September 14, 2020

Wayne Leiker
Calumet Montana Refining, LLC
1900 10th Street NE
Great Falls, MT 59404

RE: Proposed Title V Operating Permit #OP2161-16

Dear Mr. Leiker:

The Department of Environmental Quality has prepared the enclosed Proposed Operating Permit #OP2161-16, for Calumet Montana Refining, LLC, located in Great Falls, Montana. Please review the cover page of the attached permit for information pertaining to the action taking place on Permit #OP2161-16.

If you have any questions, please contact Shawn Juers, the permit writer, at (406) 444-2049 or by email at sjuers@mt.gov.

Sincerely,

Julie A. Merkel
Permitting Services Section Supervisor
Air Quality Bureau
(406) 444-3626

Shawn Juers
Air Quality Engineer
Air Quality Bureau
(406) 444-2049

JM: SJ
Enclosure

cc: Branch Chief, Air Permitting and Monitoring Branch, US EPA Region VIII 8ARD-PM
Carson Coate, US EPA Region VIII, Montana Office

State of Montana
Department of Environmental Quality
Helena, Montana 59620

AIR QUALITY OPERATING PERMIT NUMBER OP2161-16

Application Received: 12/31/2019
Application Deemed Administratively Complete: 12/31/2019
Application Deemed Technically Complete: 12/31/2019
AFS Number: 030-013-0004A

Draft Issue Date: 8/7/2020
Proposed Issue Date: 9/14/2020
End of EPA 45-day Review: 10/29/2020
Date of Decision:
Effective Date:
Expiration Date:

In accordance with the Montana Code Annotated (MCA) Sections 75-2-217 and 218, and the Administrative Rules of Montana (ARM) Title 17, Chapter 8, Subchapter 12, Operating Permit Program, ARM 17.8.1201, *et seq.*,

Calumet Montana Refining, LLC
1900 10th St. NE
Great Falls, MT 59404
NE Quarter of Section 1, Township 20 North, Range 3 East
Cascade County

hereinafter, referred to as "Calumet", is authorized to operate a stationary source of air contaminants consisting of the emission units described in this permit. Until this permit expires or is modified or revoked, Calumet is allowed to discharge air pollutants in accordance with the conditions of this permit. All conditions in this permit are federally and state enforceable unless otherwise specified. Requirements which are state only enforceable are identified as such in the permit. A copy of this permit must be kept on site at the above-named facility.

Permit Issuance and Appeal Process: In accordance with ARM 17.8.1232, the Department of Environmental Quality (Department) provided a 30-day public comment period from August 7, 2020 to September 7, 2020, on the draft permit. Any comments received by the Department regarding this permit have been summarized in the attached technical review document. This proposed permit will be sent to the United States Environmental Protection Agency (EPA). The EPA is allowed a 45-day review period on the proposed permit. After the EPA comment period has expired, the Department intends to issue a decision on the permit. In accordance with Section 75-2-218, MCA, the Department decision regarding issuance of an operating permit is not effective until 30 days have elapsed from the date of the decision. The decision may be appealed to the Board of Environmental Review (Board) by filing a request for a hearing within 30 days after the date of decision. The filing of a request for hearing does not stay the Department's decision, unless the Board orders a stay upon receipt of a petition and a finding that a stay is appropriate under Section

75-2-218(6)(b), MCA. If no stay is ordered, the Department's decision on the application is final 30 days after the decision is made. For more information please contact the Department at (406) 444-3490.

Montana Air Quality Operating Permit
Department of Environmental Quality

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Terms not otherwise defined in this permit, or in the Definitions and Abbreviations Appendix of this permit, have the meaning assigned to them in the referenced regulations.

SECTION I. GENERAL INFORMATION

The following general information is provided pursuant to ARM 17.8.1210(1).

Company Name: Calumet Montana Refining, LLC (Calumet)

Mailing Address: 1900 10th Street Northeast

City: Great Falls State: MT Zip: 59404

Plant Location: NE¼, Section 1, Township 20 North, Range 3 East, Cascade County

Responsible Official: Mr. Wayne Leiker, V.P. Refining Operations

Facility Contact Person: Joseph Dauner, Environmental Manager

Primary SIC Code: 2911

Nature of Business: Petroleum Refinery

Description of Process: Petroleum refining in Great Falls, Montana. Unit operations include:

- **Crude Distillation** - #1 and #2 Crude Units with atmospheric and vacuum distillation – separating crude oil into component parts (heavier and lighter fractions)
- **Fluidized Catalytic Cracking Unit (FCCU)** – breaking larger chains into smaller chains
- **Catalytic Reformer Unit** – convert lower octane components to high octane reformates
- **Catalytic Poly Unit** – increase lighter, smaller chains into heavier, larger chains
- **Alkylation Unit**– increase lighter, smaller chains into heavier, larger chains
- **Isomerization Unit** – convert linear molecules into higher-octane branched molecules
- **Hydrogen Plants** #1, #2, and #3 – create hydrogen for use in the plant i.e. – hydrotreating and hydrocracking
- **Polymer-Modified Asphalt (PMA) Unit** – heavy asphalt handling including heated tanks
- **Mild Hydrocracker Unit –** rearranging and breaking hydrocarbons, adding hydrogen
- **Hydrotreater Unit** – reducing sulfur and nitrogen content
- **Product Loading –** loading of finished product into cargo tanks
- **Cooling Towers –** cools water used in heat exchangers throughout the process
- **Wastewater Collection and Treatment** – individual drain systems and treatment
- **Boilers –** provides heat via steam for use throughout the process
- **Storage Tanks** - crude oil, intermediates, additives, and products
- **Internal Combustion Engines –** air compression, water pumping, firewater, etc.
- **Flares and Fuel Gas Scrubber Unit –** flares are a control device for hundreds of emissions points throughout the process, and is an important safety device during maintenance, malfunctions and non-steady state conditions such as startup and shutdown. Gas from the process is treated in the fuel gas scrubber unit to reduce sulfur content to minimize SO_2 emissions created during combustion.

SECTION II. SUMMARY OF EMISSION UNITS

The emission units regulated by this permit are the following (ARM 17.8.1211):

Title V Section	Description	Pollution Control Device/Practice
#1 Crude Unit		
Section III.C: EU02 – #1 CRUDE UNIT	#1 Crude Atmospheric Heater, H-0101, 30 MMBtu/hr	CD - NSPS J, MACT DDDDD, Burner Management System, NO_X and CO Umbrella Limits
	#1 Crude Vacuum Heater, H-0102, 7 MMBtu/hr	CD - NSPS J, MACT DDDDD, Burner Management System, NO_X and CO Umbrella Limits
	Equipment Components	CD – LDAR, NSPS GGG, MACT CC
	Individual Drain System	NSPS QQQ, MACT CC, NESHAP FF
#2 Crude Unit		
Section III.D: EU03 – #2 CRUDE UNIT	#2 Crude Atmospheric Heater, H-2101, 71 MMBtu/hr	NSPS Ja, MACT DDDDD, Burner Management System, ULNB, NO_X and CO Umbrella Limits
	#2 Crude Vacuum Heater, H-2102, 27 MMBtu/hr	NSPS Ja, MACT DDDDD, Burner Management System, ULNB, NO_X and CO Umbrella Limits
	Equipment Components	CD, NSPS GGGa, MACT CC
	Individual Drain System	NSPS QQQ, MACT CC, NESHAP FF
Catalytic Polymerization Unit		
Section III.E: EU04– Catalytic Polymerization Unit	Equipment Components	MACT CC
	Individual Drain System	NSPS QQQ, MACT CC, NESHAP FF
FCCU		
Section III.F: EU05 – FLUID CATALYTIC CRACKING UNIT (FCCU)	Catalyst Regenerator	MACT UUU, NSPS J via CD,
	FCCU Preheater, H-0302, 8.9 MMBtu/hr	MACT DDDDD, CD NSPS J
	Equipment Components	CD, NSPS GGG, MACT CC
	Individual Drain System	NSPS QQQ, MACT CC, NESHAP FF
Catalytic Reformer and Naphtha Units		
Section III.G: EU06 – CATALYTIC REFORMER	Reformer Heater, H-0403, 7.5 MMBtu/hr	CD, NSPS J, MACT DDDDD
	Process Vents	MACT CC, MACT UUU
	Equipment Components	MACT CC

Title V Section	Description	Pollution Control Device/Practice
UNIT and NAPHTHA HYDROTREATING UNIT	Individual Drain System	NSPS QQQ, MACT CC, NESHAP FF
	Naphtha Heater, H-0402a, 6.4 MMBtu/hr	NSPS Ja, MACT DDDDD
	Naphtha Splitter Reboiler, H-0405, 6.8 MMBtu/hr	NSPS Ja, MACT DDDDD
	Process Vents	MACT CC
	Equipment Components	NSPS GGGa, MACT CC
Alkylation Unit		
Section III.H: EU07 – ALKYLATION UNIT	Deisobutanizer Reboiler, 28 MMBtu/hr	CD, NSPS J, MACT DDDDD
	Equipment Components	MACT CC
	Individual Drain System	NSPS QQQ, MACT CC, NESHAP FF
	Pressure Vessels in HF Service	Flare System
Isomerization Unit		
Section III.I: EU08 – ISOMERIZATION UNIT	Equipment Components	MACT CC
	Individual Drain System	NSPS QQQ, MACT CC, NESHAP FF
Hydrogen Plants		
Section III.J: EU09 – HYDROGEN PLANTS		
H_2 Plant #1		
	#1 H_2 Plant Furnace – H-1801, 23.8 MMBtu/hr	CD, NSPS J, MACT DDDDD
	#1 H_2 Plant Components	CD, NSPS GGG
	#1 H_2 Plant Individual Drain System	NSPS QQQ, MACT CC, NESHAP FF
H_2 Plant #2		
	#2 H_2 Plant Furnace – H-2815, 65.2 MMBtu/hr	CD, NSPS Ja, MACT DDDDD, ULNB
	#2 H_2 Plant Components	CD, NSPS GGGa
	#2 H_2 Plant Individual Drain System	NSPS QQQ, MACT CC, NESHAP FF
H_2 Plant #3		
	#3 H_2 Plant Furnace A and B (combined stack) – H31A&B, 67 MMBtu/hr each	CD, NSPS Ja, MACT DDDDD, ULNB, Umbrella Limits
	#3 H_2 Plant Components	CD, NSPS GGGa
	#3 H_2 Plant Individual Drain System	NSPS QQQ, MACT CC, NESHAP FF
Polymer-Modified Asphalt Unit		
Section III.K: **EU10 –** POLYMER-MODIFIED ASPHALT UNIT		
	Tank 50	NSPS UU, MACT CC
	Tank 55 - Asphalt	MACT CC
	Tank 55 Heater – 6 MMBtu/hr	CD, NSPS J, MACT DDDDD
	Tank 56 – Asphalt	MACT CC
	Tank 56 Heater – 9 MMBtu/hr	CD, NSPS J, MACT DDDDD
	Tank 69 - Asphalt	MACT CC
	Tank 102 – Asphalt / NaHS	NSPS UU; MACT CC
	Tank 110 – Asphalt	MACT CC

Title V Section	Description	Pollution Control Device/Practice
	Tank 110 Heater – 5 MMBtu/hr	CD, NSPS J, MACT DDDDD
	Tank 112 – Asphalt	MACT CC
	Tank 112 Heater – 5 MMBtu/hr	CD, NSPS J, MACT DDDDD
	Tank 130 – PMA	MACT CC
	Tank 130 Heater – 0.8MMBtu/hr	CD, NSPS J, MACT DDDDD
	Tank 132 – PMA	MACT CC
	Tank 132 Heater – 0.8 MMBtu/hr	NSPS J, MACT DDDDD
	Tank 133 – PMA	MACT CC
	Tank 133 Heater – 0.8 MMBtu/hr	CD, NSPS J, MACT DDDDD
	Tank 135 – Asphalt	MACT CC
	Tank 135 Heater – 6 MMBtu/hr	NSPS J, MACT DDDDD
	Tank 137 – Asphalt	NSPS UU, MACT CC
	Tank 137 Heater – 1.4 MMBtu/hr	NSPS J, NSPS UU, MACT CC
	Tank 138 – Asphalt	NSPS UU; MACT CC
	Tank 138 Heater – 1.4 MMBtu/hr	NSPS Ja, MACT DDDDD
	Tank 139 – Asphalt	NSPS UU; MACT CC
	Tank 139 Heater – 4 MMBtu/hr	NSPS J, MACT DDDDD
	Tank 140 – Asphalt	NSPS UU, MACT CC
	Tank 140 Heater – 4 MMBtu/hr	NSPS J, MACT DDDDD
	Equipment Components	CD, NSPS GGG, MACT CC
	Individual Drain System	MACT CC, NESHAP FF
Mild Hydrocracker Unit		
Section III.L: EU11 – MILD HYDROCRACKER UNIT	MHC Combined Feed Heater, H-4101, 54 MMBtu/hr	CD, NSPS Ja, MACT DDDDD, ULNB, Umbrella Limits
	MHC Fractionator Feed Heater, H-4102, 38 MMBtu/hr	NSPS Ja, MACT DDDDD, ULNB, Umbrella Limits
	Process Vents	MACT CC
	Equipment Components	CD, NSPS GGGa, MACT CC
	Individual Drain System	NSPS QQQ, MACT CC, NESHAP FF
Hydrotreater Unit		
Section III.M: EU12 – HYDROTREATER UNIT	Kerosene Heater	NSPS J, MACT DDDDD
	HTU Heater, H-1701, 20.3 MMBtu/hr	CD, NSPS J, MACT DDDDD
	Process Vents	MACT CC
	Equipment Components	CD, NSPS GGG, MACT CC
	Individual Drain System	NSPS QQQ, MACT CC, NESHAP FF

Title V Section	Description	Pollution Control Device/Practice
Flares and Flare Gas Scrubber Unit		
Section III.N: EU13 – FLARE #1 & #2, Flare Gas Scrubber Equipment Components	Primary Flare #1 – Air Assisted	NSPS Ja, MACT CC, Air Assisted, H_2S Scrubbing
	Secondary Flare (Flare #2) – Air Assisted	NSPS Ja, MACT CC, Air Assisted
	NaHS Process Vents	MACT CC
	NaHS Equipment Components	CD, MACT GGGa, MACT CC
	Flare Gas Scrubber	CD, NSPS GGGa/VVa, MACT CC
Product Loading		
Section III.O: EU14 –		
Truck Loading Rack		
	Truck Loading Rack – Gasoline	MACT R, MACT CC
	Truck Loading Rack VCU	MACT R, MAQP BACT
	Truck Loading Rack Equipment Components	MACT CC
	Individual Drain System	NSPS QQQ, MACT CC, NESHAP FF
Railcar Loading Rack		
	Railcar Loading Rack – Gasoline	MACT R, MACT CC
	Railcar Loading Rack – Naphtha	MACT EEEE
	Railcar Loading Rack VCU	MACT R, MAQP BACT
	Railcar Loading Rack Equipment Components	MACT CC
	Individual Drain System	NSPS QQQ, MACT CC, NESHAP FF
Cooling Towers		
Section III.P: EU15 –	North Cooling Tower	Mist Eliminator, Total Dissolved Solids Control, MACT CC
	South Cooling Tower	Mist Eliminator, Total Dissolved Solids Control, MACT CC
Wastewater Collection and Treatment		
Section III.Q: EU16:	Individual Drain Systems, Junction Boxes, and Sampling Devices	NSPS QQQ, MACT CC, NESHAP FF
	API Separator, Aeration Tank, DAF Unit, etc	NSPS QQQ, MACT CC, NESHAP FF
	Closed Vent Systems and Control Devices	NSPS QQQ, MACT CC, NESHAP FF
	External Floating Roof, Wastewater Tanks	NSPS QQQ, MACT CC, NESHAP FF
Boilers		
Section III.R: EU17:	Boiler #1, B-0701, stack combined with Boiler #2	CD, NSPS J, MACT DDDDD, NO_X and CO Umbrella Limits
	Boiler #2, B-0702, stack combined with Boiler #1	CD, NSPS J, MACT DDDDD, NO_X and CO Umbrella Limits
	Boiler #3, B-0703, 60.5 MMBtu/hr	CD, NSPS Ja, NSPS Dc, MACT DDDDD, ULNB, Flue Gas

Title V Section	Description	Pollution Control Device/Practice
		Recirculation, NO_X and CO Umbrella Limits
	Individual Drain System	NSPS QQQ
Storage Tanks		
Section III.S: EU18:	Tank 1: 152 bbl, Fixed Roof in Jet Fuel Additive service	MACT EEEE
	Tank 2: 800 bbl Pressure Vessel in Propane service	Intrinsic Design
	Tank 3: 2,000 bbl Pressure Vessel in Isobutane service	Intrinsic Design
	Tank 4: 600 bbl Pressure Vessel in Butane service	Intrinsic Design
	Tank 5: 600 bbl Pressure Vessel in Isobutane service	Intrinsic Design
	Tank 10: 375 bbl Fixed Roof tank in Transmix service	MACT CC
	Tank 14: 1,400 bbl Pressure Vessel in Isobutane service	Intrinsic Design
	Tank 15: 1,400 bbl Pressure Vessel in Butane service	Intrinsic Design
	Tank 29: 20,600 bbl Fixed Roof in Distillate service	MACT CC
	Tank 47: 20,500 bbl Fixed Roof in Kerosene / Jet Fuel service	MACT CC
	Tank 48: 20,500 bbl Fixed Roof in Kerosene / Jet Fuel service	MACT CC
	Tank 49: 20,500 bbl Fixed Roof in Kerosene / Jet Fuel service	MACT CC
	Tank 51: 21,000 bbl Fixed Roof in Treated Gas Oil Service	MACT CC
	Tank 52: 19,000 bbl External Floating Roof in Gasoline service	MACT CC, NSPS Kb
	Tank 54: 18,000 bbl Fixed Roof in Kerosene / Jet Fuel service	MACT CC
	Tank 57: 10,000 bbl Internal Floating Roof in Naphtha service	MACT CC, NSPS Kb
	Tank 58: 9,900 bbl Fixed Roof in Kerosene / Jet Fuel service	MACT CC
	Tank 100: 1,100 bbl Fixed Roof in #5 Fuel Oil service	MACT CC
	Tank 101: 1,100 bbl Fixed Roof in #5 Fuel Oil service	MACT CC
	Tank 116: 44,900 bbl Fixed Roof in Distillate service	MACT CC
	Tank 118: 2,000 bbl Fixed Roof in Asphalt Emulsion service	MACT CC
	Tank 119: 2,000 bbl Fixed Roof in Asphalt Emulsion service	MACT CC
	Tank 120: 2,200 bbl Fixed Roof in Asphalt Emulsion service	MACT CC
	Tank 121: 2,200 bbl Fixed Roof in Asphalt Emulsion service	MACT CC
	Tank 122: 21,900 bbl External Floating Roof in Gasoline service	MACT CC, NSPS Kb
	Tank 123: 21,900 bbl External Floating Roof in Gasoline service	MACT CC, NSPS Kb
	Tank 124: 21,500 bbl External Floating Roof in Naptha service	MACT CC, NSPS Kb
	Tank 125: 38,500 bbl Fixed Roof in Heavy Liquids service	MACT CC
	Tank 126: 29,500 bbl External Floating Roof in Gasoline service	MACT CC, NSPS Kb
	Tank 127: 21,500 bbl External Floating Roof in Gasoline service	MACT CC
	Tank 128: 21,500 bbl Fixed Roof in Heavy Liquids service	MACT CC
	Tank 150: 30,100 bbl Fixed Roof in Raw Kerosene service	MACT CC
	Tank 170: 10,200 bbl Fixed Roof in Distillate service	MACT CC
	Tank 171: 10,200 bbl Fixed Roof in Distillate service	MACT CC
	Tank 175: 400 bbl Fixed Roof in Ethanol service	MACT CC
	Tank 176: 5,000 bbl Internal Floating Roof in Ethanol service	MACT CC, NSPS Kb
	Tank 201: 69,700 bbl External Floating Roof in Crude Oil service	MACT CC, NSPS Kb
	Tank 202: 69,700 bbl External Floating Roof in Crude Oil service	MACT CC, NSPS Kb
	Tank 203: 69,700 bbl External Floating Roof in Crude Oil service	MACT CC, NSPS Kb
	Tank Farm Equipment Components	MACT CC
	Individual Drain System	MACT CC, NSPS QQQ, NESHAP FF
Stationary Internal Combustion Engines		

Title V Section	Description	Pollution Control Device/Practice
<u>Section III.T:</u> EU19– EU19a: GEN1 EU19b: AC1 EU19c: WP1 EU19d: WP2 EU19e: WP3 EU19f: WP4	GEN1: 400 hp diesel fired Emergency Generator	NSPS IIII, MACT ZZZZ
	AC1: 540 hp diesel fired Emergency Air Compressor Engine	NSPS IIII, MACT ZZZZ
	WP1: 165 hp, diesel fired Emergency Storm Water Pump	NSPS IIII, MACT ZZZZ
	WP2: 240 hp, diesel fired Tank 54 Emergency Fire Water Pump	MACT ZZZZ
	WP3: 300 hp, diesel fired Tank 24 Emergency Fire Water Pump	NSPS IIII, MACT ZZZZ
	WP4: 300 hp, diesel fired Tank 146 Emergency Fire Water Pump	NSPS IIII, MACT ZZZZ

SECTION III. PERMIT CONDITIONS

The following requirements and conditions are applicable to the facility or to specific emission units located at the facility (ARM 17.8.1211, 1212, and 1213).

