge
RACT	Reasonably Available Control Technology	scf	Standard cubic feet
ROP	Renewable Operating Permit	sec	Seconds
SC	Special Condition	SO_2	Sulfur Dioxide
SCR	Selective Catalytic Reduction	THC	Total Hydrocarbons
SRN	State Registration Number	tpy	Tons per year
TAC	Toxic Air Contaminant	µg	Microgram
TEQ	Toxicity Equivalence Quotient	VOC	Volatile Organic Compound
VE	Visible Emissions	yr	Year

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

GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **(R 336.1201(1))**

2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **(R 336.1201(4))**

3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to R 336.1210, operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **(R 336.1201(6)(b))**

4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**

5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to R 336.1219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of R 336.1219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. **(R 336.1219)**

6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901)**

7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **(R 336.1912)**

8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.

9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.

10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of R 336.1301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R 336.1303. **(R 336.1301)**
    a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
    b) A visible emission limit specified by an applicable federal new source performance standard.
    c) A visible emission limit specified as a condition of this Permit to Install.

12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). **(R 336.1370)**

13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. **(R 336.2001)**

SPECIAL CONDITIONS

EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EUCOKE-BATTERY	Rebuilt No. 5 coke oven battery consisting of eighty-five, six-meter high ovens with an integral heating system and a coke oven gas (COG) flare. The following emission control devices are part of the battery: overpressure bleeder flares, pushing emission control system (PECS) baghouse, and a quench tower.	11-24-1992 / 02-07-1997 / 11-21-2014	FGMACTL, FGMACTCCCCC
EUCOKE-BYPRODUCT	The by-products plant includes the exhausters that draw the gases off the No. 5 coke oven battery and all the process vessels required to separate the phenols, tars, light oils, and ammonia from the coke oven gas. This occurs by passing the gas and fluids through a series of process decanters, condensers, heat exchangers, and stills. The by-products plant also includes storage tanks, and light oil loading operations.	04-12-1970 / 11-24-1992	FGNESHAPL,V,&FF
EUMATERIALS	Coal transfer, crushing and screening including a battery coal bin; coke transfer and screening; and transport of coal and coke.	04-12-1970 / 11-24-1992 / 11-21-2014	NA
Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.			

The following conditions apply to: EUCOKE-BATTERY

DESCRIPTION: Rebuilt No. 5 coke oven battery consisting of eighty-five, six-meter high ovens with an integral heating system and a coke oven gas (COG) flare.

Flexible Group ID: FGMACTL, FGMACTCCCCC

POLLUTION CONTROL EQUIPMENT: Overpressure bleeder flares, pushing emission control system (PECS) baghouse, quench tower

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. CO	437.3 pph	8-hr block average	Underfire combustion stack - EUCOKE-BATTERY	SC VI.3, SC VI.6	R 336.1221[3], R 336.2908[3], 40 CFR 52.21(d)
2. NO_x	1,411 tpy	12-month rolling time period as determined at the end of each calendar month	Underfire combustion stack - EUCOKE-BATTERY	SC VI.3, SC VI.7	R 336.2803, R 336.2804
3. NO_x	563.5 pph	Hourly	Underfire combustion stack - EUCOKE-BATTERY	SC VI.3, SC VI.7	R 336.2803, R 336.2804
4. NO_x	0.75 lb/MMBtu heat input	12-month rolling average as determined at the end of each calendar month	Underfire combustion stack - EUCOKE-BATTERY	SC VI.3, SC VI.7	R 336.2810
5. NO_x	1.25 lb/MMBtu heat input	24-hr rolling average	Underfire combustion stack - EUCOKE-BATTERY	SC VI.3, SC VI.7	R 336.2810
6. NO_x	2.61 pph	Test protocol shall specify averaging time.	PECS baghouse stack - EUCOKE-BATTERY	SC V.2	R 336.2803, R 336.2804, R 336.2810
7. PM	0.095 lb per 1000 lb of exhaust gases, corrected to 50% excess air	Test protocol shall specify averaging time.	Underfire combustion stack - EUCOKE-BATTERY	SC V.1	R 336.1331(1)(a)
8. PM	0.012 gr/dscf (excluding sulfates)	Test protocol shall specify averaging time.	Underfire combustion stack - EUCOKE-BATTERY	SC V.1	R 336.1221[3], R 336.2908[3]
9. PM	25.7 pph (excluding sulfates)	Test protocol shall specify averaging time.	Underfire combustion stack - EUCOKE-BATTERY	SC V.1	R 336.1221[3], R 336.2908[3]
10. PM	9.7 tpy	Test protocol shall specify averaging time.	PECS baghouse stack - EUCOKE-BATTERY	SC V.2	R 336.1221[3], R 336.2908[3]
11. PM	0.02 lb/ton of coke pushed	Test protocol shall specify averaging time.	PECS baghouse stack - EUCOKE-BATTERY	SC V.2	R 336.1221[3], R 336.1331(1)(c), R 336.2908[3]
12. PM10	73.3 pph	Test protocol shall specify averaging time.	Underfire combustion stack - EUCOKE-BATTERY	SC V.1	40 CFR 52.21(c) and (d)
13. PM10	0.69 pph	Test protocol shall specify averaging time.	PECS baghouse stack - EUCOKE-BATTERY	SC V.2	40 CFR 52.21(c) and (d)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
14. PM2.5	73.0 pph	Test protocol shall specify averaging time.	Underfire combustion stack - EUCOKE-BATTERY	SC V.1	40 CFR 52.21(c) and (d)
15. PM2.5	0.69 pph	Test protocol shall specify averaging time.	PECS baghouse stack - EUCOKE-BATTERY	SC V.2	40 CFR 52.21(c) and (d)
16. SO_2	2,071 tpy	12-month rolling time period as determined at the end of each calendar month	Underfire combustion stack - EUCOKE-BATTERY	SC VI.3, SC VI.8	R 336.1205(1)(a) and (1)(b), 40 CFR 52.21(c) and (d)
17. SO_2	544.6 pph	3-hr block average	Underfire combustion stack - EUCOKE-BATTERY	SC VI.3, SC VI.8	40 CFR 52.21(c) and (d)
18. SO_2	0.702 lb/1,000 scf of COG	1-hr average	Underfire combustion stack - EUCOKE-BATTERY	SC VI.3, SC VI.9	R 336.1205(1)(a) and (1)(b), Section 110 of the CAA
19. VOC	43.1 pph	Test protocol shall specify averaging time.	Underfire combustion stack - EUCOKE-BATTERY	SC V.1	R 336.1220[4], R 336.2908[4]
20. VOC	0.0956 lb/MMBtu heat input	Test protocol shall specify averaging time.	Underfire combustion stack - EUCOKE-BATTERY	SC V.1	R 336.1702(a)
21. Visible emissions	20% opacity	6-minute average	Underfire combustion stack - EUCOKE-BATTERY	SC VI.2, SC VI.5	R 336.1221[3], R 336.1301(1)(c), R 336.2908[3]
22. Visible emissions	15% opacity	Average of 6 consecutive readings taken at 15 second intervals	PECS baghouse stack - EUCOKE-BATTERY	SC VI.10, SC VI.11	R 336.1221[3], R 336.1301(1)(c), R 336.2908[3]

23. There shall be no visible emissions from the charging lids on EUCOKE-BATTERY except that a visible emission may be emitted from no more than 1% of all charging lids. Compliance with the limit shall be determined using reference method 9B. **(R 336.1221[3], R 336.1301(1)(c), R 336.2031, R 336.2908[3])**

24. There shall be no visible emissions from the charging of coal to EUCOKE-BATTERY except that a visible emission may be emitted for a period or periods aggregating 55 seconds during any five consecutive charges. Compliance with the limit shall be determined using reference method 9B. **(R 336.1221[3], R 336.1350, R 336.2031, R 336.2908[3])**

25. Fugitive visible emissions during the pushing and travel operations on EUCOKE-BATTERY shall not exceed 20% opacity as determined instantaneously. Instantaneous readings shall not be averaged and shall be taken at 15-second intervals for the duration of the pushing and travel operations. The observer shall be positioned in accordance with the provisions of reference method 9B. **(R 336.1221[3], R 336.2031, R 336.2908[3])**