A. Facility-Wide

Conditions	Rule Citation	Rule Description	Pollutant/Parameter	Limit
A.1	ARM 17.8.105	Testing Requirements	Testing Requirements	-------
A.2	ARM 17.8.106	Source Testing Protocol	Testing, Recordkeeping, and Reporting Requirements	-------
A.3	ARM 17.8.304(1)	Visible Air Contaminants	Opacity	40%
A.4	ARM 17.8.304(2)	Visible Air Contaminants	Opacity	20%
A.5	ARM 17.8.304(3)	Visible Air Contaminants	Opacity	60%
A.6	ARM 17.8.308(1)	Particulate Matter, Airborne	Fugitive Opacity	20%
A.7	ARM 17.8.308(2)	Particulate Matter, Airborne	Reasonable Precautions	-------
A.8	ARM 17.8.308(3)	Particulate Matter, Airborne	Reasonable Precaution, Construction	20%
A.9	ARM 17.8.309	Particulate Matter, Fuel Burning Equipment	Particulate Matter	$E = 0.882 * H^{-0.1664}$ or $E = 1.026 * H^{-0.233}$
A.10	ARM 17.8.310	Particulate Matter, Industrial Processes	Particulate Matter	$E = 4.10 * P^{0.67}$ or $E = 55 * P^{0.11} - 40$
A.11	ARM 17.8.322(4)	Sulfur Oxide Emissions, Sulfur in Fuel	Sulfur in Fuel (liquid or solid fuels)	1 lb/MMBtu fired
A.12	ARM 17.8.322(5)	Sulfur Oxide Emissions, Sulfur in Fuel	Sulfur in Fuel (gaseous)	50 gr/100 CF
A.13	ARM 17.8.324(1)	Hydrocarbon Emissions, Petroleum Products	65,000 Gallon Capacity	-------
A.14	ARM 17.8.324(2)	Hydrocarbon Emissions, Petroleum Products	Oil-effluent Water Separator	-------
A.15	ARM 17.8.324(3)	Hydrocarbon Emissions, Petroleum Products	Gasoline Storage Tanks	-------
A.16	40 CFR 63 Subpart CC	MACT CC Fenceline Monitoring	Benzene	-------
A.17	ARM 17.8.341, 40 CFR Part 61	National Emissions Standards for Benzene Waste Operations	Petroleum Refinery Wide – applicable provisions of 40 CFR 61, Subparts J, M, V & FF	-------
A.18	ARM 17.8.342, 40 CFR Part 63	NESHAPs General Provisions	SSM Plans	Submittal
A.19	ARM 17.8.1211(1)(c) and 40 CFR Part 98 (Not a Title V applicable requirement)	Greenhouse Gas Reporting	Reporting	-------
A.20	ARM 17.8.1212	Reporting Requirements	Prompt Deviation Reporting	---------
A.21	ARM 17.8.615	Firefighting Training Permit	Firefighting Requirements	
A.22	40 CFR Part 68	Chemical Accident Prevention	Risk Management Plan	

Conditions	Rule Citation	Rule Description	Pollutant/Parameter	Limit
A.23	40 CFR 63 Subpart GGGGG	National Emission Standards for Hazardous Air Pollutants for Site Remediation	40 CFR 63 Subpart GGGGG	40 CFR 63 Subpart GGGGG
A.24	CIV-01-1422LH (entered 3/5/02)	Consent Decree	Various	As specified
A.25	ARM 17.8.1212	Reporting Requirements	Compliance Monitoring	-------
A.26	ARM 17.8.1207	Reporting Requirements	Annual Certification	-------

Conditions

A.1. Pursuant to ARM 17.8.105, any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct test, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

Compliance demonstration frequencies that list "as required by the Department" refer to ARM 17.8.105. In addition, for such sources, compliance with limits and conditions listing "as required by the Department" as the frequency, is verified annually using emission factors and engineering calculations by the Department's compliance inspectors during the annual emission inventory review; in the case of Method 9 tests, compliance is monitored during the regular inspection by the compliance inspector.

A.2. Pursuant to ARM 17.8.106, all emission source testing, sampling and data collection, recording analysis, and transmittal must be performed, maintained, and reported in accordance with the Montana Source Test Protocol and Procedures Manual (dated July 1994 unless superseded by rulemaking), unless alternate methods are approved by the Department. Calumet shall clearly indicate the underlying rule or condition requiring the testing, the last source test date, the testing schedule required by the rule or condition, and a preliminary proposed test date, in any source test protocol submitted. (ARM 17.8.1212).

A.3. Pursuant to ARM 17.8.304(1), Calumet shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed on or before November 23, 1968, that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit. This rule does not apply to emissions from new stationary sources listed in ARM 17.8.340 for which a visible emission standard has been promulgated.

A.4. Pursuant to ARM 17.8.304(2), Calumet shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit. This rule does not apply to emissions from new stationary sources listed in ARM 17.8.340 for which a visible emission standard has been promulgated.

A.5. Pursuant to ARM 17.8.304(3), during the building of new fires, cleaning of grates, or soot blowing, the provisions of ARM 17.8.304(1) and (2) shall apply, except that a maximum average opacity of 60% is permissible for not more than one 4-minute period in any 60 consecutive minutes. Such a 4-minute period means any 4 consecutive minutes.

A.6. Pursuant to ARM 17.8.308(1), Calumet shall not cause or authorize the production, handling, transportation, or storage of any material unless reasonable precautions to control emissions of particulate matter (PM) are taken. Such emissions of airborne PM from any stationary source shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.

A.7. Pursuant to ARM 17.8.308(2), Calumet shall not cause or authorize the use of any street, road or parking lot without taking reasonable precautions to control emissions of airborne PM, unless otherwise specified by rule or in this permit.

A.8. Pursuant to ARM 17.8.308(3), Calumet shall not operate a construction site or demolition project unless reasonable precautions are taken to control emissions of airborne PM. Such emissions of airborne PM from any stationary source shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.

A.9. Pursuant to ARM 17.8.309, unless otherwise specified by rule or in this permit, Calumet shall not cause or authorize PM, caused by the combustion of fuel, to be discharged from any stack or chimney into the outdoor atmosphere in excess of the maximum allowable emissions of PM for existing fuel-burning equipment and new fuel-burning equipment calculated using the following equations:

For existing fuel-burning equipment (installed before November 23, 1968):
$E = 0.882 * H^{-0.1664}$

For new fuel-burning equipment (installed on or after November 23, 1968):
$E = 1.026 * H^{-0.233}$

Where H is the heat input capacity in million British thermal units (MMBtu) per hour and E is the maximum allowable particulate emissions rate in pounds per MMBtu.

A.10. Pursuant to ARM 17.8.310, unless otherwise specified by rule or in this permit, Calumet shall not cause or authorize PM to be discharged from any operation, process, or activity into the outdoor atmosphere in excess of the maximum hourly allowable emissions of PM calculated using the following equations:

For process weight rates up to 30 tons per hour: $E = 4.10 * P^{0.67}$
For process weight rates in excess of 30 tons per hour: $E = 55.0 * P^{0.11} - 40$

Where E is the rate of emissions in pounds per hour and P is the process weight rate in tons per hour.

A.11. Pursuant to ARM 17.8.322(4), Calumet shall not burn liquid or solid fuels containing sulfur in excess of 1 pound per MMBtu fired, unless otherwise specified by rule or in this permit. This rule shall be interpreted to mean that no person shall burn solid, liquid, or gaseous fuels such that the aggregate sulfur content of all fuels burned within a plant during any day exceeds 1 pound of sulfur per MMBtu fired. The rule shall be interpreted to allow for a daily deviation of 0.1 pound of sulfur per MMBtu fired. The rule shall be interpreted to allow the blending of all fuels burned in a plant during a given time period in determining the aggregate sulfur content for purposes of the rule, and it shall not be construed to require blending or physical mixing of fuels at any given furnace or heater within the plant complex (EPA-approved SIP, September 1979).

A.12. Pursuant to ARM 17.8.322(5), Calumet shall not burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet (gr/100 CF) of gaseous fuel, calculated as hydrogen sulfide at standard conditions, unless otherwise specified by rule or in this permit. This rule shall be interpreted to mean that no person shall burn solid, liquid, or gaseous fuels such that the aggregate sulfur content of all fuels burned within a plant during any day exceeds 1 pound of sulfur per MMBtu fired. The rule shall be interpreted to allow for a daily deviation of 0.1 pound of sulfur per MMBtu fired. The rule shall be interpreted to allow the blending of all fuels burned in a plant during a given time period in determining the aggregate sulfur content for purposes of the rule, and it shall not be construed to require blending or physical mixing of fuels at any given furnace or heater within the plant complex (EPA-approved SIP, September 1979).

A.13. Pursuant to ARM 17.8.324(1), unless otherwise specified by rule or in this permit, Calumet shall not place, store or hold in any stationary tank, reservoir or other container of more than 65,000-gallon capacity any crude oil, gasoline or petroleum distillate having a vapor pressure of 2.5 pounds per square inch absolute or greater under actual storage conditions, unless such tank, reservoir or other container is a pressure tank maintaining working pressure sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere, or is designed and equipped with a vapor loss control device, properly installed, in good working order and in operation.

A.14. Pursuant to ARM 17.8.324(2), unless otherwise specified by rule or in this permit, Calumet shall not use any compartment of any single or multiple-compartment oil-effluent water separator which compartment receives effluent water containing 200 gallons a day or more of any petroleum product from any equipment processing, refining, treating, storing or handling kerosene or other petroleum product of equal or greater volatility than kerosene, unless such compartment is equipped with a vapor loss control device, constructed so as to prevent emission of hydrocarbon vapors to the atmosphere, properly installed, in good working order and in operation.

A.15. Pursuant to ARM 17.8.324(3), Calumet shall not load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device or is a pressure tank as described in ARM 17.8.324(1), or unless otherwise specified by rule or in this permit.

A.16. Pursuant to 40 CFR 63 Subpart CC, Calumet shall comply with the fenceline monitoring provisions of 40 CFR 63 Subpart CC including electronic reporting requirements.

A.17. Pursuant to ARM 17.8.341 and 40 CFR Part 61, Calumet shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements, contained in the National Emission Standards for Hazardous Air Pollutants (NESHAPS) provisions of 40 CFR 61, Subpart J Equipment Leaks (Benzene), Subpart V Equipment Leaks, Subpart FF Benzene Waste Operations and Subpart M Asbestos. If at any time from the Date of Lodging of the Consent Decree Calumet is determined to have a total annual benzene (TAB) equal to or greater than 10 megagrams per year (Mg/yr), Calumet, as applicable, shall comply with the compliance option set forth at 40 CFR 61.342(e).

A.18. Pursuant to ARM 17.8.302 and ARM 17.8.342, and 40 CFR 63.6, the owner or operator must maintain at the affected source a current startup, shutdown, and malfunction plan (if a plan is required by 40 CFR 63.6(e)(3) and the Table for General Provision Applicability of the appropriate subpart), meeting the requirements of 40 CFR 63.6, and must make the plan available upon request. In addition, if the startup, shutdown, and malfunction plan is subsequently revised, the owner or operator must maintain at the affected source each previous (i.e., superseded) version of the startup, shutdown, and malfunction plan, and must make each such previous version available for a period of 5 years after revision of the plan. The owner or operator shall confirm that actions taken during the relevant reporting period during periods of startup, shutdown, and malfunction were consistent with the affected source's startup, shutdown and malfunction plan in the semiannual (or more frequent) startup, shutdown, and malfunction report required in 40 CFR 63.10(d)(5).

A.19. Pursuant to ARM 17.8.1211(1)(c) and 40 CFR Part 98, Calumet shall comply with requirements of 40 CFR Part 98 – Mandatory Greenhouse Gas Reporting, as applicable (ARM 17.8.1211(1)(c), NOT an applicable requirement under Title V).

A.20. Calumet shall promptly report deviations from permit requirements including those attributable to upset conditions, as upset is defined in the permit. To be considered prompt, deviations shall be reported to the Department using the schedule and content as described in Section V.E (unless otherwise specified in an applicable requirement) (ARM 17.8.1212).

A.21. Pursuant to ARM 17.8.615, Calumet shall apply for and comply with a Firefighter Training permit to conduct open burning for fire training purposes for any firefighter training.

A.22. Calumet shall comply with all applicable requirements of 40 CFR Part 68 – Risk Management Plan requirements (ARM 17.8.1211 and 40 CFR 68).

A.23. Calumet shall comply with all applicable requirements of 40 CFR 63 Subpart GGGGG, National Emission Standards for Hazardous Air Pollutants: Site Remediation. (ARM 17.8.342 and 40 CFR 63 Subpart GGGGG).

A.24. Calumet shall comply with the all applicable terms of US EPA Consent Decree CIV-01-1422LH (entered March 5, 2002), and its Amendments, for the life of the Consent Decree, including the following (ARM 17.8.1211):

a. Section V: Affirmative Relief/Environmental Projects
b. Section VI: Emission Credit Generation
c. Section VII: Modification to Implementation Schedules
d. Section IX: Reporting and Recordkeeping
e. Section XIII: Right of Entry
f. Section XIV: Force Majeure

g. Section XVII: General Provisions
h. Section XVIII: Termination

A.25. On or before February 15 and August 15 of each year, Calumet shall submit to the Department the compliance monitoring reports required by Section V.D, as described under ARM 17.8.1212. These reports must contain all information required by Section V.D, as well as the information required by each individual emissions unit. For units equipped with CEMS, excess emissions and monitoring downtime percentages reported on a semiannual basis shall be calculated on a quarterly basis. For the reports due by February 15 of each year, Calumet may submit a single report covering both semiannual reporting needs and annual certification needs, provided that it contains all monitoring information reporting required by each emitting unit and the information required by both Section V.B & V.D. Per ARM 17.8.1207,

> *any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12 (including semiannual monitoring reports), shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that,* ***"based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete."***

A.26. By February 15 of each year, Calumet shall submit to the Department the compliance certification report required by Section V.B. The annual certification report required by Section V.B must include a statement of compliance based on the information available, which identifies any observed, documented or otherwise known instance of noncompliance for each applicable requirement. Per ARM 17.8.1207,

> *any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12 (including annual certifications), shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that,* ***"based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete."***

B. EU01 – PLANT-WIDE LIMITATIONS

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
B.1, B.8, B.16, B.18, B.22, B.23, B.28, B.29	Plantwide SO_2 Emissions	1,515 TPY and 4.15 ton/rolling 24-hours	RFG H_2S monitoring systems, data from the FCCU, the Boilers SO_2 CEMS, and stack testing data	Ongoing	Quarterly
B.2, B.9, B.16, B.18, B.22, B.24, B.28, B.29	Plantwide CO Emissions	4,700 TPY and 12.9 tons/rolling 24-hours	FCCU CO CEMS and stack testing data, including stack tests of the boilers, product loading VCUs	Ongoing	Quarterly
B.3, B.10, B.19, B.28, B.29	SO_2	No Fuel Oil Combustion	Recordkeeping	Ongoing	Semiannual
B.4, B.11, B.18, B.20, B.22, B.28, B.29	NO_X	NO_X Reduction Technologies	Recordkeeping	Ongoing	Semiannual
B.5, B.12, B.13, B.16, B.17, B.26, B.28, B.29	NO_X	Umbrella Limit: 103.02 TPY	Outlined in each applicable section	Ongoing	Quarterly
B.6, B.14, B.16, B.17, B.26, B.28, B.29	CO	Umbrella Limit: 55.08 TPY	Outlined in each applicable section	Ongoing	Quarterly
B.7, B.15, B.16, B.21, B.27, B.28, B.29	Ambient SO_2 Monitoring	n/a	Appendix E	Ongoing	Quarterly

Conditions

B.1. Calumet shall be limited to maximum plantwide SO_2 emissions of 1,515 TPY and 4.15 tons/rolling 24-hours (ARM 17.8.749).

B.2. Calumet shall be limited to maximum plantwide CO emissions of 4,700 TPY and 12.9 tons/rolling 24-hours (ARM 17.8.749).

B.3. Calumet shall not combust fuel oil in any combustion unit (except torch oil may be used in the FCCU Regenerator during FCCU startups as noted in Condition III.F.12) (ARM 17.8.1211 and Consent Decree Section V.17.C.ii).

B.4. Any heater or boiler with a heat input capacity of 40 MMBtu/hr or greater shall have installed and operated Next Generation Ultra Low NO_X Burners on any such heater or boiler. Calumet shall comply with the remaining provisions of Paragraph 16.C – 16.E of this section of the consent decree for any such heater (ARM 17.8.1211, Consent Decree Section V.16.C.iii).

B.5. NO_X emissions from the following units, combined, shall not exceed 103.02 tons per year as determined monthly on a rolling 12-month basis, for purposes of PSD avoidance for NO_X associated with the expansion project as permitted in MAQP #2161-30. With exception of any unit equipped with NO_X CEMS verified via RATA, NO_X emissions shall be determined utilizing emissions factors determined via monthly portable analyzer results for 12 months, after which, emissions factors shall be determined based on source tests. Fuel flow shall be monitored continuously, and heat content of fuel gas determined no less than weekly. The monthly and rolling 12-month sums for the previous month shall be determined and recorded by no later than the 25th of each month. This limit is effective beginning with the first full month following the start of portable analyzer testing. Portable analyzer testing shall begin within 90 days after finalization of MAQP #2161-30 or upon startup of any affected unit, whichever is later (ARM 17.8.749).

- Boiler #1
- Boiler #2
- Crude Unit #1 Atmospheric Heater
- Crude Unit #1 Vacuum Heater
- Boiler #3
- Crude Unit #2 Atmospheric Heater H-2101
- Crude Unit #2 Vacuum Heater H-2102
- Combined Feed Heater H-4101
- MHC Reactor Fractionation Feed Heater H-4102
- #3 Hydrogen Plant Reformer A
- #3 Hydrogen Plant Reformer B

B.6. CO emissions from the following units, combined, shall not exceed 55.08 tons per year as determined monthly on a rolling 12-month basis, for purposes of PSD avoidance for CO associated with the expansion project as permitted in MAQP #2161-30. With exception of any unit equipped with CO CEMS verified via RATA, CO emissions shall be determined utilizing emissions factors determined via monthly portable analyzer results for 12 months, after which, emissions factors shall be determined based on annual source tests. Fuel flow shall be monitored continuously, and heat content of fuel gas determined no less than weekly. The monthly and rolling 12-month sums for the previous month shall be determined and recorded by no later than the 25th of each month. This limit is effective beginning with the first full month following the start of portable analyzer testing. Portable analyzer testing shall begin within 90 days after finalization of MAQP #2161-30 or upon startup of an affected unit, whichever is later (ARM 17.8.749).

- Boiler #1

- Boiler #2
- Crude Unit #1 Atmospheric Heater
- Crude Unit #1 Vacuum Heater
- Boiler #3
- Crude Unit #2 Atmospheric Heater H-2101
- Crude Unit #2 Vacuum Heater H-2102
- Combined Feed Heater H-4101
- MHC Reactor Fractionation Feed Heater H-4102
- #3 Hydrogen Plant Reformer A
- #3 Hydrogen Plant Reformer B

B.7. Calumet shall conduct ambient air monitoring as described in Appendix E of this permit (ARM 17.8.749).

Compliance Demonstration

B.8. Compliance with the plant-wide SO_2 emission limitations contained in Section III.B.1 shall be monitored using data taken from the RFG H_2S monitoring systems required by 40 CFR 60 Subpart J and Ja, in conjunction with metered RFG usage (including SWSOH, if appropriate), data from the FCCU, the Boilers SO_2 CEMS, and stack testing data (ARM 17.8.749 and ARM 17.8.1213).

B.9. Compliance with the plant-wide CO emission limitations contained in Section III.B.2 shall be monitored based on data from available CEMS including the FCCU CO CEMS and emission factors developed from stack tests, including stack tests of the boilers, product loading VCUs, and any other stack tests conducted (ARM 17.8.1213).

B.10. Calumet shall maintain records of monthly amounts of fuel oil burned by process unit. A sentence stating no fuel oil was burned throughout the refinery, with exception of that noted, will suffice (ARM 17.8.1213).

B.11. For heaters and boilers with a heat input capacity of equal to or less than 100 mmBtu/hr on a higher heating value basis, Calumet shall, by no later than 60 days after the date of installation of the applicable NO_X Control Technology, conduct an initial performance test and develop representative operating parameters for each unit, which will be used as indicators of compliance. (ARM 17.8.1213, Consent Decree section V.16.C.iii). The Department will consider NO_X CEMS operated in accord with the requirements of 40 CFR 60 Subpart A and Ja as fulfilling these requirements, for any unit so equipped (ARM 17.8.1213).

B.12. Units Subject to the NO_X Umbrella Limitation of Section III.B.5:

a. Each unit subject to the NO_X umbrella limitation and not equipped with validated (RATA conducted) CEMS meeting 40 CFR 60 Subpart A and Ja requirements, shall have annual Method 7E source tests (or testing as approved by the Department), with the first source test to be conducted no later than 12 months after finalization of MAQP #2161-30. All testing shall be conducted concurrently with CO testing. Units equipped with NO_X CEMS shall conduct a RATA as required. Emissions factors in units of lb/MMBtu shall be determined from the most recent emissions testing (portable

analyzer test, source test, or performance test (i.e. RATA testing), as applicable (ARM 17.8.749).

b. For any refinery fuel gas fired units subject to the NO_X umbrella limit in which a NO_X CEMS verified via a RATA is not in place, Calumet shall, at least once every calendar month, conduct concurrent NO_X and CO monitoring utilizing a portable analyzer and submit the results in a format as provided by Attachment 2 on a quarterly basis (within 45 days of the end of each calendar quarter). Such monitoring must begin no later than 90 days after finalization of MAQP #2161-30, and shall be conducted for no less than 12 consecutive months following finalization of MAQP #2161-30. Any subsequent source test indicating noncompliance with any NO_X or CO limit shall reinstate this requirement, until no less than 4 quarters of compliance is again achieved. Emissions factors in units of lb/MMBtu shall be determined from the most recent emissions testing (portable analyzer test, source test or performance test, as applicable) (ARM 17.8.749).

c. Portable analyzer testing shall not be required in any month in which source testing or performance testing is performed (ARM 17.8.749).

d. Upon demonstrating 12 months of compliance with the umbrella limit, Calumet shall monitor emissions as prescribed for each emitting unit in each respective section of this Title V. For any unit not equipped with NO_X CEMS at the time Title V Permit #OP2161-14 goes final, an emissions factor based on the average of all emissions factors used to date shall be used until the next source test or CEMS data is available (ARM 17.8.1213).