26. There shall be no visible emissions from the standpipes/offtakes on EUCOKE-BATTERY except that a visible emission may be emitted from no more than 4% of all standpipe assembly emission points. Compliance with the limit shall be determined using reference method 9B. **(R 336.1221[3], R 336.1353, R 336.2031, R 336.2908[3])**

27. The permittee shall not cause or permit to be discharged into the outer air any visible emission from the coke oven gas collector main, except when spooning the main or when the emergency relief valve opens. **(R 336.1355)**

28. There shall be no visible emissions from the push side doors, the coke side doors, nor the leveling doors on EUCOKE-BATTERY except that a visible emission may be emitted from no more than 5% of all doors, not including the last oven charged. The total number of doors on EUCOKE-BATTERY shall be based upon two doors per oven. Compliance with the limit shall be determined using reference method 9B. **(R 336.1221[3], R 336.2031, R 336.2908[3])**

II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Dry coal charged	1,420,000 tpy	12-month rolling time period as determined at the end of each calendar month	EUCOKE-BATTERY	SC VI.16	R 336.1205(1)(a) and (1)(b)
2. Dry coal charged	125,000 tons/month	Calendar month	EUCOKE-BATTERY	SC VI.16	R 336.1205(1)(a) and (1)(b), R 336.1225
3. Heavy tar sludge charged	836,000 gallons/yr	12-month rolling time period as determined at the end of each calendar month	EUCOKE-BATTERY	SC VI.16	R 336.1205(1)(a) and (1)(b), R 336.1225
4. No. 2 fuel oil charged	1,365,000 gallons/yr	12-month rolling time period as determined at the end of each calendar month	EUCOKE-BATTERY	SC VI.16	R 336.1205(1)(a) and (1)(b), R 336.1225
5. No. 2 fuel oil sulfur content	0.50% by weight	Instantaneous	EUCOKE-BATTERY	SC VI.22	R 336.1205(1)(a) and (1)(b)
6. Total dissolved solids (TDS) content of quenching water	Less than 800 mg/liter	Weekly composite at minimum of 3 samples collected on separate days	EUCOKE-BATTERY	SC V. 4	R 336.1205(1)(a) and (1)(b), R 336.1221[3], R 336.1331(1)(c), R 336.2908[3]

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EUCOKE-BATTERY unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the process and emission control equipment is implemented and maintained. The MAP shall, at a minimum, specify the following:
   a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
   b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
   c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 60 days after such an event occurs. The permittee shall also amend the MAP within 60 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1205, R 336.1910, R 336.1911)**

2. The volatile matter in the coke produced by EUCOKE-BATTERY shall not exceed 0.94 percent by weight, based upon a daily composite sample, on a 12-month rolling basis. **(R 336.1205, R 336.1220[4], R 336.1702(a), R 336.2908[4])**

3. The permittee shall not cause or permit any standpipe lid to be open for decarbonization on any coke oven which is more than 3 ovens ahead of the oven being pushed. **(R 336.1354)**

4. If dry coal charged to EUCOKE-BATTERY exceeds 1,300,000 tpy on a 12-month rolling time period, the permittee shall send excess COG to a separate stationary source in accordance with the following formula:

   Excess COG (MMBtu/yr) = (x – 1.3E06 tpy dry coal) * (MMBtu COG generation / ton dry coal)

   Where x = the amount of dry coal charged in tpy.

   (R 336.1205)

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate EUCOKE-BATTERY unless the overpressure bleeder flares, PECS baghouse, and quench tower are installed, maintained, and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with an approved MAP as required in SC III.1. **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910, 40 CFR 52.21(c) and (d))**

2. The permittee shall install, maintain, and operate, in a satisfactory manner, the EUCOKE-BATTERY overpressure bleeder flares and the COG flare with automatic ignition systems. **(R 336.1205, R336.1910)**

3. The permittee shall not push coke from EUCOKE-BATTERY unless the pushing emission control system (PECS) is installed, maintained, and operated in a satisfactory manner. Pushing emissions from EUCOKE-BATTERY shall be captured by a belted duct collection system connected to the PECS baghouse. **(R 336.1205, R 336.1910)**

4. The baffles in the EUCOKE-BATTERY quench tower shall be kept in a good state of repair. **(R 336.1205, R 336.1910)**

5. The permittee shall only use acceptable makeup water in the EUCOKE-BATTERY quench tower. Acceptable makeup water is defined as surface water from a river, lake, or stream; water meeting drinking water standards; storm water runoff and production area cleanup water except for water from the by-product recovery plant area; process wastewater treated to meet effluent limitations guidelines in 40 CFR 420; water from any of these sources that has been used only for non-contact cooling or in water seals; or water from scrubbers used to control pushing emissions. Waste water recycled from EUCOKE-BYPRODUCT is not acceptable makeup water. **(R 336.1205, R 336.1221[3], R 336.1331, R 336.2908[3])**

6. The permittee shall install, calibrate, maintain and operate, in a satisfactory manner, a device to monitor the pressure drop across the PECS baghouse on a continuous basis. **(R 336.1301, R 336.1331, R 336.1910)**

V. TESTING/SAMPLING

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

1. The permittee shall verify PM, PM10, PM2.5, and VOC emission rates from the underfire combustion stack on EUCOKE-BATTERY by testing at owner's expense, in accordance with Department requirements. The testing shall be repeated every two years. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. Testing methods for PM, PM10, and PM2.5 are listed in Appendix A. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1220[4], R 336.1221[3], R 336.1331, R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2908[3,4], 40 CFR 52.21(c) and (d))**

2. The permittee shall verify NO_x, PM, PM10, and PM2.5 emission rates from the PECS baghouse stack on EUCOKE-BATTERY by testing at owner's expense, in accordance with Department requirements. The testing shall be repeated every two years. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1221[3], R 336.1331, R 336.2803, R 336.2804, R 336.2810, R 336.2001, R 336.2003, R 336.2004, R 336.2908[3], 40 CFR 52.21(c) and (d))**

3. The permittee shall sample the TDS content of the quench water in the quench tower for EUCOKE-BATTERY on a weekly basis. The TDS content shall be based on a weekly composite, with a minimum of three samples of equal volume, collected on separate calendar days during the same calendar week. The permittee must submit any request for a change in the sampling frequency and methods to the AQD District Supervisor for review and approval. **(R 336.1205, R 336.1221[3], R 336.1331, R 336.2908[3])**

4. At least once each calendar month, the permittee shall sample the volatile matter content of the coke produced by EUCOKE-BATTERY. The volatile matter content shall be based on an average of 3 samples for a calendar day composite. The permittee must submit any request for a change in the sampling frequency and methods to the AQD District Supervisor for review and approval. **(R 336.1205, R 336.1220[4], R 336.1702(a), R 336.2908[4])**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required records and calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205, R 336.1220[4], R 336.1221[3], R 336.1225, R 336.1299, R 336.1301, R 336.1331, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, R 336.2908[3,4], 40 CFR 52.21(c) and (d))**

2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the opacity from the underfire combustion stack on EUCOKE-BATTERY on a continuous basis. The COM shall be operated in accordance with procedures outlined in Appendix B. **(R 336.1221[3], R 336.1301, R 336.2908[3])**

3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner device(s) to monitor and record the CO, NOx, and SO_2 emissions, and oxygen or carbon dioxide (O_2 or CO_2) content of the exhaust gas from the underfire combustion stack on EUCOKE-BATTERY on a continuous basis. The CEM and continuous emission rate monitoring system (CERMS) shall be operated according to procedures in Appendix C. **(R 336.1205, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c) and (d))**

4. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the exhaust gas flow rate from the underfire combustion stack on EUCOKE-BATTERY on a continuous basis. The monitor shall be operated in accordance with procedures outlined in Appendix C. **(R 336.1205, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c) and (d))**

5. The permittee shall keep, in a satisfactory manner, continuous opacity data records for the underfire combustion stack on EUCOKE-BATTERY, as described in emission limit SC I.20. **(R 336.1221[3], R 336.1301, R 336.2908[3])**

6. The permittee shall keep, in a satisfactory manner, hourly and 8-hr block average (starting at midnight) CO emission rate records for the underfire combustion stack on EUCOKE-BATTERY, as described in emission limit SC I.1. Beginning September 1, 2015, data substitution for each hour of monitor downtime shall use the average measured of the last known valid hour prior to the downtime and the next valid hour after the downtime. **(R 336.1221[3], 40 CFR 52.21(d), R 336.2908[3])**

7. The permittee shall keep, in a satisfactory manner, hourly, 24-hr rolling average, monthly, and 12-month rolling NO_x emission rate records for the underfire combustion stack on EUCOKE-BATTERY, as described in emission limits SC I.2, SC I.3, SC I.4, and SC I.5. Beginning September 1, 2015, data substitution for each hour of monitor downtime shall use the average measured of the last known valid hour prior to the downtime and the next valid hour after the downtime. **(R 336.2803, R 336.2804, R 336.2810)**

8. The permittee shall keep, in a satisfactory manner, hourly, 3-hr block average (starting at midnight), monthly, and 12-month rolling SO_2 emission rate records for the underfire combustion stack on EUCOKE-BATTERY, as described in emission limits SC I.16 and SC I.17. Beginning September 1, 2015, data substitution for each hour of monitor downtime shall use the average measured of the last known valid hour prior to the downtime and the next valid hour after the downtime. **(R 336.1205, 40 CFR 52.21(c) and (d))**

9. The permittee shall keep, in a satisfactory manner, 1-hr average (starting at midnight) SO_2 emission rate records for the underfire combustion stack on EUCOKE-BATTERY, as described in emission limit SC I.18. Beginning September 1, 2015, data substitution for each hour of monitor downtime shall use the average measured of the last known valid hour prior to the downtime and the next valid hour after the downtime. **(R 336.1205, Section 110 of the CAA)**

10. The permittee shall perform and document non-certified visible emissions observations, on a weekly basis, for the PECS baghouse during a minimum of one pushing event. If during the observation there are any visible emissions detected from an emission point, a reference method 9B certified visible emissions observation shall be conducted for a minimum of three pushing events to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, reference method 9B observations that are performed, the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. **(R 336.1301, R 336.1910, R 336.1911, R 336.2031(e))**

11. The permittee shall perform a reference method 9B certified visible emission observation of the PECS baghouse at least once a month during a minimum of three pushing events. The permittee shall initiate corrective action upon observation of visible emissions exceeding applicable visible emission limits. Records of the reference method 9B observations that are performed, the reason for any visible emissions observed and any corrective actions taken shall be kept on file in a format acceptable to the AQD District Supervisor. **(R 336.1221[3], R 336.1301, R 336.1910, R 336.1911, R 336.2031(e), R 336.2908[3])**

12. The permittee shall perform daily reference method 9B certified visible emission observations from charging, pushing and traveling operations, standpipes/offtakes, the coke oven gas collector main, push side doors, the coke side doors, and the leveling doors. The permittee shall initiate corrective action upon observation of visible emissions exceeding applicable visible emission limits. Records of the reference method 9B observations that are performed, the reason for any visible emissions observed and any corrective actions taken shall be kept on file in a format acceptable to the AQD District Supervisor. **(R 336.1221[3], R 336.1301, R 336.1355, R 336.2031, R 336.2908[3])**

13. The permittee shall record, in a satisfactory manner, the daily pressure drop across the PECS baghouse. The permittee shall initiate appropriate maintenance activity on the baghouse if the pressure drop exceeds the normal range as specified in an approved MAP as required in SC III.1. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1301, R 336.1331, R 336.1910, R 336.1911)**

14. The permittee shall conduct regular inspections of the operational condition of the PECS baghouse. These inspections shall be conducted during scheduled outages or downtimes, and as soon as practicable after observing visible emissions, but not less frequently than at least once every month. Records of each inspection, the reason for any visible emissions observed, and any corrective actions taken shall be kept on file in a format acceptable to the AQD District Supervisor. **(R 336.1221[3], R 336.1301, R 336.1331, R 336.1910, R 336.1911, R 336.2908[3])**

15. The permittee shall conduct regular inspections of the operational condition of the baffles in the quench tower. These inspections shall be conducted during scheduled outages or downtimes, and as soon as practicable after observing visible emissions or fallout, but not less frequently than at least once every month. Records of each inspection, the reason for any visible emissions or fallout observed, and any corrective actions taken shall be kept on file in a format acceptable to the AQD District Supervisor. **(R 336.1221[3], R 336.1301, R 336.1331, R 336.1910, R 336.1911, R 336.2908[3])**

16. The permittee shall keep, in a satisfactory manner, monthly, and 12-month rolling records of the amount of dry coal, heavy tar sludge, and No. 2 fuel oil charged to EUCOKE-BATTERY. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205, R 336.1225)**

17. The permittee shall keep, in a satisfactory manner, monthly, and 12-month rolling records of the heat input, fuel gas usage, Btu content of the fuel gas, volatile matter content of the coke produced, and coke production rate for EUCOKE-BATTERY. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205, R 336.1220[4], R 336.1225, R 336.2908[4])**

18. The permittee shall monitor and record the quantity of COG generated per ton of dry coal and the quantity of COG sent to a separate stationary source pursuant to SC III.4 in a manner and with instrumentation acceptable to the AQD District Supervisor. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling records of the amount of COG generated per ton of dry coal and the quantity of coke oven gas sent to a separate stationary source. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205)**

19. The permittee shall monitor and record, in a satisfactory manner, the quantity of coke oven gas vented to the COG flare on a daily basis. The permittee shall keep the records in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1911)**

20. The permittee shall conduct regular inspections to determine the operational condition of the COG flare and automatic ignition system at least once every 6 months. A log of the inspection, cause(s) of malfunction or failure, repairs made and corrective actions taken shall be kept and maintained in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1911)**

21. The permittee shall keep, in a satisfactory manner, daily records of the operation of overpressure bleeder flare system for EUCOKE-BATTERY. Records shall include the number, duration, and reason of overpressure bleeder flare system operation. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205, R 336.1225)**

22. The permittee shall maintain a record of the analysis for each shipment of No. 2 fuel oil. These records may include purchase records for ASTM specification fuel oil, specifications or analyses provided by the vendor at the time of delivery, analytical results from laboratory testing, or any other records adequate to demonstrate compliance with the percent sulfur limit in No. 2 fuel oil. **(R 336.1205)**

VII. REPORTING

1. The permittee shall provide notice of all emergency malfunctions of the overpressure bleeder flare system resulting in emissions of coke oven gas from EUCOKE-BATTERY. The notice shall include the reason for the malfunction, corrective actions taken, duration of the malfunction, quantity of coke oven gas released, and estimated emissions. All malfunctions involving operation of the overpressure bleeder flare system shall be reported to the AQD District Supervisor no later than 24 hours after the event. The permittee shall submit the notice within 30 days. **(R 336.1205, R 336.1910, R 336.1912)**

2. The permittee shall report, in a satisfactory manner, the 1-hr average SO_2 emission rate as described in emission limit SC I.18 on a quarterly basis including any data substitution for each hour of monitor downtime. The records shall be reported within 30 days following the end of the calendar quarter in a format acceptable to the AQD District Supervisor. **(R 336.1205, Section 110 of the CAA)**

3. The permittee shall furnish to the AQD District Supervisor, within 21 days of receipt of request, any records required by SC VI.1 through SC VI.22 for EUCOKE-BATTERY. **(R 336.1205, R 336.1912)**

VIII. STACK/VENT RESTRICTIONS

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

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVCOKE-UNDERFIRE (Combustion Stack)	219.6	315	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
2. SVCOKE-PECSBGHS	120	115	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
3. SVCOKE-COGFLARE	36	134	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENTS

1. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR 63, Subparts A and L, as they apply to EUCOKE-BATTERY. **(40 CFR 63, Subparts A and L)**

2. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR 63, Subparts A and CCCCC, as they apply to EUCOKE-BATTERY. **(40 CFR 63, Subparts A and CCCCC)**

Footnotes:

[3] This condition was established pursuant to Rule 221 as it applied at the time of initial permitting in 1990. This limit was part of nonattainment New Source Review which required LAER for CO and PM, and offsets for PM. Rule 221 has been rescinded, and the current equivalent Rule 1908 is cited in addition. However, this condition is not the result of any analysis performed under Rule 1908.