B.13. Crude Heater #2 H-2101, Mild Hydrocracker Heater H-4101, and #3 Hydrogen Plant Reformer Heaters H-3815A and H3815B shall be equipped with NO_X CEMS in compliance with 40 CFR 60 Subpart A and Ja by no later than June 30, 2018 (ARM 17.8.749).

B.14. Units Subject to CO Umbrella Limitation of Section II.B.6:

a. For all units subject to the CO Umbrella Limitation of Section II.B.6 in which a validated CO CEMS is not utilized, Calumet shall test for CO currently with testing for NO_X (ARM 17.8.749). For any units equipped with NO_X CEMS but no CO CEMS, CO testing concurrent with NO_X RATA Testing is acceptable. Units equipped with CO CEMS shall conduct a RATA as required, and determine lb/MMBtu emissions factors during the RATA testing (ARM 17.8.749).

b. For any refinery fuel gas fired units subject to the CO umbrella limit in which a CO CEMS verified via a RATA is not utilized, Calumet shall, at least once every calendar month, conduct concurrent NO_X and CO monitoring utilizing a portable analyzer and submit the results in a format as provided by Attachment 2 on a quarterly basis (within 45 days of the end of each calendar quarter). Such monitoring must begin no later than 90 days after finalization of MAQP #2161-30, and shall be conducted for no less than 12 consecutive months following finalization of MAQP #2161-30. Any subsequent source test indicating noncompliance with any NO_X or CO limit shall reinstate this requirement, until no less than 4 quarters of compliance is again achieved (ARM 17.8.749).

c. Upon 12 months of demonstrating compliance with the umbrella limit, Calumet shall monitor emissions as prescribed for each emitting unit in each respective section of this Title V. For any unit not equipped with CO CEMS at the time of Title V Permit #OP2161-14 goes final, an emissions factor based on the average of all previously determined emissions factors shall be used until the next source test and/or CEMS data is available (ARM 17.8.1213).

B.15. Calumet shall submit quarterly reports of ambient monitoring data in accord with Appendix E (ARM 17.8.1213).

Recordkeeping

B.16. Calumet shall maintain, under Calumet's control, all records required for compliance monitoring as a permanent business record for at least 5 years. Furthermore, the records must be available at the plant site for inspection by the Department and EPA, and must be submitted to the Department upon request (ARM 17.8.1212).

B.17. By the 25th day of each month, Calumet shall calculate and record the monthly and rolling 12-month sum of NO_X and CO emissions from each unit subject to the umbrella limitations for the previous month. Calumet shall also calculate and record, by the 25th of each month, the total monthly and rolling 12-month sum of emissions for the units combined for the previous 12 months (ARM 17.8.749 and ARM 17.8.1212).

B.18. All source test recordkeeping shall be performed in accordance with the test methods being used and Section III.A.2 (ARM 17.8.106).

B.19. Calumet shall maintain records of fuel oil usage by amount and unit. A sentence stating no fuel oil was burned throughout the refinery, with exception of as any noted, will suffice (ARM 17.8.1212).

B.20. Calumet shall maintain records of all Heaters and Boilers on which Next Generation Ultra Low NO_X Control Technology as required by the Consent Decree was installed, and shall include the following (ARM 17.8.1212 and Consent Decree Section V.16.F):

a. Type of NO_X Control Technology installed with detailed description of manufacturer name and model and designed emission factors;

b. A summary table of test dates, report dates, and results of all performance test conducted on each such heater and boiler;

c. A list of all heaters and boilers scheduled to have NO_X control Technology installed during the next calendar year, the projected date of installation, and type of NO_X Control Technology that will be installed on those units;

d. An identification of proposed and established permit limits applicable to each heater or boiler for which NO_X control technology has been installed.

B.21. Calumet shall keep Ambient Monitoring records in accordance with the requirements of Appendix E of this permit and 40 CFR 60 Appendix F (ARM 17.8.1212).

Reporting

B.22. Any compliance source test reports must be submitted in accordance with Section III.A.2 (ARM 17.8.106 and ARM 17.8.1212).

B.23. Calumet shall provide quarterly reports of plantwide SO_2 actual emissions compared to the emissions limitation of Section III.B.1, using the data collected as required above, that will monitor compliance with the plant-wide emission limits. The quarterly reports shall include the following (ARM 17.8.1212 and ARM 17.8.749):

a. Facility-wide SO_2 emission estimates for each month of the quarter, including:

i. Refinery fuel gas: daily H_2S monitoring data and refinery fuel gas usage;

ii. SWSOH: daily H_2S and SWSOH combustion amount in each unit;

iii. SO_2 monitoring data from the #1, #2, and #3 boiler stacks;

iv. SO_2 CEMS Data from FCCU, and the #1, #2, and #3 Boilers, converted to daily mass emissions;

b. Compliance source test data used to update emission factors, conducted during the reporting period;

c. Identification of any periods of excess emissions or other excursions during the reporting period;

d. Monitoring downtime that occurred during the reporting period;

e. A summary of flaring events; and

f. A summary of the quarterly Cylinder Gas Audit (CGA) and any daily calibration drift findings.

B.24. Calumet shall provide semiannual reports of plantwide CO actual emissions compared to the emissions limitation of Section III.B.2 (ARM 17.8.1212, ARM 17.8.1213).

B.25. In accordance to the Consent Decree Paragraph IX, Calumet shall, within 30 days after the end of each calendar quarter until termination of the Consent Decree, provide a progress report to contain the implementation of the requirements of Section V, a summary of the emissions data as required by Section V, a description of any problems anticipated with respect to meeting the requirements of Section V, a description of all environmentally beneficial project and implementation activity in accordance with Paragraphs 29-33, and any additional items as necessary (ARM 17.8.1211 and Consent Decree Paragraph IX).

B.26. Calumet shall report monthly and rolling 12-month sums for each unit under the NO_X and CO Umbrella limitations on a quarterly basis. The report shall include the emissions factor and/or measurement methodology used and monthly and rolling 12-month sums for each unit, and as a sum of all units (ARM 17.8.1213, and ARM 17.8.749 and ARM 17.8.1212).

B.27. Calumet shall submit quarterly reports of ambient monitoring data in accord with Appendix E (ARM 17.8.1212).

B.28. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1213).

B.29. The semiannual monitoring report shall clearly identify all deviations from permit requirements and shall provide (ARM 17.8.1212(3)):

a. The fuel oil consumption records required by Section III.B.19.
b. Reference to the dates quarterly reports required by this section were submitted.
c. The NO_X reduction technology records required by Section III.B.20, if any updates to those records were made during the semi-annual reporting period; otherwise, reference to the date these records were last submitted.

C. EU02 – #1 CRUDE UNIT

EU02a – #1 Crude Atmospheric Heater, H-0101
EU02b – #1 Crude Vacuum Heater, H-0102
EU02c – Equipment Components
EU02d – Individual Drain System

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
C.1, C.9, C.17, C.33, C.34	H-0101 Stack Height	150 ft above ground level	Recordkeeping	Ongoing	Semiannually
C.2, C.10, C.18, C.26, C.34	NO_X and CO	Section III.B	Section III.B	Section III.B	Section III.B
C.3, C.11, A.24, C.19, C.27, C.33, C.34	NSPS J – H_2S in fuel gas (SO_2)	0.10 gr/dscf, or alternatively pursuant to 40 CFR 60.100(e), NSPS Ja	Fuel Gas H_2S content CMS in compliance with 40 CFR 60 Subpart J or alternatively, Ja	Continuous	Quarterly and NSPS J
C.4, C.12, C.20, C.28, C.33, C.34	MACT DDDDD: HAPs (CO as surrogate)	40 CFR 63 Subpart DDDDD: Work Practice Standards: Periodic Tune-ups	40 CFR 63 Subpart DDDDD	40 CFR 63 Subpart DDDDD	Semiannually and 40 CFR 63 Subpart DDDDD
C.5, C.13, C.21, C.29, C.33, C.34	MACT CC: HAPs from equipment leaks	40 CFR 63 Subpart CC and 40 CFR 60 Subpart VV	40 CFR 63 Subpart CC and 40 CFR 60 Subpart VV	40 CFR 63 Subpart CC and 40 CFR 60 Subpart VV	Semiannually and 40 CFR 63 Subpart CC
C.5, C.13, C.21, C.29, C.33, C.34	MACT CC: HAPs from miscellaneous process vents	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	Semiannually and 40 CFR 63 Subpart CC

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Frequency	Reporting Requirements
C.6, C.14, C.22, C.30, C.33, C.34	NSPS GGG: VOC from equipment leaks	40 CFR 60 Subpart GGG and 40 CFR 60 Subpart VV	40 CFR 60 Subpart GGG and 40 CFR 60 Subpart VV	40 CFR 60 Subpart GGG and 40 CFR 60 Subpart VV	Semiannually and 40 CFR 60 Subpart GGG
C.7, C.15, C.23, C.31, C.33, C.34	NSPS QQQ: VOC from wastewater system	40 CFR 60 Subpart QQQ	40 CFR 60 Subpart QQQ	40 CFR 60 Subpart QQQ	Semiannually and 40 CFR 60 Subpart QQQ
C.8, C.16, C.24, C.32, C.33, C.34	NESHAP FF: Benzene from wastewater system	40 CFR 61 Subpart FF	40 CFR 61 Subpart FF	40 CFR 61 Subpart FF	Semiannually and 40 CFR 61 Subpart FF

Conditions

C.1. The #1 crude heater H-0101 stack height shall be at least 150-feet above ground level (ARM 17.8.749).

C.2. Calumet shall comply with the NO_X and CO Umbrella Limitations of Section III.B.5 and III.B.6. The #1 Crude Atmospheric Heater H-0101 and #1 Crude Vacuum Heater H-0102 are affected units under the NO_X and CO Umbrella Limitations (ARM 17.8.1211).

C.3. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart J – Standards of Performance for Petroleum Refineries, including as applicable to the #1 Crude Unit Atmospheric Heater H-0101 and the #1 Crude Unit Vacuum Heater H-0102 fuel gas combustion devices (Consent Decree, ARM 17.8.340, ARM 17.8.302, ARM 17.8.1211, and 40 CFR 60 Subpart J).

C.4. Calumet shall comply with all applicable requirements of 40 CFR 63 Subpart DDDDD – National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, including as applicable to the #1 Crude Unit Atmospheric Heater H-0101 and the #1 Crude Unit Vacuum Heater H-0102, "gas category 1" process heaters (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart DDDDD).

C.5. Calumet shall comply with all applicable requirements of 40 CFR 63 Subpart CC – National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries, including compliance with equipment leak standards and referenced requirements in 40 CFR 60 Subpart VV – Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for equipment in the #1 Crude Unit, and miscellaneous process vents within the #1 Crude Unit (ARM 17.8.302, ARM 17.8.342, and 40 CFR 63 Subpart CC).

C.6. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart GGG – Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries (ARM 17.8.340, ARM 17.8.302, 40 CFR 60 Subpart GGG).

C.7. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart QQQ, including as applicable to the individual drain system of Crude Unit #1 (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, 40 CFR 60 Subpart QQQ).

C.8. Calumet shall comply with all applicable requirements of 40 CFR 61 Subpart FF – National Emissions Standard for Benzene Waste Operations, as applicable to the individual drain system of the #1 Crude Unit (ARM 17.8.1211, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Compliance Demonstration

C.9. Calumet shall monitor compliance with the stack height requirement of Section III.C.1 via maintaining certified as-built drawings on-site. Any change to stack height requires notification as required by ARM 17.8.745 (ARM 17.8.1213).

C.10. For units equipped with NO_X CEMS, Calumet shall monitor compliance with the NO_X and CO umbrella limitation utilizing emissions estimated from NO_X CEMS, and CO emissions from emissions factors determined during source tests to be conducted concurrent with NO_X RATA testing (ARM 17.8.1213).

C.11. Calumet shall monitor compliance with 40 CFR 60 Subpart J as required by 40 CFR 60 Subpart J (ARM 17.8.1213, ARM 17.8.302, ARM 17.8.340, and 40 CFR 60 Subpart J).

C.12. Calumet shall monitor compliance with 40 CFR 63 Subpart DDDDD as required by 40 CFR 63 Subpart DDDDD (ARM 17.8.1213, ARM 17.8.302, ARM 17.8.342, and 40 CFR 63 Subpart DDDDD).

C.13. Calumet shall monitor compliance with 40 CFR 63 Subpart CC as required by 40 CFR 63 Subpart CC (ARM 17.8.1213, ARM 17.8.302, ARM 17.8.342, and 40 CFR 63 Subpart CC).

C.14. Calumet shall monitor compliance with 40 CFR 60 Subpart GGG as required by 40 CFR 60 Subpart GGG (ARM 17.8.1213, ARM 17.8.302, ARM 17.8.340, and 40 CFR 60 Subpart GGG).

C.15. Calumet shall monitor compliance with 40 CFR 60 Subpart QQQ as required by 40 CFR 60 Subpart QQQ (ARM 17.8.1213, ARM 17.8.302, ARM 17.8.340, and 40 CFR 60 Subpart QQQ).

C.16. Calumet shall monitor compliance with 40 CFR 61 Subpart FF as required by 40 CFR 61 Subpart FF (ARM 17.8.1211, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Recordkeeping

C.17. Calumet shall maintain, under Calumet's control, all records required for compliance monitoring as a permanent business record for at least 5 years. Furthermore, the records must be available at the plant site for inspection by the Department and EPA, and must be submitted to the Department upon request (ARM 17.8.1212).

C.18. Calumet shall maintain NO_X and CO Umbrella limit emissions records in accord with Section III.B.17 (ARM 17.8.1212).

C.19. Calumet shall maintain records as required by 40 CFR 60 Subpart J (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, 40 CFR 60 Subpart J).

C.20. Calumet shall maintain records as required by 40 CFR 63 Subpart DDDDD (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, 40 CFR 63 Subpart DDDDD).

C.21. Calumet shall maintain records as required by 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, 40 CFR 63 Subpart CC.

C.22. Calumet shall maintain records as required by 40 CFR 60 Subpart GGG (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, 40 CFR 60 Subpart GGG).

C.23. Calumet shall maintain records as required by 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, 40 CFR 60 Subpart QQQ).

C.24. Calumet shall maintain records as required by 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.341, ARM 17.8.302, 40 CFR 61 Subpart FF).

Reporting

C.25. Any compliance source test reports and/or logs must be submitted in accordance with Section III.A.2 (ARM 17.8.106 and ARM 17.8.1212).

C.26. Calumet shall comply with the NO_X and CO Umbrella limit reporting requirements of Section III.B.24 (ARM 17.8.1212).

C.27. Calumet shall comply with the applicable reporting requirements of 40 CFR 60 Subpart J (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, 40 CFR 60 Subpart J).

C.28. Calumet shall comply with the applicable reporting requirements of 40 CFR 63 Subpart DDDDD (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, 40 CFR 63 Subpart DDDDD).

C.29. Calumet shall comply with the applicable reporting requirements of 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, 40 CFR 63 Subpart CC).

C.30. Calumet shall comply with the applicable reporting requirements of 40 CFR 60 Subpart GGG (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, 40 CFR 60 Subpart GGG).

C.31. Calumet shall comply with the applicable reporting requirements of 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, 40 CFR 60 Subpart QQQ).

C.32. Calumet shall comply with the reporting requirements of 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.341, ARM 17.8.302, 40 CFR 61 Subpart FF).

C.33. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1213).

C.34. The semiannual monitoring report shall clearly identify all deviations from permit requirements and shall provide (ARM 17.8.1212(3)):

a. A summary of the results of any source testing that was performed during the reporting period and date the report was submitted;

b. A summary of any changes made to stack height of H-0101, or statement that no changes have been made;

c. Summary demonstrating compliance status with 40 CFR 60 Subpart J including reference to submittal dates of reports made or included;

d. Summary demonstrating compliance status with 40 CFR 63 Subpart DDDDD including reference to submittal dates of reports made or included;

e. Summary demonstrating compliance status with 40 CFR 63 Subpart CC including reference to submittal dates of reports made or included;

f. Summary demonstrating compliance status with 40 CFR 60 Subpart GGG including reference to submittal dates of reports made or included;

g. Summary demonstrating compliance status with 40 CFR 60 Subpart QQQ including reference to submittal dates of reports made or included;

h. Summary demonstrating compliance status with 40 CFR 61 Subpart FF including reference to submittal dates of reports made or included.

D. EU03 – #2 CRUDE UNIT

EU03a - #2 Crude Atmospheric Heater H-2101
EU03b - #2 Crude Vacuum Heater H-2102
EU03c - #2 Crude Unit Equipment Components
EU03d - #2 Crude Unit Individual Drain System

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
D.1, D.15, D.29, D.27, D.45, D.46	Max Capacity of H-2101	71.0 MMBtu/hr	Recordkeeping	Ongoing	Semiannual
D.2, D.15, D.29, D.27, D.45, D.46	Max Capacity of H-2102	27.0 MMBtu/hr	Recordkeeping	Ongoing	Semiannual
D.3, D.16, D.27, D.28, D.45, D.46	H-2101 NO_X	0.035 lb/MMBtu, 30-day rolling average BACT limit	CEMS	Continuous	Quarterly
D.4, D.17, A.2, D.27, D.45, D.46	H-2102 NO_X	0.040 lb/MMBtu, average of three source test runs	Method 7E	Annually	Semiannual and Section III.A.2
D.5, D.18, A.2, D.27, D.45, D.46	H-2101 CO	0.055 lb/MMBtu BACT limit	Source Testing once per year during a NO_X RATA	Annually	Semiannual and Section III.A.2

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
D.5, D.18, A.2, D.27, D.45, D.46	H-2102 CO	0.055 lb/MMBtu BACT limit	Source Testing once per year during a NO_X RATA	Annually	Semiannual and Section III.A.2
D.6, D.16, D.18, D.30, D.38, D.45, D.46	H-2101 NO_X and CO Umbrella Limit	Umbrella Limit	NO_X CEMS and annual CO testing during RATA	Continuous	Quarterly and Section III.A.2
D.6, D.16, D.18, D.30, D.38, D.45, D.46	H-2102 NO_X and CO Umbrella Limit	Umbrella Limit	NO_X CEMS and annual CO testing during RATA	Continuous	Quarterly and Section III.A.2
D.7, D.19, D.27, A.2, D.45, D.46	PM, PM_{10}	0.00051 lb/MMBtu BACT limit	Method 201 and 202	As required by the Department and Section III.A.1	Semiannual and Section III.A.2
D.7, D.19, D.27, A.2, D.45, D.46	$PM_{2.5}$	0.00042 lb/MMBtu BACT limit	Method 201 and 202	As required by the Department and Section III.A.1	Semiannual and Section III.A.2
D.8, D.20, D.27, D.45, D.46	CO_2e	142 lb/MMBtu based on a 30-day rolling average BACT limit	Recordkeeping of emissions based on fuel usage and established emissions factors	Ongoing	Semiannual
D.9, D.21, D.27, D.32, D.39, D.45, D.46	NSPS Ja H_2S/SO_2 for fuel gas combustion devices. NSPS Ja NO_X for H-2101 – 0.040 lb/MMBtu on a 30-day rolling average basis, or, 40 ppmvd on a 30 day rolling average basis, 0% O_2.	SO_2: H_2S content of Fuel Gas CMS NO_X: 40 CFR 60 Subpart Ja CEMS option	40 CFR 60 Subpart Ja	Continuous	Semiannual and 40 CFR 60 Subpart Ja
D.10, D.22, D.27, D.33, D.45, D.46	HAPs from Process Heaters: 40 CFR 63 Subpart DDDDD (CO as surrogate)	40 CFR 63 Subpart DDDDD Work Practice Standards: Periodic Tune-ups	40 CFR 63 Subpart DDDDD	40 CFR 63 Subpart DDDDD	Semiannual and 40 CFR 63 Subpart DDDDD

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
D.11, D.23, D.34, D.41, D.45, D.46	HAPs from equipment leaks: 40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	Semiannual and 40 CFR 63 Subpart CC
D.11, D.23, D.34, D.41, D.45, D.46	HAPs from process vents: 40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	Semiannual and 40 CFR 63 Subpart CC
D.12, D.24, D.35, D.42, D.45, D.46	VOC from equipment leaks: 40 CFR 60 Subpart GGGa	40 CFR 60 Subpart GGGa	40 CFR 60 Subpart GGGa	40 CFR 60 Subpart GGGa	Semiannual and 40 CFR 60 Subpart GGGa
D.13, D.25, D.36, D.43, D.45, D.46	VOC from wastewater systems	40 CFR 60 Subpart QQQ	40 CFR 60 Subpart QQQ	40 CFR 60 Subpart QQQ	Semiannual and 40 CFR 60 Subpart QQQ
D.14, D.26, D.37, D.44, D.45, D.46	Benzene emissions from wastewater	40 CFR 61 Subpart FF	40 CFR 61 Subpart FF	40 CFR 61 Subpart FF	Semiannual and 40 CFR 61 Subpart FF

Conditions

D.1. The maximum rated capacity of the #2 Crude Atmospheric Heater H-2101 shall not exceed 71.0 MMBtu/hr (ARM 17.8.1211 and ARM 17.8.749).

D.2. The maximum rated capacity of the #2 Crude Vacuum Heater H-2102 shall not exceed 27.0 MMBtu/hr (ARM 17.8.1211 and ARM 17.8.749).

D.3. The #2 Crude Unit Atmospheric Heater H-2101 shall be equipped with ULNB and NO_X emissions shall not exceed 0.035 lb/MMBtu-HHV based on a 30-day rolling average (ARM 17.8.1211, ARM 17.8.752).