[4] This condition was established pursuant to Rule 220 as it applied at the time of initial permitting in 1990. This limit was part of nonattainment New Source Review which required LAER for VOC, and offsets for VOC. Rule 221 has been rescinded, and the current equivalent Rule 1908 is cited in addition. However, this condition is not the result of any analysis performed under Rule 1908.

The following conditions apply to: EUCOKE-BYPRODUCT

DESCRIPTION: The by-products plant includes the exhausters that draw the gases off the No. 5 coke oven battery and all the process vessels required to separate the phenols, tars, light oils, and ammonia from the coke oven gas. This occurs by passing the gas and fluids through a series of process decanters, condensers, heat exchangers, and stills. The by-products plant also includes storage tanks, and light oil loading operations.

Flexible Group ID: FGNESHAPL,V,&FF

POLLUTION CONTROL EQUIPMENT: Nitrogen gas blanketing system

I. EMISSION LIMITS

NA

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not vent raw coke oven gas that has not been processed in EUCOKE-BYPRODUCT to the COG flare. **(R 336.1205, R 336.1225, R 336.1702(a))**

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

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

1. The permittee shall monitor for benzene leaks from the by-products plant equipment using Method 21 or other methods as approved by the AQD District Supervisor. The frequency of leak testing is as follows:
   a. Monthly for pump seals
   b. Quarterly for flanges, valves and exhausters
   c. Semi-annually for blanketing systems
   d. Annually for difficult to monitor equipment
   e. The frequency of leak tests as required by 40 CFR 61, Subpart V shall prevail over the above indicated frequency if lesser.

   The permittee must submit any request for a change in the sampling frequency and methods to the AQD District Supervisor for review and approval. **(R 336.1205, R 336.1299)**

VI. MONITORING/RECORDKEEPING

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

NA

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

1. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR 61, Subpart L, as they apply to EUCOKE-BYPRODUCT. **(40 CFR 61, Subpart L)**

2. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR 61, Subpart V, as they apply to EUCOKE-BYPRODUCT. **(40 CFR 61, Subpart V)**

3. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR 61, Subpart FF, as they apply to EUCOKE-BYPRODUCT. **(40 CFR 61, Subpart FF)**

The following conditions apply to: EUMATERIALS

DESCRIPTION: Coal transfer, crushing and screening including a battery coal bin; coke transfer and screening; and transport of coal and coke.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: Coal bin vents, Mixing building baghouse

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Visible emissions	10% opacity	6-minute average	Coal bin vents - EUMATERIALS	SC VI.4	R 336.1301(1)(c)
2. Visible emissions	10% opacity	6-minute average	Mixing building baghouse - EUMATERIALS	SC VI.4	R 336.1301(1)(c)

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. Within 180 days of permit issuance, the permittee shall submit to the AQD District Supervisor a revised program for continuous fugitive dust control for all material handling operations. The program shall be reviewed and approved by the AQD District Supervisor. Subsequently it shall be updated as necessary, and kept at the facility. If at any time the fugitive dust control program fails to address or inadequately addresses an event that meets the characteristics of a revision or update, the permittee shall amend the fugitive dust control program within 60 days after such an event occurs. The permittee shall also amend the fugitive dust control program within 60 days, if new equipment is installed or upon request from the AQD District Supervisor. The permittee shall submit the fugitive dust control program and any amendments to the fugitive dust control program to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the fugitive dust control program or amended fugitive dust control program shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(40 CFR 52.21(c) and (d), Act 451 Section 324.5524)**

2. The permittee shall not operate EUMATERIALS unless a malfunction abatement plan (MAP) as described in Rule 911(2), the mixing building baghouse has been submitted within 60 days of permit issuance, and is implemented and maintained. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 60 days after such an event occurs. The permittee shall also amend the MAP within 60 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1301, R 336.1331, R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall install, calibrate, maintain and operate, in a satisfactory manner, a device to continuously monitor the pressure drop across the mixing building baghouse in EUMATERIALS. **(R 336.1301, R 336.1331, R 336.1910)**

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required records and calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205, R 336.1301, R 336.1331, R 336.1910)**

2. The permittee shall monitor and keep records, in a satisfactory manner, of the amount of chemical dust suppressant used in the coal crushing and screening, and coke screening buildings, on a monthly basis. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1301, R 336.1910)**

3. The permittee shall keep, in a satisfactory manner, monthly records of the time and duration of each chemical dust suppressant system malfunction and a description of corrective action taken. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1301, R 336.1910)**

4. The permittee shall perform and document non-certified visible emissions observations as required in Emission Limit SC I.1 and I.2 on a daily basis when EUMATERIALS is operating. If during the observation there are any visible emissions detected from an emission point, a USEPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, USEPA Method 9 observations that are performed, the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. **(R 336.1301, R 336.1910, R 336.1911)**

5. The permittee shall record, in a satisfactory manner, the daily pressure drop across the mixing building baghouse in EUMATERIALS. The permittee shall initiate appropriate maintenance activity on the baghouse if the pressure drop exceeds the normal range as specified by the manufacturer. **(R 336.1301, R 336.1331, R 336.1910, R 336.1911)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

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

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVCOAL - BH	20	48	40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENTS

1. The permittee shall comply with the requirements specified in the fugitive dust plan per SIP Consent Order No. 27-1993. **(SIP Consent Order No. 27-1993)**

FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGNESHAPL,V,&FF	The provisions of Subpart L apply to coke by-product recovery plants: tar decanters, tar storage tanks, tar-intercepting sumps, flushing-liquor circulation tanks, light-oil sumps, light-oil condensers, light-oil decanters, wash-oil decanters, wash-oil circulation tanks, final coolers, final-cooler cooling towers, and the following equipment that are intended to operate in benzene service: pumps, valves, exhausters, pressure relief devices, sampling connection systems, open-ended valves or lines, flanges or other connectors, and control devices or systems. The provisions of Subpart V apply to each of the following sources that are intended to operate in volatile hazardous air pollutant (VHAP) service: pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, and control devices. The provisions of Subpart FF apply to coke by-product recovery plants because the waste stream is benzene-containing.	EUCOKE-BYPRODUCT
FGMACTL	The provisions of Subpart L apply to existing by-product coke oven batteries at a coke plant.	EUCOKE-BATTERY
FGMACTCCCCC	The provisions of Subpart CCCCC apply to pushing, soaking, quenching, and battery stacks at coke oven batteries.	EUCOKE-BATTERY

The following conditions apply to: FGNESHAPL,V,&FF

DESCRIPTION: The provisions of Subpart L apply to coke by-product recovery plants: tar decanters, tar storage tanks, tar-intercepting sumps, flushing-liquor circulation tanks, light-oil sumps, light-oil condensers, light-oil decanters, wash-oil decanters, wash-oil circulation tanks, final coolers, final-cooler cooling towers, and the following equipment that are intended to operate in benzene service: pumps, valves, exhausters, pressure relief devices, sampling connection systems, open-ended valves or lines, flanges or other connectors, and control devices or systems. The provisions of Subpart V apply to each of the following sources that are intended to operate in volatile hazardous air pollutant (VHAP) service: pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, and control devices. The provisions of Subpart FF apply to coke by-product recovery plants because the waste stream is benzene-containing.