D.4. The #2 Crude Unit Vacuum Heater H-2102 shall be equipped with ULNB and NO_X emissions shall not exceed 0.040 lb/MMBtu-HHV on a 3-hr average basis, as may be monitored via source testing (ARM 17.8.1211, ARM 17.8.752)

D.5. CO emissions from each #2 Crude Unit process heater shall be controlled using good combustion practices. CO emissions from each heater shall not exceed 0.055 lb/MMBtu (ARM 17.8.1211 and ARM 17.8.752).

D.6. Calumet shall comply with the NO_X and CO Umbrella Limitations of Section III.B.5 and III.B.6. The Crude Unit #2 Atmospheric Heater H-2101 and #2 Crude Unit Vacuum Heater H-2102 are affected units (ARM 17.8.1211 and ARM 17.8.749).

D.7. Calumet shall control PM/PM_{10} and $PM_{2.5}$ emissions from the #2 Crude Unit Atmospheric Heater H-2101 and #2 Crude Unit Vacuum Heater H-2102 by utilizing good combustion practices and only combusting low sulfur fuels. Particulate emissions shall not exceed the following (ARM 17.8.1211 and ARM 17.8.752):

a. PM/PM_{10} emissions from each heater shall not exceed 0.00051 lb/MMBtu; and

b. $PM_{2.5}$ emissions from each heater shall not exceed 0.00042 lb/MMBtu

D.8. Calumet shall control CO_2e emissions from each #2 Crude Unit process using low carbon fuels, good combustion practices, and an energy efficient design. The CO_2e emissions shall not exceed 142 lb/MMBtu (ARM 17.8.1211 and ARM 17.8.752).

D.9. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart Ja – Standards of Performance for Petroleum Refineries for which construction, reconstruction, or modification commenced after May 14, 2007, including as applicable to the #2 Crude Unit Atmospheric Heater H-2101 and the #2 Crude Unit Vacuum Heater H-2102 fuel gas combustion devices (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Ja). As a fuel gas combustion device with a rated heat input greater than 40 MMBtu/hr, the H-2101 is subject to the natural draft NO_X standards of 40 CFR 60 Subpart Ja.

D.10. Calumet shall comply with all applicable requirements of 40 CFR 63 Subpart DDDDD – National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, including as applicable to the #2 Crude Unit Atmospheric Heater H-2101 and the #2 Crude Unit Vacuum Heater H-2102, "gas category 1" process heaters (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart DDDDD).

D.11. Calumet shall comply with all applicable requirements of 40 CFR 63, Subpart CC – National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries, including compliance with equipment leak standards and referenced requirements in 40 CFR 60, Subpart VVa – Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for equipment in the #2 Crude Unit, and miscellaneous process vents within the #2 Crude Unit (ARM 17.8.1211, ARM 17.8.302, ARM 17.8.342, and 40 CFR 63 Subpart CC).

D.12. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart GGGa – Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries and referenced requirements of 40 CFR 60 Subpart VVa (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart GGGa).

D.13. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart QQQ – Standards of Performance from Petroleum Refinery Wastewater Systems, including as applicable to the individual drain system of Crude Unit #2 (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, 40 CFR 60 Subpart QQQ).

D.14. Calumet shall comply with all applicable requirements of 40 CFR 61 Subpart FF – National Emissions Standard for Benzene Waste Operations, as applicable to the drain system of the #2 Crude Unit (ARM 17.8.1211, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Compliance Demonstration

D.15. Calumet shall maintain on-site, manufacturer/vendor supplied specification sheets demonstrating maximum rated design capacity of the H-2101 and H-2102 heaters. Further, Calumet shall track Btu burned in each unit, as already accomplished for NO_X and CO Umbrella limit emissions tracking, emissions inventory purposes, and 40 CFR 60 Subpart Ja compliance (ARM 17.8.1213).

D.16. Calumet shall operate NO_X CEMS and monitor fuel usage and Btu value of fuel in a manner equivalent to 40 CFR 60 Subpart A and Ja requirements, to monitor NO_X emissions on a lb/MMBtu 30-day rolling average basis on the Crude #2 Atmospheric Heater H-2101. Calumet shall maintain records demonstrating 30-day rolling averages on a daily basis, with summary of monitored exceedances versus the 0.035 lb/MMBtu limit of Section III.D.3. Calumet shall use the same data to determine monthly mass emissions of NO_X for NO_X umbrella limit compliance monitoring (ARM 17.8.1213).

D.17. Once every calendar year, Calumet shall test Crude #2 Vacuum Heater H-2102 for NO_X emissions utilizing Method 7E. Fuel usage during the test and fuel analysis taken from fuel used during the test shall be determined to report an average lb/MMBtu value. The lb/MMBtu value shall be used to monitor compliance with the limitation of Section III.D.4 and as the emissions factor for use in determining mass emissions of NO_X for Umbrella limit recordkeeping (ARM 17.8.1213).

D.18. Calumet shall conduct CO testing on the Crude Unit #2 Atmospheric Heater H-2101 and Crude Unit #2 Vacuum Heater H-2102 concurrent with NO_X RATA testing, to monitor compliance with the CO emissions limitation of Section III.D.5. Calumet shall utilize fuel usage and fuel Btu content determined in accord to Section III.D.16 for determining the lb/MMBtu emissions, as well as to track ongoing Btu fired for purposes of determining monthly mass emissions of CO for CO umbrella limit compliance monitoring (ARM 17.8.1213).

D.19. During the next refinery turnaround or as opportunity may provide, Calumet shall make any modifications as may be required to ensure that H-2101 and H-2102 is equipped with appropriate sampling ports such that Method 201A and Method 202 testing could be accomplished if requested. As required by the Department and Section III.A.1, Calumet shall test the H-2101 and/or H-2102 for PM_{10} and $PM_{2.5}$ utilizing Methods 201A and 202 (ARM 17.8.105 and ARM 17.8.1213).

D.20. Calumet shall monitor compliance with the CO_2e emissions limitations of Section III.D.8 by tracking fuel usage and utilizing established emissions factors as used for greenhouse gas emissions reporting. (ARM 17.8.1213 and ARM 17.8.105).

D.21. Calumet shall monitor compliance with 40 CFR 60 Subpart Ja as required by 40 CFR 60 Subpart Ja (ARM 17.8.1213, ARM 17.8.302, ARM 17.8.340, and 40 CFR 60 Subpart Ja).

D.22. Calumet shall monitor compliance with 40 CFR 63 Subpart DDDDD as required by 40 CFR 63 Subpart DDDDD (ARM 17.8.1213, ARM 17.8.302, ARM 17.8.342, and 40 CFR 63 Subpart DDDDD).

D.23. Calumet shall monitor compliance with 40 CFR 63 Subpart CC as required by 40 CFR 63 Subpart CC (ARM 17.8.1213, ARM 17.8.302, ARM 17.8.342, and 40 CFR 63 Subpart CC).

D.24. Calumet shall monitor compliance with 40 CFR 60 Subpart GGGa as required by 40 CFR 60 Subpart GGGa (ARM 17.8.1213, ARM 17.8.302, ARM 17.8.340, and 40 CFR 60 Subpart GGGa).

D.25. Calumet shall monitor compliance with 40 CFR 60 Subpart QQQ as required by 40 CFR 60 Subpart QQQ (ARM 17.8.1213, ARM 17.8.302, ARM 17.8.340, and 40 CFR 60 Subpart QQQ).

D.26. Calumet shall monitor compliance with 40 CFR 61 Subpart FF as required by 40 CFR 61 subpart FF (ARM 17.8.1213, ARM 17.8.302, ARM 17.8.341, and 40 CFR 61 Subpart FF).

Recordkeeping

D.27. Calumet shall maintain, under Calumet's control, all records required for compliance monitoring as a permanent business record for at least 5 years. Furthermore, the records must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.1212).

D.28. Calumet shall maintain records of daily 30-day rolling average emissions of NO_X from the H-2101 as determined via CEMS operated in accord with 40 CFR 60 Subpart A and Ja requirements (ARM 17.8.1212).

D.29. Calumet shall maintain on-site, manufacturer/vendor supplied specification sheets demonstrating maximum rated design capacity of the H-2101 and H-2102 heaters (ARM 17.8.1212, ARM 17.8.1213).

D.30. Calumet shall comply with the NO_X and CO Umbrella limit related recordkeeping requirements of Section III.B.17 for the H-2101 and H-2102 heaters (ARM 17.8.1212).

D.31. Calumet shall keep record of the date that each of the H-2101 and H-2102 heaters are properly equipped to provide for Method 201A and Method 202 testing (ARM 17.8.1212).

D.32. Calumet shall comply with the applicable recordkeeping requirements of 40 CFR 60 Subpart Ja (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Ja).

D.33. Calumet shall comply with the applicable recordkeeping requirements of 40 CFR 63 Subpart DDDDD (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, 40 CFR 63 Subpart DDDDD).

D.34. Calumet shall comply with the applicable recordkeeping requirements of 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, 40 CFR 63 Subpart CC).

D.35. Calumet shall comply with the applicable recordkeeping requirements of 40 CFR 60 Subpart GGGa (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart GGGa).

D.36. Calumet shall comply with the applicable recordkeeping requirements of 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

D.37. Calumet shall comply with the applicable recordkeeping requirements of 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Reporting

D.38. Calumet shall comply with the NO_X and CO Umbrella limit reporting requirements of Section III.B.24 (ARM 17.8.1212).

D.39. Calumet shall comply with the applicable reporting requirements of 40 CFR 60 Subpart Ja (ARM 17.8.1212, ARM 17.8.302, ARM 17.8.340, and 40 CFR 60 Subpart Ja).

D.40. Calumet shall comply with the applicable reporting requirements of 40 CFR 63 Subpart DDDDD (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, 40 CFR 63 Subpart DDDDD).

D.41. Calumet shall comply with the applicable reporting requirements of 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, 40 CFR 63 Subpart CC).

D.42. Calumet shall comply with the applicable reporting requirements of 40 CFR 60 Subpart GGGa (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart GGGa).

D.43. Calumet shall comply with the applicable reporting requirements of 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

D.44. Calumet shall comply with the applicable reporting requirements of 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

D.45. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1213).

D.46. The semiannual monitoring report shall clearly identify all deviations from permit requirements and shall provide (ARM 17.8.1212(3)):

a. A copy of manufacturer/vendor supplied specification sheets, or note as to the date it was submitted and that no changes have taken place.

b. A summary of the of any source testing that was performed during the reporting period including date testing was performed, result of the test, and date the report was submitted or estimated to be submitted;

c. Summary of daily 30-day rolling average NO_X emissions as determined from the H-2101 NO_X CEMS.

d. Summary of CO_2e emissions records of Section III.D.20;

e. Summary demonstrating compliance status with 40 CFR 60 Subpart Ja including reference to submittal dates of reports made or included;

f. Summary demonstrating compliance status with 40 CFR 63 Subpart DDDDD including reference to submittal dates of reports made or included;

g. Summary demonstrating compliance status with 40 CFR 63 Subpart CC including reference to submittal dates of reports made or included;

h. Summary demonstrating compliance status with 40 CFR 60 Subpart GGGa including reference to submittal dates of reports made or included;

i. Summary demonstrating compliance status with 40 CFR 60 Subpart QQQ including reference to submittal dates of reports made or included;

j. Summary demonstrating compliance status with 40 CFR 61 Subpart FF including reference to submittal dates of reports made or included.

E. EU04 - CATALYTIC POLYMERIZATION UNIT

EU04a – Equipment Components
EU04b – Individual Drain System

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
E.1, E.4, E.7, E.10, E.11	HAPs from equipment leaks: 40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	Semiannual and 40 CFR 63 Subpart CC
E.2, E.5, E.8, E.10, E.11	VOC from wastewater systems	40 CFR 60 Subpart QQQ	40 CFR 60 Subpart QQQ	40 CFR 60 Subpart QQQ	Semiannual and 40 CFR 60 Subpart QQQ
E.3, E.6, E.9, E.10, E.11	Benzene emissions from wastewater	40 CFR 61 Subpart FF	40 CFR 61 Subpart FF	40 CFR 61 Subpart FF	Semiannual and 40 CFR 61 Subpart FF

Conditions

E.1. Calumet shall comply with all applicable requirements of 40 CFR 63 Subpart CC – National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries, including compliance with referenced requirements in 40 CFR 60 Subpart VV – Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry as applicable to the Catalytic Polymerization Unit. (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

E.2. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart QQQ, including as applicable to the individual drain system of the Catalytic Polymerization Unit (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

E.3. Calumet shall comply with all applicable requirements of 40 CFR 61 Subpart FF – National Emission Standard for Benzene Waste Operations as applicable to the drain system of the catalytic polymerization unit (ARM 17.8.1211, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF). Further, Calumet shall comply with applicable requirements of 40 CFR 63 Subpart CC wastewater provisions (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

Compliance Demonstration

E.4. Calumet shall comply with all the applicable requirements in 40 CFR 63 Subpart CC – National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries, including compliance with specific requirements in 40 CFR 60 Subpart VV – Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as specified in each applicable emitting unit (ARM 17.8.749, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63, Subpart CC).

E.5. Calumet shall monitor compliance with 40 CFR 60 Subpart QQQ as required by 40 CFR 60 Subpart QQQ (ARM 17.8.1213, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

E.6. Calumet shall monitor compliance with 40 CFR 61 Subpart FF as required by 40 CFR 61 Subpart FF (ARM 17.8.1213, ARM 17.8.341, ARM 17.8.302, 40 CFR 61 Subpart FF).

Recordkeeping

E.7. Calumet shall comply with all the applicable recordkeeping requirements in 40 CFR 63 Subpart CC including referenced requirements of 40 CFR 60 Subpart VV (ARM 17.8.340, ARM 17.8.342, ARM 17.8.302, 40 CFR 63, Subpart CC and 40 CFR 60, Subpart VV).

E.8. Calumet shall comply with the applicable recordkeeping requirements for 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

E.9. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Reporting

E.10. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements.

E.11. The semiannual monitoring report shall clearly identify all deviations from permit requirements and shall provide (ARM 17.8.1212(3)):

a. A summary of the of any source testing that was performed during the reporting period including date testing was performed, result of the test, and date the report was submitted or estimated to be submitted;

b. Summary demonstrating compliance status with 40 CFR 63 Subpart CC including reference to submittal dates of reports made or included;

c. Summary demonstrating compliance status with 40 CFR 60 Subpart QQQ including reference to submittal dates of reports made or included;

d. Summary demonstrating compliance status with 40 CFR 61 Subpart FF including reference to submittal dates of reports made and reference to status with regard to the wastewater provisions of 40 CFR 63 Subpart CC.

F. EU05 – FLUID CATALYTIC CRACKING UNIT (FCCU)

EU05a – FCCU Catalyst Regenerator
EU05b – FCCU Preheater H-0302
EU05c – Equipment Components
EU05d – Individual Drain System
EU05e – Electric Driven Compressor C-032701 in Wet Gas Service

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
F.1, A.24, F.19, F.31, F.32, F.40, F.47, F.48	NSPS J for CO on Catalyst Regenerator	CO: 500 ppmvd at stack oxygen	CO: CEMS	Continuous	Quarterly
F.1, A.24, F.18, F.31, F.32, F.40, F.47, F.48	NSPS J for SO_2 on Catalyst Regenerator	SO_2: 50 ppmvd, or 90% reduction or 20 lb/ton coke burn-off or process fresh feed with sulfur content no greater than 0.30% by weight, any of which is determined daily on a 7-day rolling average basis	SO_2: CEMS monitoring 50 ppmvd option	Continuous	Quarterly
F.2, F.3, A.24, F.18, F.31, F.32, F.47, F.48	Consent Decree: SO_2 from Catalyst Regenerator	SO_2: 50 ppmvd @ 0% O_2, 7-day rolling average basis, excluding startup, shutdown, and malfunction. SO_2: 25 ppmvd corrected to 0% O_2, on a 365-day rolling average basis, applicable at all times.	SO_2 and O_2 CEMS	Continuous	Quarterly

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
F.4, F.19, F.31, F.32, F.40, F.47, F.48	Consent Decree: CO from Catalyst Regenerator	500 ppmvd @ 0% O_2, 1-hr avg 500 ppmvd at stack O_2, 100 ppmvd @ 0% O_2, 365-day average	CO CEMS	Continuous	Quarterly
F.5, F.6, F.20, F.31, F.47, F.48	Consent Decree NO_X from Catalyst Regenerator	68 ppmvd at 0% O_2 on a 365-day rolling average basis, applicable at all times 87.0 ppmvd @ 0% O_2 on a 7-day rolling average basis, excluding startup, shutdown, malfunction, and hydrotreater outages	NO_X and O_2 CEMS. For hours in which the FCCU is not in operation, no NO_X value shall be used in the average, and those periods shall be skipped in determining 7-day and 365-day averages.	Ongoing	Quarterly
F.7, F.21, F.31, F.39, F.47, F.49	Consent Decree FCCU PM	15.0 lb/hr	Method 5	Annually	Section III.A.2 and Quarterly
F.8, F.22, F.23, F.31, F.33, F.39, F.45, F.47, F.49	MACT UUU Metal HAPs from catalyst regenerator	40 CFR 63 Subpart UUU	40 CFR 63 Subpart UUU: Opacity CMS and performance testing	Ongoing, performance testing once every 5 years	40 CFR 63 Subpart UUU and Semiannual and Section III.A.2
F.8, F.22, F.23, F.31, F.33, F.45, F.47, F.49	MACT UUU Organic HAPs from catalyst regenerator	40 CFR 63 Subpart UUU: CO limit of 500 ppmvd as an NSPS J affected unit, option to maintain O_2 above 1% by volume during Startup, Shutdown, and Hot Standby	CO CEMS monitoring ppmvd	Continuous	Semiannual

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
F.9, F.22, F.31, F.47, F.49	FCCU Opacity	40%	COMS	Continuous	Semiannual
F.10, A.24, F.24, F.31, F.32, F.40, F.41F.47, F.48	NSPS J H_2S/SO_2 for fuel gas combustion devices: H-0302 FCCU Preheater	40 CFR 60 Subpart J: 0.10 gr/dscf H_2S in fuel gas, rolling 3-hr average basis	Fuel Gas H_2S content CMS in compliance with NSPS J or Ja	Continuous	Quarterly
F.11, F.25, F.31, F.34, F.44, F.47, F.49	MACT DDDDD: HAPs from FCCU Preheater H-0302 process heaters	40 CFR 63 Subpart DDDDD: Work Practice Standards: Periodic Tune-ups	40 CFR 63 Subpart DDDDD	40 CFR 63 Subpart DDDDD	Semiannual and 40 CFR 63 Subpart DDDDD
F.12, F.26, F.31, F.47, F.48	Prohibition on Fuel Oil (except torch oil in FCCU startup)	No Fuel Oil Combustion	Recordkeeping	Ongoing	Quarterly
F.13, F.28, F.31, F.35, F.41 F.47, F.49	NSPS GGG: VOC from Compressor C-032701	NSPS VV	NSPS VV	NSPS VV	Semiannual and 40 CFR 60 Subpart GGG/VV
F.13, F.28, F.31, F.35F.34, F.41, F.47, F.49	NSPS GGG: VOC from equipment components: Pumps, valves, flanges/connectors, etc.	NSPS VV	NSPS VV	NSPS VV	Semiannual and 40 CFR 60 Subpart GGG/VV
F.14, F.27, F.31, F.36, F.46, F.47, F.49	MACT CC – Leaks from equipment in HAP service and Emissions of HAP from pressure relief devices	NSPS VV (or VVa if elected) and MACT CC	NSPS VV (or VVa if elected) and MACT CC	NSPS VV (or VVa if elected) and MACT CC	Semiannual and 40 CFR 60 Subpart VV (or VVa if elected) and 40 CFR 63 Subpart CC
F.15, F.27, F.31, F.36, F.46, F.47, F.49	MACT CC – Miscellaneous Process Vent emissions	MACT CC	MACT CC	MACT CC	Semiannual and 40 CFR 63 Subpart CC
F.16, F.29, F.31, F.37, F.42, F.47, F.49	NSPS QQQ – Individual Drain System VOC emissions	NSPS QQQ	NSPS QQQ	NSPS QQQ	Semiannual and 40 CFR 60 Subpart QQQ
F.17, F.30, F.31, F.38, F.43, F.47, F.49	NESHAP FF – benzene emissions from wastewater	NESHAP FF	NESHAP FF	NESHAP FF	Semiannual and 40 CFR 61 Subpart FF

Conditions

F.1. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart J, as it applies to the FCCU Catalyst Regenerator, for SO_2 and CO (ARM 17.8.1211, Consent Decree Paragraph 15, and 40 CFR 60 Subpart J).

F.2. Calumet shall comply with the FCCU Catalyst Regenerator SO_2 limitation of the Consent Decree, of 50 parts per million, volume dry basis (ppmvd), corrected to 0% O_2, on a 7-day rolling average basis, except for periods of hydrotreater outages (ARM 17.8.1211, Consent Decree Paragraph 12, March 22, 2006 letter from EPA to Calumet).

F.3. SO_2 emissions from the FCCU Catalyst Regenerator shall not exceed 25 ppmvd, corrected to 0% O_2, on a 365-day rolling average basis, applicable at all times (ARM 17.8.1211, Consent Decree Paragraph 12, March 22, 2006 letter from EPA to Calumet).

F.4. CO emissions from the FCCU Catalyst Regenerator shall not exceed 500 ppmvd, corrected to 0% oxygen (O_2) on a 1-hour average basis; 500 ppmvd, at stack oxygen; and 100 ppmvd, corrected to 0% O_2 on a 365-day rolling average basis (ARM 17.8.1211, Consent Decree Paragraph 14, 40 CFR 60 Subpart J, and 40 CFR 63 Subpart UUU).

F.5. NO_X emissions from the FCCU Catalyst Regenerator shall not exceed 68 ppmvd @ 0% O_2 on a 365-day rolling average basis, corrected to 0% oxygen, applicable at all times (ARM 17.8.1211, Consent Decree Paragraph 11, and September 23, 2010 letter from EPA to Calumet).

F.6. NO_x emissions from the FCCU shall not exceed 87 ppmvd, corrected to 0% O_2, on a 7-day rolling average, except for periods of startup, shutdown, malfunction or hydrotreater outages (ARM 17.8.1211, Consent Decree Paragraph 11, and September 23, 2010 letter from EPA to Calumet).

F.7. The FCCU shall be limited to 15.0 lb/hr of PM (ARM 17.8.1211 and Consent Decree Paragraph 13).

F.8. Calumet shall comply with all applicable requirements of 40 CFR 63 Subpart UUU – National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units, including as applicable to the fluid catalytic cracking unit (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart UUU).

F.9. Calumet shall not discharge from the FCCU Catalyst Regenerator emissions into the atmosphere that exhibit an opacity of 40% or greater averaged over six consecutive minutes (ARM 17.8.304).

F.10. Calumet shall comply with 40 CFR 60 Subpart J as applicable to fuel gas combustion devices for the FCCU Preheater H-0302 (ARM 17.8.1211, Consent Decree Paragraph 17.B, and 40 CFR 60 Subpart J).

F.11. Calumet shall comply with all applicable requirements of 40 CFR 63 Subpart DDDDD – National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, including as applicable to the FCCU Pre-heater, a "gas category 1" process heater (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart DDDDD).

F.12. Calumet shall not combust fuel oil in any combustion unit, except torch oil may be used in the FCCU Regenerator during FCCU startups (ARM 17.8.1211 and Consent Decree Paragraph 17.C.ii).

F.13. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart GGG – Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries, including as applicable to the C-032701 compressor in Wet Gas service (ARM 17.8.302, ARM 17.8.340, and 40 CFR 60 Subpart GGG).

F.14. Calumet shall comply with all the applicable requirements in 40 CFR 63 Subpart CC – National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries, including compliance with referenced requirements in 40 CFR 60 Subpart VV – Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

F.15. Calumet shall comply with all applicable requirements of 40 CFR 63 Subpart CC – National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries for miscellaneous process vents within the FCCU (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

F.16. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart QQQ – Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems, including as applicable to the individual drain system of the FCCU (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, 40 CFR 60 Subpart QQQ).

F.17. Calumet shall comply with all applicable requirements of 40 CFR 61 Subpart FF – National Emissions Standard for Benzene Waste Operations, as applicable to the drain system of the FCCU (ARM 17.8.1211, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Compliance Demonstration

F.18. Calumet shall monitor compliance with SO_2 emissions limitations of the Consent Decree and 40 CFR 60 Subpart J for the FCCU by continuously monitoring SO_2 emissions utilizing CEMS in compliance with 40 CFR 60 Subpart J, 40 CFR §§ 60.11, 60.13 and Part 60 Appendix A, and the applicable performance specification requirements of 40 CFR Part 60 Appendices B and F. Data summarized by averaging periods shall be available upon request (ARM 17.8.1212, Consent Decree Paragraphs 12.A and 12.D, 40 CFR 60 Subpart J, and ARM 17.8.1213).

F.19. Calumet shall monitor compliance with CO emissions limitations of 40 CFR 60 Subpart J utilizing CEMS in compliance with 40 CFR §§ 60.11, 60.13 and Part 60 Appendix A, and the applicable performance specification test of 40 CFR Part 60 Appendices B and F. Data summarized by averaging periods shall be available upon request (ARM 17.8.1212, Consent Decree Paragraph 14.C, ARM 17.8.1213).

F.20. Calumet shall continuously monitor NO_X (and O_2) emissions from the FCCU Catalyst Regenerator utilizing CEMS in accordance with 40 CFR §§ 60.11, 60.13, and Part 60 Appendix A, and the applicable performance requirements of 40 CFR Part 60 Appendices B and F. For hours in which the FCCU is not operating, no NO_X value shall be used in the average, and those periods shall be skipped in determining the 7-day and 365-day averages. Data summarized by averaging periods shall be available upon request (ARM 17.8.1212, ARM 17.8.1213, Consent Decree Paragraph 11.F, September 23, 2010 letter from EPA to Calumet).

F.21. Compliance with the PM emission limit of 15.0 lb/hr shall be monitored by conducting a 3-hour performance test representative of normal operating conditions for PM emissions by December 31 of each calendar year. If any performance test undertaken pursuant this section is not representative of normal operating conditions, Calumet shall conduct a subsequent performance test representative of normal operating conditions by no later than 90 days after the test that was not representative (ARM 17.8.1212, Consent Decree Paragraph 15, ARM 17.8.1213).

F.22. Calumet shall install and use a COMS to continuously monitor opacity of the FCCU Catalyst Regenerator emissions to monitor compliance with the 40% opacity rule of ARM 17.8.304 as well as monitor compliance with the nickel limit in 40 CFR 63 Subpart UUU. Calumet shall install, certify, calibrate, maintain and operate the COMS in accordance with the requirements of 40 CFR 63 Subpart UUU, including 40 CFR 63.8 and including maintaining records to monitor conformance with procedures in Calumet's Operations, Maintenance, and Monitoring Plan (OMMP) (ARM 17.8.1212, ARM 17.8.1213, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart UUU).

F.23. Calumet shall monitor compliance with 40 CFR 63 Subpart CC as required by 40 CFR 63 Subpart CC (ARM 17.8.342 and 40 CFR 63 Subpart CC).

F.24. Calumet shall continuously monitor the H_2S content of fuel gas burned in the FCCU Preheater H-0302 in accord with 40 CFR 60 Subpart J. Calumet shall install, certify, calibrate, maintain, and operate a fuel gas CEMS in accordance with the requirements of 40 CFR §§ 60.11, 60.13, and Part 60 Appendix A, and the applicable performance requirements of 40 CFR Part 60 Appendices B and F. Data summarized by averaging periods shall be available upon request (ARM 17.8.1212, ARM 17.8.1213, Consent Decree Paragraph 17.B).

F.25. Calumet shall monitor compliance with 40 CFR 63 Subpart DDDDD as required by 40 CFR 63 Subpart DDDDD (ARM 17.8.1212, ARM 17.8.1213, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart DDDDD).

F.26. Calumet shall record, in a log, any time that torch oil is burned in the FCCU Regenerator. Such log shall include the date, timeframe, and operational status of the FCCU during such timeframe (ARM 17.8.1212, ARM 17.8.1213).

F.27. Calumet shall monitor compliance with 40 CFR 63 Subpart CC as required by 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.1213, ARM 17.8.340, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

F.28. Calumet shall monitor compliance with 40 CFR 60 Subpart GGG as required by 40 CFR 60 Subpart GGG (ARM 17.8.1212, ARM 17.8.1213, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart GGG).

F.29. Calumet shall monitor compliance with 40 CFR 60 Subpart QQQ as required by 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.1213, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

F.30. Calumet shall monitor compliance with 40 CFR 61 Subpart FF as required by 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.1213, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Recordkeeping

F.31. Calumet shall maintain, under Calumet's control, all records required for compliance monitoring as a permanent business record for at least 5 years. Furthermore, the records must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.1212).

F.32. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart J (ARM 17.8.1212, Consent Decree Paragraph 15 and Paragraph 17, 40 CFR 60 Subpart J).

F.33. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 63 Subpart UUU (ARM 17.8.1212, ARM 17.8.342, ARM and 40 CFR 63, Subpart UUU).

F.34. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 63 Subpart DDDDD (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart DDDDD).

F.35. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart GGG (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart GGG).

F.36. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

F.37. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

F.38. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Reporting

F.39. Any compliance source test reports must be submitted in accordance with Section III.A.2 (ARM 17.8.106 and ARM 17.8.1212).

F.40. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart J (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302 and 40 CFR 60 Subpart J).

F.41. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart GGG (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302 and 40 CFR 60 Subpart GGG).

F.42. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302 and 40 CFR 60 Subpart QQQ).

F.43. Calumet shall comply with all applicable reporting requirements of 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

F.44. Calumet shall comply with all applicable reporting requirements of 40 CFR 63 Subpart DDDDD (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart DDDDD).

F.45. Calumet shall comply with all applicable reporting requirements of 40 CFR 63 Subpart UUU (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart UUU).

F.46. Calumet shall comply with all applicable reporting requirements of 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

F.47. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements.

F.48. Within 45 days of the end of each calendar quarter, Calumet shall provide the following for that calendar quarter period (ARM 17.8.1212):

a. For each CEMS/CMS unit required by the Consent Decree:

i. Excess Emissions and Monitoring System Performance Reports and Data Assessment Reports

ii. For any quarter with excess emissions greater than 1% of the total operating time of the affected source during the reporting period, or any quarter with monitoring downtime greater than 5% of the total operating time of the affected source during the reporting period, detailed emissions data or if no data available, estimated emissions, during that time.

b. Summary of the fuel oil usage log required by Section III.F.26

c. Enhanced LDAR reporting requirements of the Consent Decree

F.49. The semiannual monitoring report shall clearly identify all deviations from permit requirements and shall provide (ARM 17.8.1212(3)):

a. Summary demonstrating compliance with 40 CFR 63 Subpart UUU including clearly indicating the compliance monitoring options utilized during the reporting period and summary of underlying data, including CEMS and COMS performance and excess emissions information determined on a quarterly basis;

b. Summary demonstrating compliance status with 40 CFR 63 Subpart DDDDD including reference to submittal dates of reports made or included;

c. Summary demonstrating compliance status with the 40% opacity requirement;

d. Summary demonstrating compliance status with 40 CFR 63 Subpart CC, organized by applicable sections of Subpart CC, including reference to submittal dates of reports made or included;

e. Summary demonstrating compliance with 40 CFR 60 Subpart GGG, including reference to submittal dates of reports made or included;

f. Summary of compliance with 40 CFR 61 Subpart FF including reference to submittal dates of reports made or included;

g. A summary of the of any source testing that was performed during the reporting period including date testing was performed, result of the test, and date the report was submitted or estimated to be submitted;

h. Reference to quarterly reports required by the consent decree.

G. EU06 – CATALYTIC REFORMER UNIT and NAPHTHA HYDROTREATING UNIT

EU06a Reformer Heater H-0403
EU06b Reformer Unit, Process Vents
EU06c Reformer Unit, Individual Drain System
EU06d Catalytic Reformer Electric Driven Compressor C-040307 in H_2 Service
EU06e Naphtha Splitter Reboiler H-0405
EU06f Naphtha HDS Heater H-0402a
EU06g Diesel/Gas Oil HTU Electric Driven Compressor C-172801

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
G.1, G.10, G.19, G.20, G.30, G.39, G.40	Catalytic Reformer Unit - Organic & Inorganic HAPs from process vents	40 CFR 63 Subpart UUU	40 CFR 63, Subpart UUU	Ongoing	40 CFR 63 Subpart UUU and Semiannual
			OMMP Plan	Ongoing	Semiannual
G.2, G.11, G.19, G.21, G.31, G.39, G.40	Naptha HDS unit Heater H-0402a, Naptha Splitter Reboiler Heater H-0405 SO_2	40 CFR 60 Subpart Ja	40 CFR 60, Subpart Ja Fuel Gas H_2S CEMS	Continuous	Semiannual and 40 CFR 60 Subpart Ja
G.3, G.12, G.19, G.22, G.32, G.39, G.40	Catalytic Reformer Heater H-0403 SO_2	40 CFR 60 Subpart J	40 CFR 60 Subpart J Fuel Gas H_2S CEMS	Continuous	Quarterly and 40 CFR 60 Subpart J
G.4, G.13, G.19, G.23, G.33, G.39, G.40	Naptha HDS unit Heater H-0402a, Naptha Splitter Reboiler Heater H-0405, Catalytic Reformer Heater H-0403 HAPs	40 CFR 63 Subpart DDDDD: Work Practice Standards: Periodic Tune-ups	40 CFR 63 Subpart DDDDD	40 CFR 63 Subpart DDDDD	Semiannual and 40 CFR 63 Subpart DDDDD

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
G.5, G.14, G.19, G.24, G.34, G.39, G.40	VOC and HAP Equipment Leaks from Catalytic Reformer Group I Process Vents	40 CFR 63 Subpart CC	40 CFR 63, Subpart CC	40 CFR 63, Subpart CC	Semiannual and 40 CFR 63 Subpart CC
	VOC and HAP Equipment Leaks for Catalytic Reformer Components	40 CFR 63 Subpart CC	40 CFR 60 Subpart VV	40 CFR 60 Subpart VV	Semiannual and 40 CFR 63 Subpart CC
	HAP from Wastewater	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	Semiannual and 40 CFR 63 Subpart CC
	VOC and HAP Equipment Leaks from Naptha Unit components	40 CFR 63 Subpart CC	40 CFR 60 Subpart VVa	40 CFR 60 Subpart VVa	Semiannual and 40 CFR 63 Subpart CC
G.6, G.19, G.25, G.35, G.39, G.40	VOC from HTU Equipment Components	40 CFR 60 Subpart GGG	40 CFR 60 Subpart VV	40 CFR 60 Subpart VV	Semiannual and 40 CFR 60 Subpart GGG
G.7, G.16, G.19, G.26, G.36, G.39, G.40	VOC from Naphtha Unit Equipment Components	40 CFR 60 Subpart GGGa	40 CFR 60 Subpart VVa	40 CFR 60 Subpart VVa	Semiannual and 40 CFR 60 Subpart GGGa
G.8, G.17, G.19, G.27, G.37, G.39, G.40	VOC from Wastewater – Individual drain system	40 CFR 60 Subpart QQQ	40 CFR 60 Subpart QQQ	40 CFR 60 Subpart QQQ	Semiannual and 40 CFR 60 Subpart QQQ
G.9, G.18, G.19, G.38, G.39, G.40	HAP from Wastewater – Individual Drain System	40 CFR 61 Subpart FF	40 CFR 61 Subpart FF	40 CFR 61 Subpart FF	Semiannual and 40 CFR 61 Subpart FF

Conditions

G.1. Calumet shall comply with 40 CFR 63 Subpart UUU – National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart UUU).

G.2. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart Ja – Standards of Performance for Petroleum Refineries for which construction, reconstruction, or modification commenced after May 14, 2007, including as applicable to the Naphtha Splitter Reboiler H-0405 and Naphtha HDS Heater H-0402a (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Ja).

G.3. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart J – Standards of Performance for Petroleum Refineries, including as applicable to the Catalytic Reformer Heater H-0403 (ARM 17.8.1211, Consent Decree Paragraph 15).

G.4. Calumet shall comply with all applicable requirements of 40 CFR 63 Subpart DDDDD – National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, including as applicable to the Catalytic Reformer Heater H-0403, Naphtha Splitter Reboiler Heater H-0405 and Naphtha HDS Heater H-0402, "gas category 1" process heaters (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart DDDDD).

G.5. Calumet shall comply with all the applicable requirements in 40 CFR 63 Subpart CC – National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries, including miscellaneous process vents, HAPs from wastewater, and referenced requirements in 40 CFR 60 Subpart VV and VVa – Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

G.6. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart GGG – Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries and referenced requirements of 40 CFR 60 Subpart VV, including as applicable to the C-172801 Compressor (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart GGG).

G.7. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart GGGa – Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries and referenced requirements of 40 CFR 60 Subpart VVa, including as applicable to the Naphtha Hydrotreating Unit and Compressor C-040307. Calumet shall present to the Department an engineering analysis if these compressors are believed to be in Hydrogen Service (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart GGGa).

G.8. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart QQQ, including as applicable to the individual drain system of the Catalytic Reformer Unit (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, 40 CFR 60 Subpart QQQ).

G.9. Calumet shall comply with all applicable requirements of 40 CFR 61 Subpart FF – National Emissions Standard for Benzene Waste Operations, as applicable to the drain system of the Catalytic Reformer Unit (ARM 17.8.1211, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Compliance Demonstration

G.10. Calumet shall monitor compliance with 40 CFR 63 Subpart UUU as required by 40 CFR 63 Subpart UUU, including maintaining records to document conformance with procedures in Calumet's required OMMP (ARM 17.8.1212, ARM 17.8.1213, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63, Subpart UUU).

G.11. Calumet shall monitor compliance with 40 CFR 60 Subpart Ja as required by 40 CFR 60 Subpart Ja (ARM 17.8.1212, ARM 17.8.1213, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Ja).

G.12. Calumet shall monitor compliance with 40 CFR 60 Subpart J as required by 40 CFR 60 Subpart J (ARM 17.8.1212, ARM, 17.8.1213, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart J).

G.13. Calumet shall monitor compliance with 40 CFR 63 Subpart DDDDD as required by 40 CFR 63 Subpart DDDDD (ARM 17.8.1212, ARM 17.8.1213, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart DDDDD).

G.14. Calumet shall monitor compliance with 40 CFR 63 Subpart CC as required by 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.1213, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

G.15. Calumet shall monitor compliance with 40 CFR 60 Subpart GGG as required by 40 CFR 60 Subpart GGG (ARM 17.8.1212, ARM 17.8.1213, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart GGG).

G.16. Calumet shall monitor compliance with 40 CFR 60 Subpart GGGa as required by 40 CFR 60 Subpart GGGa (ARM 17.8.1212, ARM 17.8.1213, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart GGGa).

G.17. Calumet shall monitor compliance with 40 CFR 60 Subpart QQQ as required by 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.1213, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

G.18. Calumet shall monitor compliance with 40 CFR 61 Subpart FF as required by 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.1213, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Recordkeeping

G.19. Calumet shall maintain, under Calumet's control, all records required for compliance monitoring as a permanent business record for at least 5 years. Furthermore, the records must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.1212).

G.20. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 63 Subpart UUU (ARM 17.8.1212, ARM 17.8.342, ARM and 40 CFR 63, Subpart UUU).

G.21. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart Ja (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Ja).

G.22. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart J (ARM 17.8.1212, Consent Decree Paragraph 15 and Paragraph 17, 40 CFR 60 Subpart J).

G.23. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 63 Subpart DDDDD (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302 and 40 CFR 63, Subpart DDDDD).

G.24. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302 and 40 CFR 63 Subpart CC).

G.25. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart GGG (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart GGG).

G.26. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart GGGa (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 63 Subpart GGGa).

G.27. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63, Subpart QQQ).

G.28. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Reporting

G.29. Any compliance source test reports must be submitted in accordance with Section III.A.2 (ARM 17.8.106 and ARM 17.8.1212).

G.30. Calumet shall comply with all applicable reporting requirements of 40 CFR 63 Subpart UUU (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart UUU).

G.31. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart Ja (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302 and 40 CFR 60 Subpart Ja).

G.32. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart J (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302 and 40 CFR 60 Subpart J).

G.33. Calumet shall comply with all applicable reporting requirements of 40 CFR 63 Subpart DDDDD (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart DDDDD).

G.34. Calumet shall comply with all applicable reporting requirements of 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302 and 40 CFR 63 Subpart CC).

G.35. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart GGG (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302 and 40 CFR 60 Subpart GGG).

G.36. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart GGGa (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302 and 40 CFR 60 Subpart GGGa).

G.37. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302 and 40 CFR 60 Subpart QQQ).

G.38. Calumet shall comply with all applicable reporting requirements of 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

G.39. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements.

G.40. The semiannual monitoring report shall clearly identify all deviations from permit requirements and shall provide (ARM 17.8.1212(3)):

a. A summary of the of any source testing that was performed during the reporting period including date testing was performed, result of the test, and date the report was submitted or estimated to be submitted;

b. Summary demonstrating compliance status with 40 CFR 63 Subpart UUU, including reference to submittal dates of reports made or included;

c. Summary demonstrating compliance status with 40 CFR 60 Subpart Ja including reference to submittal dates of reports made or included;

d. Summary demonstrating compliance status with 40 CFR 60 Subpart J including reference to submittal dates of reports made or included;

e. Summary demonstrating compliance status with 40 CFR 63 Subpart CC including reference to submittal dates of reports made or included;

f. Summary demonstrating compliance status with 40 CFR 60 Subpart GGG including reference to submittal dates of reports made or included;

g. Summary demonstrating compliance status with 40 CFR 60 Subpart GGGa including reference to submittal dates of reports made or included;

h. Summary demonstrating compliance status with 40 CFR 60 Subpart QQQ including reference to submittal dates of reports made or included;

i. Summary demonstrating compliance status with 40 CFR 61 Subpart FF including reference to submittal dates of reports made or included.

H. EU07 – ALKYLATION UNIT

EU07a - Deisobutanizer Reboiler
EU07b - Pressure Vessels in Hydrofluoric Acid Service
EU07c - Equipment Components
EU07d – Individual Drain System

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
H.1, H.8, H.15, H.27, H.28	All HF acid pressure vessels	Vent to flare	Recordkeeping	Ongoing	Semiannual
H.2, H.9, H.15, H.16, H.27, H.28	Alkylation Unit fugitives	Design and operational standards	40 CFR 60.482-2 & 40 CFR 60.482-7, and 40 CFR 60 Subpart QQQ	Pumps: weekly Valves: monthly Other: quarterly	Semiannual
H.3, H.10, A.24, H.15, H.17, H.22, H.27, H.28	NSPS J Fuel Gas H_2S Content for Reboiler	NSPS J Fuel Gas H_2S Content: 0.10 gr/dscf	Fuel Gas H_2S CMS	Continuous	Quarterly
H.4, H.11, H.15, H.18, H.23, H.27, H.28	MACT DDDDD: HAPS from Alkylation Unit Process Heater	Work Practice Standards: Periodic Tune-ups	40 CFR 63 Subpart DDDDD	40 CFR 63 Subpart DDDDD	40 CFR 63 Subpart DDDDD and Semiannually
H.5, H.12, H.15, H.24, H.27, H.28	MACT CC – HAPS from equipment leaks	40 CFR 63 Subpart CC	40 CFR 60 Subpart VV	40 CFR 60 Subpart VV	Semiannual and 40 CFR 63 Subpart CC

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
H.5, H.12, H.15, H.24, H.27, H.28	MACT CC – HAPs from process vents	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	Semiannual and 40 CFR 63 Subpart CC
H.5, H.12, H.15, H.19, H.24, H.27, H.28	MACT CC – HAPs from drain system	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	Semiannual and 40 CFR 63 Subpart CC
H.6, H.13, H.15, H.20, H.25, H.27, H.28	NSPS QQQ: VOC from drain system	40 CFR 60 Subpart QQQ	40 CFR 60 Subpart QQQ	40 CFR 60 Subpart QQQ	Semiannual and 40 CFR 60 Subpart QQQ
H.7, H.14, H.15, H.21, H.26, H.27, H.28	NESHAP FF: Benzene from drain system	40 CFR 61 Subpart FF	40 CFR 61 Subpart FF	40 CFR 61 Subpart FF	Semiannual and 40 CFR 61 Subpart FF

Conditions

H.1. All pressure vessels in hydrofluoric acid service, except storage tanks, shall be vented to the flare system (ARM 17.8.1211, ARM 17.8.749, and ARM 17.8.752).