Emission Units: EUCOKE-BYPRODUCT

POLLUTION CONTROL EQUIPMENT: Nitrogen gas blanketing system

I. EMISSION LIMITS

NA

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall visually inspect the connections and seals on the gas blanketing system including the ductworks for evidence of visible defects such as gaps or tears by Method 21 on a semi-annual basis, and at any other time after the system is re-pressurized with blanketing gas following removal of the cover or opening of the access latch. **(40 CFR 61, Subpart L, § 61.132(b) and (d))**

2. The permittee shall conduct a maintenance inspection of the control system (gas blanketing system) on an annual basis for system abnormalities. The permittee shall make a first attempt at repair within 5 days, and final repairs within 15 days of leak detection. **(40 CFR 61, Subpart L, § 61.132(c) and (d))**

3. The permittee shall visually inspect the connections and seals on the light oil sump by Method 21 on a semi-annual basis, and at any other time when the cover is removed. The permittee shall make a first attempt at repair within 5 days, and final repairs within 15 days of leak detection. **(40 CFR 61, Subpart L, § 61.133)**

4. No (zero) emissions are allowed from final coolers and final-cooler cooling towers at the coke by-product recovery plant. **(40 CFR 61, Subpart L, § 61.134)**

5. The permittee shall visually inspect each pump in benzene service for indications of liquids dripping from the pump seal on a weekly basis. (Leak indication by Method 21 is a reading greater than or equal to 10,000 ppm or indications of liquid dripping from pump seal.) When a leak is detected, the permittee shall repair the leak within 5 days of detection, or repair any leaks as soon as practicable, but no later than 15 days after detection. **(40 CFR 61, Subpart V, § 61.242-2 (a)(2), (b), and (c))**

6. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by a Method 21 reading of less than 500 ppm above background. Pressure relief devices in gas/vapor service shall be returned to a condition of no detectable emissions as soon as practicable following a pressure release but no later than 5 days after such release. The permittee shall perform Method 21 monitoring on the pressure relief device in gas/vapor service within 5 days of a pressure release to confirm that it is operating with no detectable emissions. **(40 CFR 61, Subpart V, § 61.242-4)**

7. The permittee shall monitor monthly each valve in benzene service to detect leaks by Method 21. If a leak is detected (reading of 10,000 ppm or greater), a first attempt at repair shall be made within 5 days, and final repairs are to be made as soon as practicable but no later than 15 days after the leak is detected. Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months. **(40 CFR 61, Subpart V, § 61.242-7(a) through (e))**

8. The permittee shall check pressure relief devices in liquid service and flanges and other connectors during the monthly Method 21 leak monitoring of valves. If evidence of a potential leak is found by visual, audible, olfactory or other method, Method 21 monitoring shall be performed within 5 days. If such monitoring detects a leak (instrument reading of 10,000 ppm or greater) the permittee shall make a first attempt at repair within 5 days and final repair is made as soon as practicable but not later than 15 days after detection. **(40 CFR 61, Subpart V, § 61.242-8)**

9. The permittee may delay of repair for which leaks have been detected if the repair is technically infeasible without process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. **(40 CFR 61, Subpart V, § 61.242-10)**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall enclose and seal all opening on each process vessel, tar storage tank, and tar-intercepting sump in the coke by-product recovery plant. **(40 CFR 61, Subpart L, § 61.132(a)(1) and (d))**

2. The permittee shall maintain and operate a closed, positive pressure gas blanketing system utilizing nitrogen gas for each process vessel, tar storage tank, and tar-intercepting sump. **(40 CFR 61, Subpart L, § 61.132(a)(2) and (d))**

3. The permittee shall enclose and seal the liquid surface in the light oil sump to form a closed system to contain emissions in accordance with § 61.133. **(40 CFR 61, Subpart L, § 61.133)**

4. The permittee shall equip each sampling connection system with a closed-purge system or closed vent system. **(40 CFR 61, Subpart V, § 61.242-5)**

5. The permittee shall equip each open-ended valve or line with a cap, blind flange, plug, or a second valve such that the open end is sealed at all times except during operations requiring process fluid flow through the valve or line. Second valves shall be operated such that the process fluid valve is closed before the second valve. **(40 CFR 61, Subpart V, § 61.242-6)**

V. TESTING/SAMPLING

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

1. The permittee shall comply with the test methods and procedures requirements set forth in § 61.245. Monitoring shall comply with Method 21 utilizing calibrated instrumentation, and employing the techniques described in § 61.245(b) and (c). **(40 CFR 61, Subpart V, § 61.245(a) through (c))**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall monitor each exhauster quarterly to detect leaks by Method 21. **(40 CFR 61, Subpart L, § 61.135(d))**

2. The permittee shall record and keep in a readily accessible location information pertaining to the design of the control equipment (including schematics, design specifications, and information regarding changes in the design specifications) installed to comply with § 61.132 through § 61.134. **(40 CFR Part 61, Subpart L, § 61.138(a))**

3. The permittee shall record and maintain the following information regarding the semi-annual monitoring of the gas blanketing system:
   a. The date of the inspection and the name of the inspector.
   b. A brief description of each visible defect.
   c. The presence of any leaks including the date of attempted and actual repair and method of repair of the leak.
   d. Brief description of system abnormalities found.
   (40 CFR 61, Subpart L, § 61.138(b))

4. The permittee shall maintain records including information regarding equipment leaks, equipment identification numbers for all equipment in benzene service, a list of difficult to monitor valves, and information regarding any exemptions. Such records shall be maintained in a readily accessible location and be readily available to AQD upon request. **(40 CFR 61, Subpart V, § 61.246(c) through (j))**

5. The permittee shall determine the Total Annual Benzene (TAB) quantity in accordance with 40 CFR 61, Subpart FF, § 61.355(a)(1), (a)(2), (a)(6), (b), and (c). **(40 CFR, 61, Subpart FF, § 61.355(a)(1),(a)(2), (a)(6), (b), and (c))**

6. The permittee shall comply with the recordkeeping requirements of § 61.356 and reporting requirements of § 61.357. The permittee shall repeat the determination of TAB quantity whenever there is a change in the process generating the waste that could cause the TAB to increase to 1 Mg/yr or more. **(40 CFR 61, Subpart FF, § 61.355(a)(5))**

7. The permittee shall maintain in a readily available location for a period not less than 2 years, records regarding benzene waste streams subject to Subpart FF that include the information required by § 61.356(b). **(40 CFR 61, Subpart FF, § 61.356(a) and (b))**

VII. REPORTING

1. The permittee shall submit semi-annual reports containing information regarding source leaks, control system abnormalities, and equipment leaks and other information as specified in § 61.138(f). The permittee shall submit the reports in January and July of each year. **(40 CFR 261, Subpart L, § 61.138(f) and (g))**

2. The permittee shall submit semi-annual reports containing information regarding source leaks, control system abnormalities, and equipment leaks and other information as specified in § 61.242, § 61.245, § 61.246, and § 61.247. The permittee shall submit the reports in January and July of each year. **(40 CFR 61, Subpart V, § 61.247(a) and (c))**

3. The permittee shall submit semi-annual reports containing information including the process unit identification, the number of leaks in pumps and valves for each month of the reporting period, an explanation of any delay of repairs, dates of process unit shutdowns, any changes that have occurred since the initial report, and the results of any performance tests or monitoring to determine compliance with no detectable emissions. The permittee shall submit the reports in January and July of each year. **(40 CFR 61, Subpart V, § 61.247(b))**

4. If the permittee elects to comply with the alternative standards for valves (§ 61.243-1 or 2), the permittee shall notify the AQD District Supervisor 90 days before implementing the alternative standard. **(40 CFR 61, Subpart V, § 61.247(d))**

5. The permittee will review the TAB each year and shall submit an updated TAB report whenever there is a change in the process generating the benzene waste stream that could cause the TAB to increase to 1 Mg/yr or more. **(40 CFR 61, Subpart FF, § 61.357(b))**

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

1. Each piece of equipment in benzene service which is subject to 40 CFR 61, Subpart L shall be marked in such a manner that it can be distinguished readily from other pieces of equipment in benzene service. **(40 CFR 61, Subpart L, § 61.135(c))**

2. Each piece of equipment subject to 40 CFR 61, Subpart V shall be marked in such a manner that it can be distinguished readily from other pieces of equipment. **(40 CFR 61, Subpart V, § 61.242-1(d))**

3. The permittee shall determine what equipment are in benzene service as each piece of equipment within the process unit is presumed to be in benzene service unless the permittee demonstrates that the piece of equipment is not in benzene service. **(40 CFR 61, Subpart V, § 61.245(d))**

4. When leak is detected at any pump, valve, pressure relief device in liquid service, flange and other connector, or exhauster, the permittee shall attach to the leaking equipment a weatherproof and readily visible identification tag with the equipment identification number. Any such identification tag on a valve shall not be removed until the valve has been monitored for 2 successive months and no leak has been detected. Any such identification tag can be removed from any other equipment after the leak has been repaired. **(40 CFR 61, Subpart V, § 61.246(b))**

The following conditions apply to: FGMACTL

DESCRIPTION: The provisions of Subpart L apply to existing by-product coke oven batteries at a coke plant.