H.2. The hydrofluoric acid alkylation unit shall be operated and maintained as follows (ARM 17.8.749 and ARM 17.8.752):

a. All valves used shall be high quality valves containing high quality packing.

b. All open-ended valves shall be of the same quality as the valves described above. They shall have plugs or caps installed on the open end.

c. All pumps used in the alkylation plant shall be fitted with the highest quality state-of-the-art mechanical seals.

d. All pumps shall be monitored and maintained as described in 40 CFR 60.482-2 and all control valves shall be monitored and maintained as described in 40 CFR 60.482-7. All other potential sources of VOC leaks shall be inspected quarterly for evidence of leakage by visual or other detection methods. Repairs shall be made promptly as described in 40 CFR 482-7(d). Records of monitoring and maintenance shall be maintained on site for a minimum of 2 years.

e. All process drains shall consist of water seal traps with covers.

f. All equipment shall be operated and maintained as described in 40 CFR 60.692-2, 60.692-6, and 60.693-1. Inspection reports shall be made available for inspection upon request.

H.3. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart J – Standards of Performance for Petroleum Refineries, including as applicable to the Alkylation Unit Deisobutanizer Reboiler (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, 40 CFR 60 Subpart J, and Consent Decree Paragraph 15). The Alkylation Unit Deisobutanizer Reboiler shall burn only natural gas or fuel gas in compliance with 40 CFR 60 Subpart J (ARM 17.8.749).

H.4. Calumet shall comply with all applicable requirements of 40 CFR 63 Subpart DDDDD – National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, including as applicable to the Alkylation Unit Deisobutanizer Reboiler, a "gas category 1" process heater (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart DDDDD).

H.5. Calumet shall comply with all the applicable requirements in 40 CFR 63 Subpart CC – National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries, including compliance with referenced requirements in 40 CFR 60 Subpart VV – Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, requirements for miscellaneous process vents, and wastewater provisions (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

H.6. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart QQQ – Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

H.7. Calumet shall comply with all applicable requirements of 40 CFR 61 Subpart FF – National Emissions Standard for Benzene Waste Operations, as applicable to the individual drain system of the Alkylation Unit (ARM 17.8.1211, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Compliance Demonstration

H.8. Calumet shall maintain a log to document that all pressure vessels in HF acid service are vented to the flare, which shall specifically include the reasons for every case in which an applicable pressure vessel is not vented to the flare (ARM 17.8.1213).

H.9. Compliance with Section III.H.2 for pumps and control valves not subject to 40 CFR 63 Subpart CC shall meet the requirements of 40 CFR 60.482-2 and 40 CFR 60.482-7, respectively, that includes, but is not limited to the following (ARM 17.8.1213):

a. Each pump in light liquid service shall be monitored monthly to determine leaks by methods specified in §60.485;

b. Each pump in light liquid service shall be visually inspected each calendar week for indications of liquids dripping from the pump seal; and

c. Each control valve shall be monitored as per 40 CFR 60.482-7 to detect leaks by the methods specified in §60.485.

H.10. Calumet shall monitor compliance with 40 CFR 60 Subpart J as required by 40 CFR 60 Subpart J (ARM 17.8.1213, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart J).

H.11. Calumet shall monitor compliance with 40 CFR 63 Subpart DDDDD as required by 40 CFR 63 Subpart DDDDD (ARM 17.8.1213, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart DDDDD).

H.12. Calumet shall monitor compliance with 40 CFR 63 Subpart CC as required by 40 CFR 63 Subpart CC (ARM 17.8.1213, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

H.13. Calumet shall monitor compliance with 40 CFR 60 Subpart QQQ as required by 40 CFR 60 Subpart QQQ (ARM 17.8.1213, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

H.14. Calumet shall monitor compliance with 40 CFR 61 Subpart FF as required by 40 CFR 61 Subpart FF (ARM 17.8.1213, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Recordkeeping

H.15. Calumet shall maintain, under Calumet's control, all records required for compliance monitoring as a permanent business record for at least 5 years. Furthermore, the records must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.1212).

H.16. Calumet shall maintain records of inspections and repairs made under Section III.H.9 (ARM 17.8.1212).

H.17. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart J (ARM 17.8.1212, ARM 17.8.340, ARM 178.8.302, and 40 CFR 60 Subpart J).

H.18. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 63 Subpart DDDDD (ARM 17.8.1212, ARM 17.8.342, AM 17.8.302, and 40 CFR 63 Subpart DDDDD).

H.19. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

H.20. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

H.21. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Reporting

H.22. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart J (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302 and 40 CFR 60 Subpart J).

H.23. Calumet shall comply with all applicable reporting requirements of 40 CFR 63 Subpart DDDDD (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302 and 40 CFR 63 Subpart DDDDD).

H.24. Calumet shall comply with all applicable reporting requirements of 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302 and 40 CFR 63 Subpart CC).

H.25. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

H.26. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

H.27. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements.

H.28. The semiannual monitoring report shall clearly identify all deviations from permit requirements and shall provide (ARM 17.8.1212(3)):

a. summary of the HF acid pressure vessel log required by Section III.H.8;
b. summary of the leak detection and repair log required by Section III.H.16;
c. summary demonstrating compliance status with 40 CFR 60 Subpart J including reference to submittal dates of reports made or included;
d. Summary demonstrating compliance status with 40 CFR 63 Subpart DDDDD including reference to submittal dates of reports made or included;
e. summary demonstrating compliance status with 40 CFR 63 Subpart CC including reference to submittal dates of reports made or included;
f. summary demonstrating compliance status with 40 CFR 60 Subpart QQQ including reference to submittal dates of reports made or included;
g. summary demonstrating compliance status with 40 CFR 61 Subpart FF including reference to submittal dates of reports made or included.

I. EU08 – ISOMERIZATION UNIT

EU08a – Equipment Components
EU08b – Individual Drain System

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
I.1, I.5, I.8, I.9, I.12, I.15, I.16	MACT CC – HAPs from equipment leaks	40 CFR 63 Subpart CC	40 CFR 60 Subpart VV	40 CFR 60 Subpart VV	40 CFR 63 Subpart CC and Semiannual
I.2, I.5, I.8, I.9, I.12, I.15, I.16	MACT CC – HAPs from drain system	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC and Semiannual
I.3, I.6, I.8, I.10, I.13, I.15, I.16	NSPS QQQ – VOC from drain system	40 CFR 60 Subpart QQQ	40 CFR 60 Subpart QQQ	40 CFR 60 Subpart QQQ	40 CFR 60 Subpart QQQ and semiannual
I.4, I.7, I.8, I.11, I.14, I.15, I.16	NESHAP FF – benzene from drain system	40 CFR 61 Subpart FF	40 CFR 61 Subpart FF	40 CFR 61 Subpart FF	40 CFR 61 Subpart FF and semiannual

Conditions

I.1. Calumet shall comply with all the applicable requirements in 40 CFR 63 Subpart CC – National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries, including compliance with referenced requirements in 40 CFR 60 Subpart VV – Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

I.2. Calumet shall comply with all applicable requirements of 40 CFR 63 Subpart CC – National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries for wastewater provisions (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

I.3. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart QQQ – Standards of Performance for VOC emissions from Petroleum Refinery Wastewater Systems as applicable to the Isomerization Unit individual drain system (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

I.4. Calumet shall comply with all applicable requirements of 40 CFR 61 Subpart FF – National Emissions Standard for Benzene Waste Operations, as applicable to the drain system of the Isomerization Unit (ARM 17.8.1211, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Compliance Demonstration

I.5. Calumet shall monitor compliance with 40 CFR 63 Subpart CC as required by 40 CFR 63 Subpart CC (ARM 17.8.1213, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

I.6. Calumet shall monitor compliance with 40 CFR 60 Subpart QQQ as required by 40 CFR 60 Subpart QQQ (ARM 17.8.1213, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

I.7. Calumet shall monitor compliance with 40 CFR 61 Subpart FF as required by 40 CFR 61 Subpart FF (ARM 17.8.1213, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Recordkeeping

I.8. Calumet shall maintain, under Calumet's control, all records required for compliance monitoring as a permanent business record for at least 5 years. Furthermore, the records must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.1212).

I.9. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 63 Subpart CC. (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

I.10. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

I.11. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Reporting

I.12. Calumet shall comply with all applicable reporting requirements of 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302 and 40 CFR 63 Subpart CC).

I.13. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

I.14. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

I.15. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements.

I.16. The semiannual monitoring report shall clearly identify all deviations from permit requirements and shall provide (ARM 17.8.1212(3)):

a. summary demonstrating compliance status with 40 CFR 63 Subpart CC including reference to submittal dates or reports made or included;
b. summary demonstrating compliance status with 40 CFR 60 Subpart QQQ including reference to submittal dates or reports made or included;
c. summary demonstrating compliance status with 40 CFR 61 Subpart FF including reference to submittal dates or reports made or included.

J. EU09 – HYDROGEN PLANTS

EU09a - #1 H_2 Plant Furnace H-1801
EU09b - #1 H_2 Plant Equipment Components
EU09c - #1 H_2 Plant Individual Drain System
EU09d - #2 H_2 Plant Furnace H-2815
EU09e - #2 H_2 Plant Equipment Components
EU09f - #2 H_2 Plant Individual Drain System
EU09g - #3 H_2 Plant Furnace A: H-3815A
EU09h - #3 H_2 Plant Furnace B: H-3815B
EU09i - #3 H_2 Plant Equipment Components
EU09j - #3 H_2 Plant Individual Drain System

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
J.1, J.22, J.34, J.35, J.45, J.54	NO_X and CO Umbrella Limit: #3 Hydrogen Plant:	Section III.B.5 and III.B.6	NO_X: CEMS CO: Source Test	NO_X: Ongoing CO: Annually	Quarterly and Section III.A.2
J.2, J.19, A.2, J.34, J.54, J.55	#1 H_2 Plant NO_X	0.07 lb/MMBtu 1.90 lb/hr 8.3 TPY	Source test Fuel Tracking	Once/permit term Ongoing	Semiannual and Section III.A.2

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
J.3, J.19, A.2, J.34, J.54, J.55	#1 H_2 Plant CO	0.93 lb/hr 4.1 TPY	Source Test Fuel Tracking	Once/permit term Ongoing	Semiannual and Section III.A.2
J.4, J.20, J.34, J.54, J.55	H_2 Plant Furnaces Fuel Type	Burn natural gas and recycled hydrogen plant gas only	Recordkeeping	Ongoing	Semiannual
J.5, J.21, J.34, J.54, J.55	#3 H_2 Plant Capacity	67 MMBtu/hr each heater	Recordkeeping	Ongoing	Semiannual
J.6, J.27, J.34, J.37, J.47, J.54, J.55	#2 H_2 Plant Furnace NO_X (BACT and CD)	0.033 lb/MMBtu - HHV	NO_X CEMS	Continuous	Semiannual
J.7, J.22, J.34, J.44, J.54, J.55	#3 H_2 Plant Furnace NO_X (BACT)	0.051 lb/MMBtu, 30-day average	NO_X CEMS	Continuous	Semiannual
J.8, J.23, J.34, J.54, J.55	#3 H_2 Plant CO	0.03 lb/MMBtu 17.6 TPY	Testing once every 5 years concurrent with NO_X RATA	Continuous	Semiannual
J.9, J.24, J.34, J.54, J.55	#3 H_2 Plant CO_2	133,038 TPY	Recordkeeping	Continuous	Semiannual
J.10, J.34, J.54, J.55	#3 H_2 Plant PM, PM_{10}, and $PM_{2.5}$	PM/PM_{10}: 0.00051 lb/MMBtu $PM_{2.5}$: 0.00042 lb/MMBtu	Recordkeeping and Method 201a and 202	As required by the Department and Section III.A.1	Semiannual and Section III.A.2
J.11, A.24, J.26, J.34, J.36, J.46, J.54, J.55	NSPS J: #1 H_2 Plant Furnace SO_2	Burn natural gas and recycled hydrogen plant gas only	40 CFR 60 Subpart J @ 40 CFR 60.105(b)	40 CFR 60 Subpart J	Quarterly and 40 CFR 60 Subpart J
J.12, J.27, J.37, J.47, J.54, J.55	NSPS Ja: #2 and #3 H_2 Plant Furnaces SO_2	Burn natural gas and recycled hydrogen plant gas only	40 CFR 60 Subpart Ja @ 40 CFR 60.107a(b)	40 CFR 60 Subpart Ja	40 CFR 60 Subpart Ja and Semiannual
J.12, J.27, J.37, J.47, J.54, J.55	NSPS Ja: #2 and #3 H_2 Plant Furnaces NO_X	60 ppmvd @ 0% O_2, 30-day rolling average or 0.060 lb/MMBtu-HHV, 30-day rolling average	NO_X CEMS	Continuous	40 CFR 60 Subpart Ja and Semiannual

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
J.13, J.28, J.34, J.38, J.48, J.54, J.55	MACT DDDDD: HAPs from Hydrogen Plant Furnaces	40 CFR 63 Subpart DDDDD: Work Practice Standards: Periodic Tune-ups	40 CFR 63 Subpart DDDDD	40 CFR 63 Subpart DDDDD	40 CFR 63 Subpart DDDDD and Semiannual
J.14, J.29, J.39, J.49, J.54, J.55	NSPS GGG: #1 H_2 Plant VOC from equipment leaks	40 CFR 60 Subpart GGG	40 CFR 60 Subpart VV	40 CFR 60 Subpart VV	40 CFR 60 Subpart GGG and Semiannual
J.15, J.30, J.34, J.40, J.50, J.54, J.55	NSPS GGGa: #2 and #3 H_2 Plant VOC from equipment leaks	40 CFR 60 Subpart GGGa	40 CFR 60 Subpart VVa	40 CFR 60 Subpart VVa	40 CFR 60 Subpart GGGa and Semiannual
J.16, J.31, J.34, J.41, J.51, J.54, J.55	MACT CC: HAPs from drain systems	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC and Semiannual
J.17, J.32, J.34, J.42, J.52, J.54, J.55	NSPS QQQ: VOC from drain systems	40 CFR 60 Subpart QQQ	40 CFR 60 Subpart QQQ	40 CFR 60 Subpart QQQ	40 CFR 60 Subpart QQQ and Semiannual
J.18, J.33, J.34, J.43, J.53, J.54, J.55	NESHAP FF: Benzene from drain systems	40 CFR 61 Subpart FF	40 CFR 61 Subpart FF	40 CFR 61 Subpart FF	40 CFR 61 Subpart FF and Semiannual

Conditions

J.1. Calumet shall comply with the NO_X and CO Umbrella limits of Section III.B.5 and III.B.6. The #3 Hydrogen Plant H-3815A and B heaters are affected units (ARM 17.8.749, ARM 17.8.1211).

J.2. The #1 Hydrogen Plant furnace shall not exceed NO_X emissions of 0.07 lb/MMBtu, 1.90 lb/hr, and 8.3 tons per year (ARM 17.8.752 and ARM 17.8.1211).

J.3. The #1 Hydrogen Plant furnace shall not exceed CO emissions of 0.93 lb/hr or 4.1 TPY (ARM 17.8.752).

J.4. The Hydrogen Plant furnaces shall only be fired with commercially available natural gas, which may include recycled gas from the hydrogen plants, and shall not be fired with refinery fuel gas or refinery liquified petroleum gas (ARM 17.8.1211 and ARM 17.8.752).

J.5. The #3 Hydrogen Plant furnace must be equipped with ultra-low NO_X burners and the maximum capacity of each of the two heaters shall not exceed 67 MMBtu/hr on a HHV basis (ARM 17.8.752 and ARM 17.8.1211).

J.6. The #2 Hydrogen Plant furnace must be equipped with next-generation ultra-low NO_X burners (ARM 17.8.1211 and ARM 17.8.749). NO_X emissions from the process heater shall not exceed 0.033 lb/MMBtu based on a higher heating value basis (ARM 17.8.752 and ARM 17.8.1211).

J.7. NO_X emissions from each #3 Hydrogen Plant heater shall not exceed 0.051 lb/MMBtu based on a 30-day rolling average (ARM 17.8.752 and ARM 17.8.1211).

J.8. CO emissions from each #3 Hydrogen Plant heater shall not exceed 0.03 lb/MMBtu or 17.6 tons per year based on a 12-month rolling average (ARM 17.8.1211 and ARM 17.8.752).

J.9. The combined carbon dioxide equivalent emissions from the #3 Hydrogen Plant heaters shall not exceed 133,038 TPY based on a 12-month rolling average (ARM 17.8.752).

J.10. Calumet shall control PM, PM_{10} and $PM_{2.5}$ emissions from each Hydrogen Plant #3 Reformer Heater (H-31A and H-31B) by utilizing good combustion practices and only combusting low sulfur fuels.

a. PM/PM_{10} emissions shall note exceed 0.00051 lb/MMBtu
b. $PM_{2.5}$ emissions shall not exceed 0.00042 lb/MMBtu

J.11. Calumet shall comply with requirements of 40 CFR 60 Subpart J – Standards of Performance for Petroleum Refineries, as applicable to the #1 Hydrogen Plant Furnace as requirement of the Consent Decree (ARM 17.8.1211 and Consent Decree Paragraph 15).

J.12. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart Ja – Standards of Performance for Petroleum Refineries, including as applicable to the #2 and #3 Hydrogen Plant Furnaces (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Ja).

J.13. Calumet shall comply with all applicable requirements of 40 CFR 63 Subpart DDDDD – National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, including as applicable to the #1, #2, and #3 Hydrogen Plant Furnaces, "gas category 1" process heaters (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart DDDDD).

J.14. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart GGG – Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries and referenced requirements of 40 CFR 60 Subpart VV, including as applicable to the #1 Hydrogen Plant (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart GGG).

J.15. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart GGGa – Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries and referenced requirements of 40 CFR 60 Subpart VVa, including as applicable to the #2 and #3 Hydrogen Plants (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart GGGa).

J.16. Calumet shall comply with all applicable requirements of 40 CFR 63 Subpart CC as applicable to the drain systems of the hydrogen plants (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 63 Subpart CC).

J.17. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart QQQ as applicable to the individual drain systems of each hydrogen plant (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

J.18. Calumet shall comply with all applicable requirements of 40 CFR 61 Subpart FF as applicable to the drain systems of the hydrogen plants (ARM 17.8.1211, ARM 17.8.341, and 40 CFR 61 Subpart FF).

Compliance Demonstration

J.19. Calumet shall test the Hydrogen Plant #1 reformer heater biennially, to monitor compliance with the NO_X and CO limitations of Section III.J.2 and III.J.3 (ARM 17.8.1213) and to determine an emissions factor to monitor compliance with the mass emissions limitations of Section III.J.2 and III.J.3. (ARM 17.8.1213). Monitoring for NO_X and CO mass emission limits shall be based upon actual fuel burning rates and the emission factors developed from the most recent compliance source test (ARM 17.8.1213, ARM 17.8.749). Should the unit be idle at testing deadline, testing shall be conducted as soon as reasonably possible after startup, which shall not be greater than 180 days after startup (ARM 17.8.1213).

J.20. Calumet shall maintain a record of the type(s) of fuel burned in the hydrogen plant furnaces (ARM 17.8.1213).

J.21. Calumet shall maintain on-site, and available upon request, record of the maximum rated capacity of #3 Hydrogen Plant furnaces (ARM 17.8.1213).

J.22. #3 Hydrogen Plant Reformer Heaters H-3815A and H-3815B shall be equipped with NO_X CEMS in compliance with 40 CFR 60 Subpart A and Ja by no later than June 30, 2018 (ARM 17.8.749, ARM 17.8.1213).

J.23. Once during the term of this permit, Calumet shall conduct CO testing to monitor compliance with Section III.J.8. An emissions factor shall be developed from the test to monitor compliance with the TPY emissions limitation of Section III.J.8 (ARM 17.8.1213, ARM 17.8.106).

J.24. By the 25th of each month, Calumet shall calculate and record the monthly and rolling 12-month emissions of CO_2e from the #3 hydrogen plant (ARM 17.8.1213).

J.25. Calumet shall maintain records demonstrating utilization of good combustion practices, and combusting low sulfur fuels. NSPS Ja fuel gas H_2S records may be utilized to monitor low sulfur fuel combustion. As required by the Department and Section III.A.1, Calumet shall test the H-4101 and H-4102 heaters utilizing Method 201 and 202. During the next refinery turnaround or as opportunity may provide, Calumet shall make any modifications as may be required to ensure that Hydrogen Plant #3 heaters are equipped with appropriate sampling ports such that Method 201A and Method 202 testing could be accomplished if requested (ARM 17.8.105, ARM 17.8.1213).

J.26. Calumet shall monitor compliance with 40 CFR 60 Subpart J as required by 40 CFR 60 Subpart J (ARM 17.8.1213, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart J).

J.27. Calumet shall monitor compliance with 40 CFR 60 Subpart Ja as required by 40 CFR 60 Subpart Ja (ARM 17.8.1213, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Ja).

J.28. Calumet shall monitor compliance with 40 CFR 63 Subpart DDDDD as required by 40 CFR 63 Subpart DDDDD (ARM 17.8.1213, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart DDDDD).

J.29. Calumet shall monitor compliance with 40 CFR 60 Subpart GGG as required by 40 CFR 60 Subpart GGG (ARM 17.8.1213, ARM 17.8.302, ARM 17.8.340, and 40 CFR 60 Subpart GGG).

J.30. Calumet shall monitor compliance with 40 CFR 60 Subpart GGGa as required by 40 CFR 60 Subpart GGGa (ARM 17.8.1213, ARM 17.8.302, ARM 17.8.340, and 40 CFR 60 Subpart GGGa).

J.31. Calumet shall monitor compliance with 40 CFR 63 Subpart CC as required by 40 CFR 63 Subpart CC (ARM 17.8.1213, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

J.32. Calumet shall monitor compliance with 40 CFR 60 Subpart QQQ as required by 40 CFR 60 Subpart QQQ (ARM 17.8.1213, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

J.33. Calumet shall monitor compliance with 40 CFR 61 Subpart FF as required by 40 CFR 61 Subpart FF (ARM 17.8.1213, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Recordkeeping

J.34. Calumet shall maintain, under Calumet's control, all records required for compliance monitoring as a permanent business record for at least 5 years. Furthermore, the records must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.1212).

J.35. Calumet shall comply with the NO_X and CO Umbrella limit related recordkeeping requirements of Section III.B.17 (ARM 17.8.1212).

J.36. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart J (ARM 17.8.1212, ARM 17.8.340, ARM 178.8.302, and 40 CFR 60 Subpart J).

J.37. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart Ja (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Ja).

J.38. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 63 Subpart DDDDD (ARM 17.8.1212, ARM 17.8.342, AM 17.8.302, and 40 CFR 63 Subpart DDDDD).

J.39. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart GGG (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart GGG).

J.40. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart GGGa (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 63 Subpart GGGa).

J.41. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

J.42. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

J.43. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Reporting

J.44. No less than semiannually, Calumet shall submit a CEMS performance and excess emissions report for NO_X emissions from the #3 Hydrogen Plant furnace, in format equivalent to as submitted for NSPS Ja. Additionally, daily 30-day averages shall be submitted for days in which any excess emissions occurred (ARM 17.8.1212 and ARM 17.8.1213).

J.45. Calumet shall comply with the NO_X and CO Umbrella limit reporting requirements of Section III.B.24 (ARM 17.8.1212).

J.46. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart J (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302 and 40 CFR 60 Subpart J).

J.47. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart Ja (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302 and 40 CFR 60 Subpart Ja).

J.48. Calumet shall comply with all applicable reporting requirements of 40 CFR 63 Subpart DDDDD (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302 and 40 CFR 63 Subpart DDDDD).

J.49. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart GGG (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302 and 40 CFR 60 Subpart GGG).

J.50. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart GGGa (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302 and 40 CFR 60 Subpart GGGa).

J.51. Calumet shall comply with all applicable reporting requirements of 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302 and 40 CFR 63 Subpart CC).

J.52. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

J.53. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

J.54. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements.

J.55. The semiannual monitoring report shall clearly identify all deviations from permit requirements and shall provide (ARM 17.8.1212(3)):

a. summary of hydrogen plant #1, #2, and #3 NO_X and CO emissions as applicable
b. summary of hydrogen plant #3 CO_2 emissions
c. a summary of the of any source testing that was performed during the reporting period including date testing was performed, result of the test, and date the report was submitted or estimated to be submitted;
d. summary demonstrating compliance status with 40 CFR 60 Subpart J including reference to submittal dates or reports made or included;
e. summary demonstrating compliance status with 40 CFR 60 Subpart Ja including reference to submittal dates or reports made or included;
f. summary demonstrating compliance status with 40 CFR 63 Subpart DDDDD including reference to submittal dates or reports made or included;
g. summary demonstrating compliance status with 40 CFR 63 Subpart GGG including reference to submittal dates or reports made or included;
h. summary demonstrating compliance status with 40 CFR 63 Subpart GGGa including reference to submittal dates or reports made or included;
i. summary demonstrating compliance status with 40 CFR 63 Subpart CC including reference to submittal dates or reports made or included;
j. summary demonstrating compliance status with 40 CFR 60 Subpart QQQ including reference to submittal dates or reports made or included;
k. summary demonstrating compliance status with 40 CFR 61 Subpart FF including reference to submittal dates or reports made or included.

K. EU10 – POLYMER-MODIFIED ASPHALT UNIT

EU10a – Storage Tank #50
EU10b – Storage Tank #55
EU10c - Storage Tank #55 Heater
EU10d – Storage Tank #56
EU 10e - Storage Tank #56 Heater
EU10f – Storage Tank #69
EU10g – Storage Tank #110
EU10h – Storage Tank #110 Heater
EU10i – Storage Tank #102
EU10j – Storage Tank #112
EU10k - Storage Tank #112 Heater
EU10l – Storage Tank #130
EU10m – Storage Tank #130 Heater
EU10n – Storage Tank #132
EU10o – Storage Tank #132 Heater
EU10p – Storage Tank #133
EU10q – Storage Tank #133 Heater
EU10r – Storage Tank #135
EU10s – Storage Tank #135 Heater
EU10t – Storage Tank #137
EU10u – Storage Tank #137 Heater
EU10v – Storage Tank #138
EU10w – Storage Tank #138 Heater
EU10x – Storage Tank #139
EU10y – Storage Tank #139 Heater
EU10z – Storage Tank #140
EU10aa – Storage Tank #140 Heater
EU10bb – Equipment Components
EU10cc – Individual Drains

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
K.1, K.13, K.22, K.38, K.39	VOC	Operational design and maintenance	Inspection	Ongoing	Semiannually

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
K.2, A.24, K.13, K.14, K.22, K.23, K.31, K.38, K.39	NSPS J SO_2: Tank Heaters for Tanks 55, 56, 110, 112, 130, 132, 133, 135, 137, 139, 140	40 CFR 60 Subpart J	Fuel Gas Monitoring	Continuous	Quarterly and 40 CFR 60 Subpart J
K.3, K.15, K.22, K.24, K.32, K.38, K.39	NSPS Ja SO_2: Tank Heater 138	40 CFR 60 Subpart Ja	Fuel Gas Monitoring	Continuous	40 CFR 60 Subpart Ja, Semiannual
K.4, K.16, K.22, K.25, K.30, K.33, K.38, K.39	MACT DDDDD: All tank heaters	40 CFR 63 Subpart DDDDD	40 CFR 63 Subpart DDDDD	40 CFR 63 Subpart DDDDD	40 CFR 63 Subpart DDDDD and semiannual
K.5, K.17, K.22, K.26, K.34, K.38, K.39	MACT CC: Group II Tanks – All Tanks	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC and semiannual
K.6, K.18, K.22, K.27, K.35, K.38, K.39	NSPS UU: Tanks 50, 102, 137, 138, 139, 140	40 CFR 60 Subpart UU	40 CFR 60 Subpart UU	40 CFR 60 Subpart UU	40 CFR 60 Subpart UU and semiannual
K.5, K.17, K.22, K.26, K.34, K.38, K.39	MACT CC: leaks from equipment components	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC and semiannual
K.7, K.19, K.22, K.28, K.36, K.38, K.39	NSPS GGG: leaks from equipment components	40 CFR 60 Subpart GGG	40 CFR 60 Subpart GGG	40 CFR 60 Subpart GGG	40 CFR 60 Subpart GGG and semiannual
K.5, K.17, K.22, K.26, K.34, K.38, K.39	MACT CC: HAPs from individual drain system	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC and semiannual
K.8, K.20, K.22, K.29, K.37, K.38, K.39	NESHAP FF: benzene from individual drain system	40 CFR 61 Subpart FF	40 CFR 61 Subpart FF	40 CFR 61 Subpart FF	40 CFR 61 Subpart FF and semiannual
K.9, K.21, K.22, K.38, K.39	Storage Tanks #50 and #102	Fixed Roof	Recordkeeping	Ongoing	Semiannual

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Frequency	Reporting Requirements
K.10, K.21, K.22, K.38, K.39	Storage Tanks #50, 55, 56, 69, 102, 110, 112, 130, 132, 133, 135, 137, 139, 140	Heavy Oil use only	Recordkeeping	Ongoing	Semiannual
K.11, K.13, A.24, K.22, K.23, K.38, K.39	Asphalt Tank Heaters on Tanks #135, 137, 139, and 140	Natural Gas or NSPS J compliant fuel gas only	40 CFR 60 Subpart J	40 CFR 60 Subpart J	Quarterly and 40 CFR 60 Subpart J
K.12, K.13, A.24, K.22, K.23, K.38, K.39	Asphalt Tank Heaters on Tanks #130, 132, and 133	Natural Gas or NSPS J compliant fuel gas only	40 CFR 60 Subpart J	40 CFR 60 Subpart J	Quarterly and 40 CFR 60 Subpart J

Conditions

K.1. The PMA unit shall be operated and maintained as follows (ARM 17.8.752):

a. All open-ended valves shall have plugs or caps installed on the open end
b. All pumps in the PMA unit shall be equipped with standard single seals
c. All pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy service, and flanges and other connectors shall meet the standards described in 40 CFR 60.482-8. Repairs shall be made promptly as described in 40 CFR 60.482-7(e).

K.2. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart J, including as required by the consent decree and as applicable to heaters on tanks 55, 56, 110, 112, 130, 132, 133, 135, 137, 139, and 140 (ARM 17.8.1211, Consent Decree Paragraph 17.B, ARM 17.8.302, ARM 17.8.340, and 40 CFR 60 Subpart J).

K.3. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart Ja, including as applicable to the Tank 138 heater (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Ja).

K.4. Calumet shall comply with all applicable requirements of 40 CFR 63 Subpart DDDDD, including as applicable to all tank heaters (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart DDDDD).

K.5. Calumet shall comply with all applicable requirements of 40 CFR 63 Subpart CC, including as applicable to all polymer modified asphalt unit tanks, equipment components in the polymer modified asphalt unit, and the individual drain system in the polymer modified asphalt unit (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

K.6. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart UU – Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture including as applicable to asphalt storage tanks 50, 102, 137, 138, 139, 140 (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart UU).

K.7. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart GGG including as applicable to the equipment components in the polymer modified asphalt unit (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart GGG).

K.8. Calumet shall comply with all applicable requirements of 40 CFR 61 Subpart FF including as applicable to the individual drain system in the polymer modified asphalt unit (ARM 17.8.1211, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

K.9. Storage tanks #50 and #102 shall be equipped with a fixed roof (ARM 17.8.752).

K.10. Storage tanks #50, #55, #56, #69, #102, #110, #112, #130, #132, #133, #135, #137, #139, and #140 shall be used for heavy oil (ARM 17.8.749).

K.11. Asphalt tank heaters #135, #137, #139, and #140 shall burn only natural gas or refinery fuel gas in compliance with 40 CFR 60 Subpart J (ARM 17.8.749, Consent Decree, and 40 CFR 60 Subpart J).

K.12. Tanks #130, #132, and #133, equipped with 0.75 MMBtu/hr tank heaters, shall burn natural gas or refinery fuel gas in compliance with 40 CFR 60 Subpart J (ARM 17.8.752, Consent Decree, and 40 CFR 60 Subpart J).

Compliance Demonstration

K.13. Calumet shall conduct inspection and maintain records monitoring compliance with Section III.K.1 (ARM 17.8.1213).

K.14. Calumet shall monitor compliance with 40 CFR 60 Subpart J as required by 40 CFR 60 Subpart J (ARM 17.8.1213, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart J).

K.15. Calumet shall monitor compliance with 40 CFR 60 Subpart Ja as required by 40 CFR 60 Subpart Ja (ARM 17.8.1213, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Ja).

K.16. Calumet shall monitor compliance with 40 CFR 63 Subpart DDDDD as required by 40 CFR 63 Subpart DDDDD (ARM 17.8.1213, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart DDDDD).

K.17. Calumet shall monitor compliance with 40 CFR 63 Subpart CC as required by 40 CFR 63 Subpart CC (ARM 17.8.1213, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

K.18. Calumet shall monitor compliance with 40 CFR 60 Subpart UU as required by 40 CFR 60 Subpart UU (ARM 17.8.1213, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart UU).

K.19. Calumet shall monitor compliance with 40 CFR 60 Subpart GGG as required by 40 CFR 60 Subpart GGG (ARM 17.8.1213, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart GGG).

K.20. Calumet shall monitor compliance with 40 CFR 61 Subpart FF as required by 40 CFR 61 Subpart FF (ARM 17.8.1213, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

K.21. Calumet shall maintain onsite, and made available upon request, a map of tanks at the facility with Tank numbers clearly identified, and records of the capacity, design, and service of those tanks. Service changes shall be clearly logged, maintaining a history of the service of the tanks such that dates of service are maintained (ARM 17.8.1213).

Recordkeeping

K.22. Calumet shall maintain, under Calumet's control, all records required for compliance monitoring as a permanent business record for at least 5 years. Furthermore, the records must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.1212).

K.23. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart J (ARM 17.8.1212, ARM 17.8.340, ARM 178.8.302, and 40 CFR 60 Subpart J).

K.24. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart Ja (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Ja).

K.25. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 63 Subpart DDDDD (ARM 17.8.1212, ARM 17.8.342, AM 17.8.302, and 40 CFR 63 Subpart DDDDD).

K.26. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

K.27. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart UU (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart UU).

K.28. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart GGG (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart GGG).

K.29. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Reporting

K.30. Any compliance source test reports and/or logs must be submitted in accordance with Section III.A.2 (ARM 17.8.106 and ARM 17.8.1212).

K.31. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart J (ARM 17.8.1212, ARM 17.8.340, ARM 178.8.302, and 40 CFR 60 Subpart J).

K.32. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart Ja (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Ja).

K.33. Calumet shall comply with all applicable reporting requirements of 40 CFR 63 Subpart DDDDD (ARM 17.8.1212, ARM 17.8.342, AM 17.8.302, and 40 CFR 63 Subpart DDDDD).

K.34. Calumet shall comply with all applicable reporting requirements of 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

K.35. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart UU (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart UU).

K.36. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart GGG (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart GGG).

K.37. Calumet shall comply with all applicable reporting requirements of 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

K.38. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements.

K.39. The semiannual monitoring report shall clearly identify all deviations from permit requirements and shall provide (ARM 17.8.1212(3)):

a. A summary highlighting inspection as required by Section III.K.13
b. A summary demonstrating compliance status with 40 CFR 60 Subpart J including reference to submittal dates or reports made or included
c. A summary demonstrating compliance status with 40 CFR 60 Subpart Ja including reference to submittal dates or reports made or included
d. A summary demonstrating compliance status with 40 CFR 63 Subpart DDDDD including reference to submittal dates or reports made or included
e. A summary demonstrating compliance status with 40 CFR 63 Subpart CC including reference to submittal dates or reports made or included
f. A summary demonstrating compliance status with 40 CFR 60 Subpart UU including reference to submittal dates or reports made or included
g. A summary demonstrating compliance status with 40 CFR 60 Subpart GGG including reference to submittal dates or reports made or included
h. A summary demonstrating compliance status with 40 CFR 61 Subpart FF including reference to submittal dates or reports made or included
i. A summary of any updates made to the records required by Section III.K.21
j. A summary of results of any testing that was performed on any of the storage units during the reporting period;

L. EU11 – MILD HYDROCRACKER UNIT

EU11a – MHC Combined Feed Heater H-4101
EU11b – MHC Fractionator Feed Heater H-4102
EU11c – Process Vents
EU11d – C01 Recycle Hydrogen Compressor
EU11e – C02a Hydrogen Compressor
EU11f – C02b Hydrogen Compressor
EU11g – C03a Off-gas Compressor
EU11h – C03b Off-gas Compressor
EU11i – Equipment Components
EU11j – Individual Drain System

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
L.1, L.27, L.35, L.42, L.43	H-4101 and H-4102 Maximum Rated Capacity	H-4101: 54.0 MMBtu/hr H-4102: 38.0 MMBtu/hr	Recordkeeping	Ongoing	Semiannual
L.2, L.15, L.29, L.36, L.42, L.43	H-4101 NO_X	0.035 lb/MMBtu	CEMS	Continuous	Semiannual
L.3, L.16, A.2, L.27, L.42, L.43	H-4102 NO_X	0.040 lb/MMBtu	Method 7E	Annually	Semiannual and Section III.A.2
L.4, L.17, L.27, L.42, L.43, A.2	H-4101 and H-4102 CO	0.055 lb/MMBtu	Source Test	Once per permit term	As required by the Department and Section III.A.2
L.5, L.14, L.19, L.27, L.42, L.43, A.2	H-4101 and H-4102 CO_2e	141 lb/MMBtu	Recordkeeping of emissions based on fuel usage and established emissions factors	Ongoing	Semiannual
L.6, L.18, L.27, L.28, L.35, L.42, L.43	H-4101 and H-4102: NO_X and CO Umbrella Limit Affected Units	Section III.B.5 and III.B.6	NO_X: CEMS CO: Average emissions factor from portable analyzer + fuel usage	Ongoing	Quarterly
L.7, L.20, L.27, L.42, L.43, A.2	H-4101 and H-4102 PM/PM_{10}, and $PM_{2.5}$	PM and PM_{10}: 0.00051 lb/MMBtu $PM_{2.5}$: 0.00042 lb/MMBtu	Source Test	As required by the Department and Section III.A.1	As required by the Department and Section III.A.2

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
L.8, L.21, L.27, L.29, L.36, L.42, L.43	NSPS Ja SO_2/H_2S: H-4101 and H-4102	162 ppmv on a 3-hr average basis and 60 ppmv determined daily on a 365 succesive calendar day rolling average basis	NSPS Ja Fuel Gas H_2S CMS	Continuous	Semiannual and 40 CFR 60 Subpart Ja
L.8, L.15, L.21, L.27, L.29, L.36, L.42, L.43	NSPS Ja NO_X: H-4101	40 ppmvd at 0% O_2 determined daily on a 30-day rolling average, or 0.040 lb/MMBtu-HHV on a 30-day rolling average	NO_X CEMS	Continuous	Semiannual and 40 CFR 60 Subpart Ja
L.9, L.22, L.30, L.37, L.42, L.43	MACT DDDDD: HAPs from H-4101 and H-4102	40 CFR 63 Subpart DDDDD	40 CFR 63 Subpart DDDDD	40 CFR 63 Subpart DDDDD	Semiannual and 40 CFR 63 Subpart DDDDD
L.10, L.23, L.33, L.38, L.42, L.43	MACT CC: HAPs from process vents	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	Semiannual and 40 CFR 63 Subpart CC
L.10, L.23, L.33, L.38, L.42, L.43	MACT CC: HAPs from equipment components	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	Semiannual and 40 CFR 63 Subpart CC
L.10, L.23, L.33, L.38, L.42, L.43	MACT CC: HAPs from individual drain system	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	Semiannual and 40 CFR 63 Subpart CC
L.11, L.24, L.31, L.39, L.42, L.43	NSPS GGGa: VOC from equipment components	40 CFR 60 Subpart GGGa	40 CFR 60 Subpart GGGa	40 CFR 60 Subpart GGGa	Semiannual and 40 CFR 60 Subpart GGGa
L.12, L.25, L.32, L.40, L.42, L.43	NSPS QQQ: VOC from individual drain system	40 CFR 60 Subpart QQQ	40 CFR 60 Subpart QQQ	40 CFR 60 Subpart QQQ	Semiannual and 40 CFR 60 Subpart QQQ
L.13, L.26, L.34, L.41, L.42, L.43	NESHAP FF: benzene from individual drain system	40 CFR 61 Subpart FF	40 CFR 61 Subpart FF	40 CFR 61 Subpart FF	Semiannual and 40 CFR 61 Subpart FF

Conditions

L.1. The maximum rated capacity of the H-4101 and H-4102 shall not exceed 54.0 and 38.0 MMBtu/hr, respectively (ARM 17.8.1212 and ARM 17.8.749).

L.2. The H-4101 shall be equipped with ULNB and NO_X emissions shall not exceed 0.035 lb/MMBtu-HHV based on a 30-day rolling average (ARM 17.8.1211, ARM 17.8.749, ARM 17.8.752).

L.3. The H-4102 shall be equipped with ULNB and NO_X emissions shall not exceed 0.040 lb/MMBtu-HHV based on a 3-hour average (ARM 17.8.1211, ARM 17.8.752).

L.4. CO emissions from the H-4101 and H-4102 shall not exceed 0.055 lb/MMBtu (ARM 17.8.752).

L.5. CO_2e emissions from the H-4101 and H-4102 heaters shall not exceed 141 lb/MMBtu. (ARM 17.8.1212 and ARM 17.8.752).

L.6. Calumet shall comply with the NO_X and CO Umbrella Limitations of Section III.B.5 and III.B.6. The H-4101 and H-4102 are affected units (ARM 17.8.1211 and ARM 17.8.749).

L.7. Calumet shall control PM, PM_{10}, and $PM_{2.5}$ emissions from each heater by utilizing good combustion practices and only combusting low sulfur fuels. Particulate emissions from the H-4101 and H-4102 shall not exceed the following (ARM 17.8.752):

a. PM and PM_{10} emissions: 0.00051 lb/MMBtu
b. $PM_{2.5}$ emissions: 0.00042 lb/MMBtu

L.8. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart Ja, including as applicable to the MHC Combined Feed Heater H-4101 for NO_X and SO_2/H_2S, and MHC Fractionator Feed Heater H-4102 for SO_2/H_2S (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, 40 CFR 60 Subpart Ja).