Emission Units: EUCOKE-BATTERY

POLLUTION CONTROL EQUIPMENT: Overpressure bleeder flares

I. EMISSION LIMITS

1. The permittee shall not allow to be discharged to the atmosphere coke oven emissions from the coke oven doors that exceed any of the following emission limitations:
   a. 4.0 percent leaking coke oven doors, as determined by the procedures in § 63.309(d)(1). **(40 CFR 63.304(b)(4)(i))**
   b. 0.4 percent leaking topside port lids, as determined by the procedures in § 63.309(d)(1). **(40 CFR 63.304(b)(4)(ii))**
   c. 2.5 percent leaking offtake system(s), as determined by the procedures in § 63.309(d)(1). **(40 CFR 63.304(b)(4)(iii))**
   d. 12 seconds of visible emissions per charge, as determined by the procedures in § 63.309(d)(2). **(40 CFR 63.304(b)(4)(iv))**

2. The permittee shall have no visible emissions from bypass/bleeder flares, as determined by the methods specified in § 63.309(h)(1), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. **(40 CFR 63.307(c))**

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall implement the written emission control work practice plan which addresses all applicable plan components identified in § 63.306(b) as submitted to the EPA. **(40 CFR 63.306(c))**

2. The permittee shall temporarily seal any leak in the collecting main as soon as possible after detection, but no later than 4 hours after detection of leaks. **(40 CFR 63.308(c))**

3. The permittee shall operate the coke oven battery and the required pollution control equipment at all times including periods of startup, shutdown and malfunction, in a manner consistent with good air pollution control practices for minimizing emissions to levels required under CFR 63, Subpart L. **(40 CFR 63.310(a))**

4. The permittee of a coke oven battery shall implement and maintain a written startup, shutdown and malfunction plan that describes procedures for operating the battery in a manner consistent with good air pollution control practices for minimizing emissions and by correcting malfunctions as soon as practicable in accordance with the plan. **(40 CFR 63.310(b) and (c))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall operate and maintain a bypass/bleeder stack flare system complete with electronic igniters installed in accordance with the design requirements as specified in § 63.307(a)(1) and (b). **(40 CFR 63.307)**

V. TESTING/SAMPLING

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

1. A daily performance test shall be conducted each day, 7 days per week by certified Method 303 observer to determine compliance with each applicable visible emission limitation for coke oven doors, topside port lids, offtake systems, bypass/bleeder flares, and charging operations in this permit. Each performance test shall be conducted according to the procedures and requirements of reference Method 303 or 303A or Methods 9 and 22 where applicable. Each performance test is to be conducted by a certified observer. The certified observer shall conduct each performance test according to the requirements of 40 CFR 63, Subpart L. The procedures in § 63.309(d) shall be used to determine compliance with each applicable visible emission limitation for coke oven doors, topside port lids, offtake systems, bypass/bleeder flares, and charging operations in this permit. **(40 CFR 63.309)**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall inspect the collecting main for leaks at least once daily according to the procedures in Method 303 as specified in § 63.308(a). The permittee shall record the time and date a leak is first observed, the time and date the leak is temporarily sealed, and the time and date of repair. **(40 CFR 63.308)**

2. The permittee shall maintain a record of internal reports which form the basis of every malfunction notification under § 63.310(f). **(40 CFR 63.310(f))**

3. The permittee shall maintain files on-site at all time of all required information in a permanent form suitable for inspection at an on-site location for at least 1 year, and thereafter will maintain such files for 5 years from the date of creation at a location so that the files are accessible within 3 working days. Such records include a copy of the work practice plan, records related to the implementation of the work practice plan, design drawings and engineering specifications for the bypass/bleeder stack flare system, and records regarding the basis of each malfunction notification. **(40 CFR 63.311(f))**

4. The permittee shall maintain records required to be maintained and reports required to be filed under 40 CFR 63, Subpart L be made available to the authorized collective bargaining representative of the employees at the coke battery for inspection and copying in accordance with the provisions of § 63.311(g). **(40 CFR 63.311(g))**

VII. REPORTING

1. Within 14 days of the notification made under § 63.310(d), or after a startup, shutdown, or malfunction, the permittee shall submit a written report to the AQD District Supervisor that:
   a. Describes the time and circumstances of the startup, shutdown, or malfunction; and
   b. Describes actions taken that might be considered inconsistent with the startup, shutdown, or malfunction plan.

   (40 CFR 63.310(e))

2. The permittee shall submit semi-annual compliance certifications in accordance with § 63.311(d). **(40 CFR 63.311(d))**

3. The permittee shall report any venting of coke oven gas through a bypass/bleeder stack that was not vented through the bypass/bleeder stack flare system to the USEPA as soon as practicable but no later than 24 hours of the event. The permittee shall submit a follow-up written report within 30 days. **(40 CFR 63.311(e))**

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

1. The permittee shall make available to the surrounding communities the results of any risk assessment performed by the USEPA to determine the appropriate level of any emission standards under section 112(f) of the CAA, within reasonable time after any such risk assessment is published by the USEPA. **(40 CFR 63.304(d))**

The following conditions apply to: FGMACTCCCCC

DESCRIPTION: The provisions of Subpart CCCCC apply to pushing, soaking, quenching, and battery stacks at coke oven batteries.

Emission Units: EUCOKE-BATTERY

POLLUTION CONTROL EQUIPMENT: PECS baghouse, quench tower

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.02 lb/ton of coke pushed	Test protocol shall specify averaging time.	PECS baghouse stack - EUCOKE-BATTERY	SC V.1	40 CFR 63.7290(a)(2)

2. The permittee shall not discharge to the atmosphere any emissions from any battery stack at the coke oven battery that exhibit an opacity greater than the following emission limitations:
   a. Daily average of 15 percent opacity for a battery on a normal coking cycle.
   b. Daily average of 20 percent opacity for a battery on batterywide extended coking.
   (40 CFR 63.7296)

II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Total dissolved solids (TDS) content of quenching water	Less than 1,100 mg/liter	Test protocol shall specify averaging time.	Quench tower - EUCOKE-BATTERY	SC V.3	40 CFR 63.7295(a)(1)(i)

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall comply with the work practice standards for fugitive pushing emissions as specified in § 63.7291(a). **(40 CFR 63.7291(a))**

2. The permittee shall operate at all times according to a written work practice plan for soaking. The plan must include measures and procedures to:
   a. Train topside workers to identify soaking emissions that require corrective actions.
   b. Damper the oven off the collecting main prior to opening the standpipe cap.
   c. Determine the cause of soaking emissions that do not ignite automatically, including emissions that result from raw coke oven gas leaking from the collecting main through the damper, and emissions that result from incomplete coking.
   d. If soaking emissions are caused by leaks from the collecting main, take corrective actions to eliminate the soaking emissions. Corrective actions may include, but are 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.
   e. 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.

f. As provided in § 63.6(g), you may request to use an alternative to the work practice standard. **(40 CFR 63.7294)**

3. The permittee shall comply with the following requirements for each quench tower at a coke oven battery:
   a. Equip each quench tower with baffles such that no more than 5 percent of the cross sectional area of the tower may be uncovered or open to the sky.
   b. Wash the baffles in each quench tower once each day that the tower is used to quench coke, except as specified as follows:
      i. The permittee is not required to wash the baffles in a quench tower if the highest measured ambient temperature remains less than 30°F throughout that day (24-hour period). If the measured ambient temperature rises to 30°F or more during the day, you must resume daily washing according to the schedule in your operation and maintenance plan.
      ii. Continuously record the ambient temperature on days that the baffles were not washed.
   c. Inspect each quench tower monthly for damaged or missing baffles and blockage.
   d. Initiate repair or replacement of damaged or missing baffles within 30 days and complete as soon as practicable.

   (40 CFR 63.7295(b))

4. The permittee shall comply with the general operation and maintenance requirements for the coke oven battery as specified in § 63.7300(b). **(40 CFR 63.7300(b))**

5. The permittee shall maintain 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 the coke oven battery as specified in § 63.7300(c). **(40 CFR 63.7300(c))**

6. The permittee shall implement and maintain a written start-up, shutdown, and malfunction plan as specified in § 63.7310(c). **(40 CFR 63.7310(c))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall install, operate, and maintain a bag leak detection system for each baghouse applied to pushing emissions according to the following requirements:
   a. The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less;
   b. The system must provide output of relative changes in particulate matter loadings;
   c. The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over a preset level. The alarm must be located such that it can be heard by the appropriate plant personnel;
   d. Each system that works based on the triboelectric effect must be installed, operated, and maintained in a manner consistent with the guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015, September 1997). You may install, operate, and maintain other types of bag leak detection systems in a manner consistent with the manufacturer's written specifications and recommendations;
   e. To make the initial adjustment of the system, establish the baseline output by adjusting the sensitivity (range) and the averaging period of the device. Then, establish the alarm set points and the alarm delay time;
   f. Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time, except as detailed in your operation and maintenance plan. Do not increase the sensitivity by more than 100 percent or decrease the sensitivity by more than 50 percent over a 365-day period unless a responsible official certifies, in writing, that the baghouse has been inspected and found to be in good operating condition;
   g. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

   (40 CFR 63.7331(a))

V. TESTING/SAMPLING

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

1. The permittee shall conduct performance tests for emissions of particulate matter from the PECS baghouse no less frequently than twice (at mid-term and renewal) during each term of an ROP. The permittee shall comply with test requirements and follow the methods and procedures as specified:
   a. Determine the concentration of particulate matter according to the following test methods in appendix A to 40 CFR 60.
      i. Method 1 to select sampling port locations and the number of traverse points. Sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere.
      ii. Method 2, 2F, or 2G to determine the volumetric flow rate of the stack gas.
      iii. Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.
      iv. Method 4 to determine the moisture content of the stack gas.
      v. Method 5 or 5D, as applicable, to determine the concentration of front half particulate matter in the stack gas.
   b. During each particulate matter test run, sample only during periods of actual pushing when the capture system fan and control device are engaged. Collect a minimum sample volume of 30 dry standard cubic feet of gas during each test run. Three valid test runs are needed to comprise a performance test. Each run must start at the beginning of a push and finish at the end of a push (*i.e.*, sample for an integral number of pushes).

   (40 CFR 63.7321, 40 CFR 63.7322, 40 CFR 7333(a))

2. The permittee shall determine compliance with the daily average opacity limit for stacks of 15 percent for a coke oven battery on a normal coking cycle or 20 percent for a coke oven battery on batterywide extended coking using the following test methods and procedures:
   a. Using the continuous opacity monitoring system (COMS) required in § 63.7330(e), measure and record the opacity of emissions from each battery stack for a 24-hour period.
   b. Reduce the monitoring data to hourly averages as specified in § 63.8(g)(2).
   c. Compute and record the 24-hour (daily) average of the COMS data.

   (40 CFR 63.7324)

3. The permittee shall sample the TDS content of the quench water using the test methods for coke oven quench towers as specified in § 63.7325. **(40 CFR 63.7325)**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall comply with the continuous compliance monitoring requirements for the PECS baghouse as specified:
   a. For each baghouse applied to pushing emissions, the permittee must install, operate, and maintain each bag leak detection system according to the requirements:
      i. The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less;
      ii. The system must provide output of relative changes in particulate matter loadings;
      iii. The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over a preset level. The alarm must be located such that it can be heard by the appropriate plant personnel;
      iv. Ongoing operation and maintenance procedures in accordance with the general requirements of §§ 63.8(c)(1), (3), (4)(ii), (7), and (8);
      v. Ongoing data quality assurance procedures in accordance with the general requirements of § 63.8(d);
      vi. Ongoing recordkeeping and reporting procedures in accordance the general requirements of §§ 63.10(c), (e)(1), and (e)(2)(i).

b. For each baghouse applied to pushing emissions, the permittee shall conduct inspections as follows:
   i. Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual;
   ii. Confirm that dust is being removed from hoppers through weekly visual inspections or equivalent means of ensuring the proper functioning of removal mechanisms;
   iii. Check the compressed air supply for pulse-jet baghouses each day;
   iv. Monitor cleaning cycles to ensure proper operation using an appropriate methodology;
   v. Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means;
   vi. Make monthly visual checks of bag tension on reverse air baghouses to ensure that bags are not kinked (kneed or bent) or laying on their sides.;
   vi. Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks; and
   vii. Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.

(40 CFR 63.7330, 40 CFR 63.7331)

2. The permittee shall monitor and collect data for combustion stack opacity, PECS baghouse leak detection, and the PECS (fan motor amps, RPM or static pressure) to demonstrate continuous compliance at all times the affected source is operating except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments). The permittee must monitor continuously (or collect data at all required intervals) at all times the affected source is operating.

   The permittee may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels, or in fulfilling a minimum data availability requirement, if applicable. The permittee must use all the data collected during all other periods in assessing compliance. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitor to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

   (40 FR 63.7332)

3. The permittee shall demonstrate continuous compliance for each by-product coke oven battery subject to the opacity limit for stacks in § 63.7296(a) by meeting the following requirements:
   a. 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 battery wide extended coking;
   b. Operating and maintaining a COMS and collecting and reducing the COMS data according to § 63.7331(j).

   (40 CFR 63.7333(e))

4. The permittee shall demonstrate continuous compliance with the TDS limit for quenching in §63.7295(a)(1)(i) by meeting the following requirements:
   a. Maintaining the TDS content of the water used to quench hot coke at 1,100 mg/L or less;
   b. Determining the TDS content of the quench water at least weekly according to the requirements in § 63.7325(a) and recording the sample results.

   (40 CFR 63.7333(f))

5. The permittee shall demonstrate continuous compliance with the work practice standards that apply to the affected source by meeting the following requirements:
   a. For each by-product coke oven battery with vertical flues subject to the work practice standards for fugitive pushing emissions in § 63.7291(a):
      i. Observe and record the opacity of fugitive emissions for four consecutive pushes per operating day, except you may make fewer or non-consecutive observations as permitted by § 63.7291(a)(3). Maintain records of the pushing schedule for each oven and records indicating the legitimate operational reason for any change in the pushing schedule according to § 63.7291(a)(4).

ii. Observe and record the opacity of fugitive emissions from each oven in a battery at least once every 90 days. If an oven cannot be observed during a 90-day period, observe and record the opacity of the first push of that oven following the close of the 90-day period that can be read in accordance with the procedures in this SC.

iii. Make all observations and calculations for opacity observations of fugitive pushing emissions in accordance with Method 9 in appendix A to 40 CFR 60 using a Method 9 certified observer unless you have an approved alternative procedure.

iv. Record pushing opacity observations at 15-second intervals as required in section 2.4 of Method 9 (appendix A to 40 CFR 60). The requirement in Section 2.4 of Method 9 for a minimum of 24 observations does not apply, and the data reduction requirements in section 2.5 of Method 9 do not apply. The requirement in § 63.6(h)(5)(ii)(B) for obtaining at least 3 hours of observations (thirty 6-minute averages) to demonstrate initial compliance does not apply.

v. If fewer than six but at least four 15-second observations can be made, use the average of the total number of observations to calculate average opacity for the push. Missing one or more observations during the push (*e.g.,* as the quench car passes behind a building) does not invalidate the observations before or after the interference for that push. However, a minimum of four 15-second readings must be made for a valid observation.

vi. Begin observations for a push at the first detectable movement of the coke mass. End observations of a push when the quench car enters the quench tower.

1. For a battery without a cokeside shed, observe fugitive pushing emissions from a position at least 10 meters from the quench car that provides an unobstructed view and avoids interferences from the topside of the battery. This may require the observer to be positioned at an angle to the quench car rather than perpendicular to it. Typical interferences to avoid include emissions from open standpipes and charging. Observe the opacity of emissions above the battery top with the sky as the background where possible. Record the oven number of any push not observed because of obstructions or interferences.
2. Reposition after the push to observe emissions during travel if necessary.

vii. For each oven observed that exceeds an opacity of 35 percent for any tall battery, take corrective action and/or increase the coking time in accordance with § 63.7291(a). Maintain records documenting conformance with the requirements in § 63.7291(a).

b. For each by-product coke oven battery subject to the work practice standard for soaking in §63.7294(a), maintain records that document conformance with requirements in § 63.7294(a)(1) through (5).

c. For each coke oven battery subject to the work practice standard for quenching in § 63.7295(b):

i. Maintain baffles in each quench tower such that no more than 5 percent of the cross-sectional area of the tower is uncovered or open to the sky as required in § 63.7295(b)(1);

ii. Maintain records that document conformance with the washing, inspection, and repair requirements in § 63.7295(b)(2), including records of the ambient temperature on any day that the baffles were not washed;

iii. Maintain records of the source of makeup water to document conformance with the requirement for acceptable makeup water in § 63.7295(a)(2).

(40 CFR 63.7334(a), (d) and (e))

6. The permittee shall demonstrate continuous compliance with the operation and maintenance requirements that apply to the affected source as specified:

a. For each by-product coke oven battery, the permittee must demonstrate continuous compliance with the operation and maintenance requirements in § 63.7300(b) by adhering at all times to the plan requirements and recording all information needed to document conformance.

b. 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) by meeting the requirements of paragraphs (b)(1) through (3) of this section:

i. Making monthly inspections of capture systems according to § 63.7300(c)(1) and recording all information needed to document conformance with these requirements;

ii. Performing preventative maintenance for each control device according to § 63.7300(c)(2) and recording all information needed to document conformance with these requirements; and

iii. Initiating and completing corrective action for a bag leak detection system alarm according to § 63.7300(c)(3) and recording all information needed to document conformance with these requirements. This includes records of the times the bag leak detection system alarm sounds, and for each valid alarm, the time corrective action is initiated, the corrective action(s) taken, and the date on which corrective action is completed.

c. To demonstrate continuous compliance with the operation and maintenance requirements for a baghouse applied to pushing emissions from a coke oven battery in § 63.7331(a), the permittee must inspect and maintain each baghouse according to the requirements in § 63.7331(a)(1) through (8) and record all information needed to document conformance with these requirements. If increase or decrease the sensitivity of the bag leak detection system beyond the limits specified in §63.7331(a)(6), include a copy of the required written certification by a responsible official in the next semiannual compliance report.

d. You must maintain a current copy of the operation and maintenance plans required in § 63.7300(b) and (c) onsite and available for inspection upon request. The permittee keep the plans for the life of the affected source or until the affected source is no longer subject.

(40 CFR 63.7335)

7. The permittee must keep the records for the affected source as specified:
   a. A copy of each notification and report submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status submitted, according to the requirements in § 63.10(b)(2)(xiv).
   b. The records in § 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.
   c. Records of performance tests, performance evaluations, and opacity observations as required in § 63.10(b)(2)(viii).
   d. For each COMS or CEMS, keep the following records as specified:
      i. Records described in § 63.10(b)(2)(vi) through (xi).
      ii. Monitoring data for COMS during a performance evaluation as required in § 63.6(h)(7)(i) and (ii).
      iii. Previous (that is, superseded) versions of the performance evaluation plan as required in § 63.8(d)(3).
      iv. Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.
   e. The permittee must keep the records in § 63.6(h)(6) for visual observations.
   f. The permittee must keep the records required in §§ 63.7333 through 63.7335 to show continuous compliance with each emission limitation, work practice standard, and operation and maintenance requirement that applies.

   (40 CFR 63.7342)

VII. REPORTING

1. The permittee shall report each deviation from continuous compliance with emission limitation (including operating limits), work practice standards, and the operation and maintenance requirements that apply to the affected source as specified in § 63.7336. These deviations shall be reported according to the requirements in § 63.7341. **(40 CFR 63.7341)**

2. The permittee must submit all of the notifications that apply to the source as specified in § 63.7336(a) to (e) and § 63.7340(a) to (e). **(40 CFR 63.7334, 40 CFR 63.7340)**

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

1. The permittee shall comply with the general compliance requirements as specified in § 63.7310(a). **(40 CFR 63.7310(a))**

APPENDIX A
Particulate Matter Testing Methods for the Underfire Combustion Stack on EUCOKE-BATTERY

Limit	Method*	Duration / Sample Volume
PM (lb/1000 lb at 50% excess air)	State of MI 5C/EPA Method 5	60 minutes/30 dscf
PM (gr/dscf excluding sulfates)	EPA Method 5 corrected for sulfate – No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing.	60 minutes/30 dscf
PM (pph excluding sulfates)	EPA Method 5 corrected for sulfate – No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing.	60 minutes/30 dscf
PM10 (pph)	EPA Method 201A + 202	120 minutes/60 dscf
PM2.5 (pph)	EPA Method 201A + 202	120 minutes/60 dscf

* Any changes to testing methods must be approved by the AQD District Supervisor.

APPENDIX B
Continuous Opacity Monitoring System (COMS) Requirements

1. The permittee shall implement and maintain an approved Monitoring Plan. The Monitoring Plan shall include drawings or specifications showing proposed locations and descriptions of the required COMS.

2. Within 60 days of completion of testing, the permittee shall submit to the AQD two copies of the final report demonstrating the COMS complies with the requirements of Performance Specification (PS) 1.

3. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.

4. The COMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13, and PS 1 of Appendix B, 40 CFR 60.

5. The permittee shall perform an annual audit of the COMS using the procedures set forth in the USEPA Publication 450/4-92-010, "Performance Audits Procedures for Opacity Monitors", or a procedure acceptable to AQD. Within 30 days after the completion of the audit, the results of the annual audit shall be submitted to the AQD.

6. In accordance with 40 CFR 60.7(c) and (d), the permittee shall submit two copies of an excess emission report (EER) and summary report in an acceptable format to Air Quality Division, within 30 days following the end of each calendar quarter. The Summary Report shall follow the format of Figure 1 in 40 CFR 60.7(d). The EER shall include the following information:
   a. A report of each exceedance. This includes the date, time, magnitude, cause and corrective actions of all occurrences during the reporting period.
   b. A report of all periods of COMS downtime and corrective action.
   c. A report of the total operating time during the reporting period.
   d. If no exceedances or COMS downtime occurred during the reporting period, the permittee shall report that fact.

   All monitoring data is shall be kept on file for a period of at least five years and made available to the AQD upon request.

APPENDIX C
NO_x, SO_2, CO, CO_2/O_2
Continuous Emission Monitoring System and Continuous Emission Rate Monitoring System (CEMS/CERMS) Requirements

1. Within 30 calendar days after permit issuance, the permittee shall submit two copies of a Fuel Flow Monitoring Plan to the AQD for review and approval. The Fuel Flow Monitoring Plan shall include fuel flow metering methodology and data to support a default COG heating value (Btu/scf).

2. The permittee shall implement and maintain an approved Monitoring Plan. The Monitoring Plan shall include drawings or specifications showing proposed locations and descriptions of the required CEMS/CERMS.

3. Within 60 days of completion of testing, the permittee shall submit to the AQD two copies of the final report demonstrating the CEMS/CERMS complies with the requirements of the corresponding Performance Specifications (PS) in the following table:

Pollutant	Applicable PS
NO_x/SO_2	2
CO	4
CO_2/O_2	3
CERMS	6

4. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.

5. The CEMS/CERMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13 and PS 2, 3, 4, and 6 (see No. 2 above) of Appendix B to 40 CFR 60.

6. Each calendar quarter, the permittee shall perform the Quality Assurance Procedures of the CEMS/CERMS set forth in Appendix F of 40 CFR 60. Within 30 days following the end of each calendar quarter, the permittee shall submit the results to the AQD in the format of the data assessment report (Figure 1, Appendix F of 40 CFR 60).

7. In accordance with 40 CFR 60.7(c) and (d), the permittee shall submit two copies of an excess emission report (EER) and summary report in an acceptable format to the AQD, within 30 days following the end of each calendar quarter. The Summary Report shall follow the format of Figure 1 in 40 CFR 60.7(d). The EER shall include the following information:
   a. A report of each exceedance above the limits specified in the emission limits of this permit. This includes the date, time, magnitude, cause and corrective actions of all occurrences during the reporting period.
   b. A report of all periods of CEMS/CERMS downtime and corrective action.
   c. A report of the total operating time during the reporting period.
   d. A report of any periods that the CEMS/CERMS exceeds the instrument range.
   e. If no exceedances or CEMS/CERMS downtime occurred during the reporting period, the permittee shall report that fact.

8. The permittee shall keep all monitoring data on file for a period of at least five years and make them available to the AQD upon request.