L.9. Calumet shall comply with all applicable requirements of 40 CFR 63 Subpart DDDDD, as applicable to the MHC Combined Feed Heater H-4101 and MHC Fractionator Feed Heater H-4102 (ARM 17.08.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart DDDDD).

L.10. Calumet shall comply with all applicable requirements of 40 CFR 63 Subpart CC, including as applicable to the process vents, equipment components, and the individual drain system in the mild hydrocracking unit (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

L.11. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart GGGa, including as applicable to equipment components in the mild hydrocracking unit and the C01, C02a, C02b, C03a, and C03b compressors (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart GGGa).

L.12. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart QQQ, including as applicable to the individual drain system in the mild hydrocracking unit (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

L.13. Calumet shall comply with all applicable requirements of 40 CFR 61 Subpart FF, including as applicable to the individual drain system in the mild hydrocracking unit (ARM 17.8.1211, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Compliance Demonstration

L.14. Calumet shall maintain on-site and available upon request, documentation of the maximum rated capacity of the H-4101 and H-4102 (ARM 17.8.1213).

L.15. The Mild Hydrocracker Heater H-4101 shall be equipped with NO_X CEMS in compliance with 40 CFR 60 Subpart A and Ja by no later than June 30, 2018 (ARM 17.8.749).

L.16. Once every calendar year, Calumet shall test H-4102 for NO_X emissions utilizing Method 7E. Fuel usage during the test and fuel analysis taken from fuel used during the test shall be determined to report an average lb/MMBtu value. The lb/MMBtu value shall be used to monitor compliance with the limitation of Section III.L.3 and as the emissions factor for use in determining mass emissions of NO_X for Umbrella limit recordkeeping (ARM 17.8.1213).

L.17. Once during the term of this permit, Calumet shall conduct a CO test utilizing Method 10, and utilizing fuel analyses taken from the day of the testing, determine the lb/MMBtu emissions against the limitation of Section III.L.3. All CO testing shall be concurrent with NO_X testing. (ARM 17.8.1213).

L.18. Calumet shall utilize a CO emissions factor derived as the average of all portable analyzer testing results completed, and continuously monitor fuel usage in each unit, to monitor mass emissions of CO from the H-4101 and H-4102 heaters for purposes of the CO Umbrella Limit monitoring, until a CO test is performed. After such test is performed, Calumet shall utilize the emissions factor determined in the last source test. By no later than the 25th of each month, Calumet shall determine the monthly and rolling 12-month sum of mass emissions of CO from each unit (ARM 17.8.1213).

L.19. Calumet shall monitor compliance with the CO_2e emissions limitations of Section III.D.7 by tracking fuel usage and utilizing established emissions factors as used for greenhouse gas emissions reporting. (ARM 17.8.105, ARM 17.8.1213).

L.20. Calumet shall maintain records demonstrating utilization of good combustion practices, and combusting low sulfur fuels. NSPS Ja fuel gas H_2S records may be utilized to monitor low sulfur fuel combustion. As required by the Department and Section III.A.1, Calumet shall test the H-4101 and H-4102 heaters utilizing Method 201 and 202. During the next refinery turnaround or as opportunity may provide, Calumet shall make any modifications as may be required to ensure that H-4101 and H-4102 is equipped with appropriate sampling ports such that Method 201A and Method 202 testing could be accomplished if requested (ARM 17.8.105, ARM 17.8.1213).

L.21. Calumet shall monitor compliance with 40 CFR 60 Subpart Ja as required by 40 CFR 60 Subpart Ja (ARM 17.8.1213, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Ja).

L.22. Calumet shall monitor compliance with 40 CFR 63 Subpart DDDDD as required by 40 CFR 63 Subpart DDDDD (ARM 17.8.1213, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart DDDDD).

L.23. Calumet shall monitor compliance with 40 CFR 63 Subpart CC as required by 40 CFR 63 Subpart CC (ARM 17.8.1213, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

L.24. Calumet shall monitor compliance with 40 CFR 60 Subpart GGGa as required by 40 CFR 60 Subpart GGGa (ARM 17.8.1213, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart GGGa).

L.25. Calumet shall monitor compliance with 40 CFR 60 Subpart QQQ as required by 40 CFR 60 Subpart QQQ (ARM 17.8.1213, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

L.26. Calumet shall monitor compliance with 40 CFR 61 Subpart FF as required by 40 CFR 61 Subpart FF (ARM 17.8.1213, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Recordkeeping

L.27. Calumet shall maintain, under Calumet's control, all records required for compliance monitoring as a permanent business record for at least 5 years. Furthermore, the records must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.1212).

L.28. Calumet shall comply with the NO_X and CO Umbrella limit recordkeeping requirement of Section III.B.17 for H-4101 and H-4102 (ARM 17.8.1212).

L.29. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart Ja (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Ja).

L.30. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 63 Subpart DDDDD (ARM 17.8.1212, ARM 17.8.342, AM 17.8.302, and 40 CFR 63 Subpart DDDDD).

L.31. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart GGGa (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart GGGa).

L.32. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

L.33. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

L.34. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Reporting

L.35. Calumet shall comply with the NO_X and CO Umbrella limit reporting requirements of Section III.B.26 (ARM 17.8.1212).

L.36. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart Ja (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Ja).

L.37. Calumet shall comply with all applicable reporting requirements of 40 CFR 63 Subpart DDDDD (ARM 17.8.1212, ARM 17.8.342, AM 17.8.302, and 40 CFR 63 Subpart DDDDD).

L.38. Calumet shall comply with all applicable reporting requirements of 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

L.39. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart GGGa (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart GGGa).

L.40. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

L.41. Calumet shall comply with all applicable reporting requirements of 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

L.42. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements.

L.43. The semiannual monitoring report shall clearly identify all deviations from permit requirements and shall provide (ARM 17.8.1212(3)):

a. The report required by Section III.B.26, or reference to it if submitted separately
b. A summary of data demonstrating compliance with the lb/MMBtu NO_X limit on H-4101 and H-4102;
c. A summary of any source testing that was performed during the reporting period including date testing was performed, result of the test, and date the report was submitted or estimated to be submitted;
d. Summary of CO_2e emissions as kept by Section III.L.18;
e. A summary demonstrating compliance status with 40 CFR 60 Subpart Ja including reference to submittal dates or reports made or included;
f. A summary demonstrating compliance status with 40 CFR 63 Subpart DDDDD including reference to submittal dates or reports made or included;
g. A summary demonstrating compliance status with 40 CFR 63 Subpart CC including reference to submittal dates or reports made or included;
h. A summary demonstrating compliance status with 40 CFR 60 Subpart GGGa including reference to submittal dates or reports made or included;
i. A summary demonstrating compliance status with 40 CFR 60 Subpart QQQ including reference to submittal dates or reports made or included;
j. A summary demonstrating compliance status with 40 CFR 61 Subpart FF including reference to submittal dates or reports made or included;
k. A summary of results of any testing and reference to source test submittal date.

M. EU12 – HYDROTREATER UNIT

EU12a: Kerosene Heater
EU12b: HTU Heater (HDS Furnace Stack)
EU12c: Process Vents
EU12d: Equipment Components
EU12e: Individual Drain System

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
M.1, M.9, M.16, M.29, M.30	NO_X emissions from the HTU Heater	0.07 lb/MMBtu 1.42 lb/hr 6.2 ton/yr	Method 7 with emissions factor development and monthly calc	Method 7: Once during permit term Ton/yr: Monthly	Semiannual and Section III.A.2
M.2, M.9, M.16, M.29, M.30	CO emissions from the HTU Heater	0.79 lb/hr 3.5 ton/yr	Method 10 with emissions factor development and monthly calc	Method 10: Once during permit term Ton/yr: Monthly	Semiannual and Section III.A.2
M.3, M.10, A.24, M.16, M.17, M.23, M.29, M.30	40 CFR 60 Subpart J: H_2S in Fuel Gas Units Kerosene Heater and HTU Heater	162 ppmv on a 3-hr average basis	Fuel Gas H_2S CMS	Continuous	Quarterly and 40 CFR 60 Subpart J
M.4, M.11, M.16, M.18, M.24, M.29, M.30	MACT DDDDD: HAPs from HTU and Kerosene Heaters	40 CFR 63 Subpart DDDDD	40 CFR 63 Subpart DDDDD	40 CFR 63 Subpart DDDDD	Semiannual and 40 CFR 63 Subpart DDDDD
M.5, M.12, M.16, M.21, M.25, M.29, M.30	MACT CC: HAPs from process vents	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	Semiannual and 40 CFR 63 Subpart CC
M.5, M.12, M.16, M.21, M.25, M.29, M.30	MACT CC: HAPs from Equipment Components	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	Semiannual and 40 CFR 63 Subpart CC
M.6, M.13, M.16, M.19, M.26, M.29, M.30	NSPS GGG: VOC from equipment components	40 CFR 60 Subpart GGG	40 CFR 60 Subpart GGG	40 CFR 60 Subpart GGG	Semiannual and 40 CFR 60 Subpart GGG
M.7, M.14, M.16, M.20, M.27, M.29, M.30	NSPS QQQ: VOC from Wastewater Individual Drain System	40 CFR 60 Subpart QQQ	40 CFR 60 Subpart QQQ	40 CFR 60 Subpart QQQ	Semiannual and 40 CFR 60 Subpart QQQ
M.5, M.12, M.16, M.21, M.25, M.29, M.30	MACT CC: HAPs from Wastewater Individual Drain System	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	Semiannual and 40 CFR 63 Subpart CC

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
M.8, M.15, M.16, M.22, M.28, M.29, M.30	NESHAP FF: benzene from Wastewater Individual Drain System	40 CFR 61 Subpart FF	40 CFR 61 Subpart FF	40 CFR 61 Subpart FF	Semiannual and 40 CFR 61 Subpart FF

Conditions

M.1. NO_X emissions from the HTU Heater (HDS Furnace Stack) shall not exceed the following (ARM 17.8.1211 and ARM 17.8.752):

a. 0.07 lb/MMBtu
b. 1.42 lb/hr
c. 6.2 TPY

M.2. CO emissions from the HTU Heater (HDS Furnace Stack) shall not exceed the following (ARM 17.8.1211 and ARM 17.8.752):

a. 0.79 lb/hr
b. 3.5 TPY

M.3. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart J, including as applicable to the Kerosene and HTU (HDS) heaters (Consent Decree, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart J).

M.4. Calumet shall comply with all applicable requirements of 40 CFR 63 Subpart DDDDD, including as applicable to the Kerosene and HTU (HDS) heaters (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart DDDDD).

M.5. Calumet shall comply with all applicable requirements of 40 CFR 63 Subpart CC, including as applicable to process vents, equipment components, and the individual drain system of the hydrotreater unit (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 60 Subpart CC).

M.6. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart GGG, including as applicable to equipment components of the hydrotreater unit (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart GGG).

M.7. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart QQQ, including as applicable to the individual drain system of the hydrotreater unit (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

M.8. Calumet shall comply with all applicable requirements of 40 CFR 61 Subpart FF, including as applicable to the individual drain system of the hydrotreater unit (ARM 17.8.1211, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Compliance Demonstration

M.9. Calumet shall, utilizing an emissions factor determined during the last source test, track actual fuel burning rates to monitor compliance against the NO_X and CO TPY emissions limitations of Section III.M.1 and III.M.2. By the 25th of each month, Calumet shall calculate and record the monthly and rolling 12-month sum of emissions. Once during the term of this permit, Calumet shall test the heaters for NO_X and CO, concurrently, to monitor compliance against the rate based and hourly limitations of Section III.M.1 and III.M.2 (ARM 17.8.1213).

M.10. Calumet shall monitor compliance with 40 CFR 60 Subpart J as required by 40 CFR 60 Subpart J (ARM 17.8.1213, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart J).

M.11. Calumet shall monitor compliance with 40 CFR 63 Subpart DDDDD as required by 40 CFR 63 Subpart DDDDD (ARM 17.8.1213, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart DDDDD).

M.12. Calumet shall monitor compliance with 40 CFR 63 Subpart CC as required by 40 CFR 63 Subpart CC (ARM 17.8.1213, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

M.13. Calumet shall monitor compliance with 40 CFR 60 Subpart GGG as required by 40 CFR 60 Subpart GGG (ARM 17.8.1213, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart GGG).

M.14. Calumet shall monitor compliance with 40 CFR 60 Subpart QQQ as required by 40 CFR 60 Subpart QQQ (ARM 17.8.1213, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

M.15. Calumet shall monitor compliance with 40 CFR 61 Subpart FF as required by 40 CFR 61 Subpart FF (ARM 17.8.1213, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Recordkeeping

M.16. Calumet shall maintain, under Calumet's control, all records required for compliance monitoring as a permanent business record for at least 5 years. Furthermore, the records must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.1212).

M.17. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart J (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart J).

M.18. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 63 Subpart DDDDD (ARM 17.8.1212, ARM 17.8.342, AM 17.8.302, and 40 CFR 63 Subpart DDDDD).

M.19. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart GGG (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart GGG).

M.20. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

M.21. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

M.22. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Reporting

M.23. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart J (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart J).

M.24. Calumet shall comply with all applicable reporting requirements of 40 CFR 63 Subpart DDDDD (ARM 17.8.1212, ARM 17.8.342, AM 17.8.302, and 40 CFR 63 Subpart DDDDD).

M.25. Calumet shall comply with all applicable reporting requirements of 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

M.26. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart GGG (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart GGG).

M.27. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

M.28. Calumet shall comply with all applicable reporting requirements of 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

M.29. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements.

M.30. The semiannual monitoring report shall clearly identify all deviations from permit requirements and shall provide (ARM 17.8.1212(3)):

a. A summary of the of any source testing that was performed during the reporting period including date testing was performed, result of the test, and date the report was submitted or estimated to be submitted;
b. The monthly and rolling 12-month sum of NO_X and CO emissions from the Kerosene and HTU Heaters
c. A summary demonstrating compliance status with 40 CFR 60 Subpart J including reference to submittal dates or reports made or included;
d. A summary demonstrating compliance status with 40 CFR 63 Subpart DDDDD including reference to submittal dates or reports made or included;
e. A summary demonstrating compliance status with 40 CFR 63 Subpart CC including reference to submittal dates or reports made or included;
f. A summary demonstrating compliance status with 40 CFR 60 Subpart GGG including reference to submittal dates or reports made or included;
g. A summary demonstrating compliance status with 40 CFR 60 Subpart QQQ including reference to submittal dates or reports made or included;
h. A summary demonstrating compliance status with 40 CFR 61 Subpart FF including reference to submittal dates or reports made or included.

N. EU13 – FLARE #1 & #2, Flare Gas Scrubber Equipment Components

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
N.1, N.3, N.13, N.14, N.20, N.21, N.27, N.32, N.33	Flare #1 - Scrubber	Equipped with flare gas scrubber and NSPS Ja	NSPS Ja	NSPS Ja	Semiannual and 40 CFR 60 Subpart Ja
N.2, N.12, N.20, N.32, N.33	Flare #2:	Emergency /Startup/ Shutdown/ Malfunction use only	Recordkeeping	Continuous	Semiannual
N.4, N.15, N.20, N.28, N.32, N.33	MACT CC: HAPs from process vents	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	Semiannual and 40 CFR 63 Subpart CC
N.4, N.15, N.20, N.28, N.32, N.33	MACT CC: HAPs from Equipment Components	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	Semiannual and 40 CFR 63 Subpart CC
N.5, N.16 N.22, N.29, N.32, N.33	NSPS GGGa: VOC from equipment components	40 CFR 60 Subpart GGGa	40 CFR 60 Subpart GGGa	40 CFR 60 Subpart GGGa	Semiannual and 40 CFR 60 Subpart GGGa/VVa
N.10, N.17, N.23, N.30, N.32, N.33	NSPS QQQ: VOC from Wastewater Individual Drain System	40 CFR 60 Subpart QQQ	40 CFR 60 Subpart QQQ	40 CFR 60 Subpart QQQ	Semiannual and 40 CFR 60 Subpart QQQ
N.4, N.15, N.24, N.28, N.32, N.33	MACT CC: HAPs from Wastewater Individual Drain System	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	Semiannual and 40 CFR 63 Subpart CC
N.11, N.18, N.25, N.31, N.32, N.33	NESHAP FF: benzene from Wastewater Individual Drain System	40 CFR 61 Subpart FF	40 CFR 61 Subpart FF	40 CFR 61 Subpart FF	Semiannual and 40 CFR 61 Subpart FF
N.6, N.19, N.20, N.32, N.33	Old Sour Water Stripper	Reactivation Review Required	Recordkeeping	Ongoing	Semiannual
N.9, A.24, N.32	Consent Decree Requirements	500 lb SO_2 in any 24-hr period	investigative, reporting, and corrective action procedures	As required	Semiannual and Consent Decree

Conditions

N.1. Flare #1 (Primary Flare) shall be equipped with a flare gas scrubber (ARM 17.8.1211, ARM 17.8.749, ARM 17.8.752).

N.2. Flare #2 (secondary flare) must maintain a water seal except during periods of startup, shutdown, or malfunction. These periods of startup, shutdown, and malfunction shall not exceed 9 hours per year based on a 12-month rolling average (ARM 17.8.1211, ARM 17.8.749).

N.3. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart Ja, including as applicable to Flare #1 and #2 (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Ja).

N.4. Calumet shall comply with all applicable requirements of 40 CFR 63 Subpart CC, including as applicable to the flares and equipment components of the NaHS Fuel Gas Scrubber Unit (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

N.5. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart GGGa, including as applicable to the NaHS equipment components. (ARM 17.8.1211, ARM 17.8.3452, ARM 17.8.302, and 40 CFR 60 Subpart GGGa).

N.6. Calumet shall not re-activate the old sour water stripper unit that was taken out of stripping service in 2006, without conducting a permitting analysis in conformance with ARM 17.8 Subchapter 7, and obtaining Department approval, in writing (ARM 17.8.749).

N.7. For purposes of streamlining, instead of complying with 40 CFR 60.11(d) as indicated by the Consent Decree, Calumet shall comply with the NSPS obligation to implement good air pollution control practices by complying with the flare requirements as outline in 40 CFR 63 Subpart CC (ARM 17.8.1211, Consent Decree, ARM 17.8.302, ARM 17.8.342, and 40 CFR 63 Subpart CC – Streamlined condition identifying MACT CC as demonstrating compliance with good air pollution control practices as required by NSPS).

N.8. For purposes of streamlining, instead of complying with the reporting requirements of 40 CFR 60 Subpart J for the flares as required by Consent Decree Paragraph 19.D, Calumet shall comply with reporting requirements of 40 CFR 60 Subpart Ja, and 40 CFR 63 Subpart CC (ARM 17.8.1211, Consent Decree, ARM 17.8.302, ARM 17.8.340, ARM 17.8.342, 40 CFR 60 Subpart Ja, and 40 CFR 63 Subpart CC).

N.9. Pursuant to the Consent Decree, Paragraph 21, Calumet shall, for all Hydrocarbon Flaring Incidents (as defined in the Consent Decree – 500 lb SO_2 in any 24-hr period), follow the investigative, reporting, and corrective action procedures as outline in paragraphs 20.A-20.B (ARM 17.8.1211, Consent Decree Paragraph 21).

N.10. Calumet shall comply with all applicable requirements of 40 CFR 63 Subpart QQQ including as applicable to the individual drain system of the flare gas scrubber (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

N.11. Calumet shall comply with all applicable requirements of 40 CFR 61 Subpart FF including as applicable to the individual drain system of the flare gas scrubber (ARM 17.8.1211, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Compliance Demonstration

N.12. Calumet shall document any timeframe in which flare #2 operates. By the 25th of each month, Calumet shall calculate and record the monthly hours of flaring, and the rolling 12-month average hours of operation (ARM 17.8.1213, ARM 17.8.749).

N.13. Calumet shall comply with Section III.N.1 by utilizing compliance monitoring mechanisms as provided in 40 CFR 60 Subpart Ja (ARM 17.8.1213).

N.14. Calumet shall monitor compliance with 40 CFR 60 Subpart Ja as required by 40 CFR 60 Subpart Ja, including the alternative monitoring plan for Total Reduced Sulfur Monitoring at the flares approved by EPA in correspondence date stamped August 14, 2019, and agreed to by Calumet (ARM 17.8.1213, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Ja).

N.15. Calumet shall monitor compliance with 40 CFR 63 Subpart CC as required by 40 CFR 63 Subpart CC (ARM 17.8.1213, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

N.16. Calumet shall monitor compliance with 40 CFR 60 Subpart GGGa as required by 40 CFR 60 Subpart GGGa (ARM 17.8.1213, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart GGGa).

N.17. Calumet shall monitor compliance with 40 CFR 60 Subpart QQQ as required by 40 CFR 60 Subpart QQQ (ARM 17.8.1213, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

N.18. Calumet shall monitor compliance with 40 CFR 61 Subpart FF as required by 40 CFR 61 Subpart FF (ARM 17.8.1213, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

N.19. Calumet shall maintain records of sour water stripper operations and Department reviews, for the old sour water stripper or any new sour water stripper (ARM 17.8.1213).

Recordkeeping

N.20. Calumet shall maintain, under Calumet's control, all records required for compliance monitoring as a permanent business record for at least 5 years. Furthermore, the records must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.1212).

N.21. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart Ja (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Ja).

N.22. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart GGGa (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart GGGa).

N.23. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

N.24. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

N.25. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Reporting

N.26. Calumet shall comply with the NO_X and CO Umbrella limit reporting requirements of Section III.B.24. (ARM 17.8.1212).

N.27. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart Ja (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Ja).

N.28. Calumet shall comply with all applicable reporting requirements of 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

N.29. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart GGGa (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart GGGa).

N.30. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

N.31. Calumet shall comply with all applicable reporting requirements of 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

N.32. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements.

N.33. The semiannual monitoring report shall clearly identify all deviations from permit requirements and shall provide (ARM 17.8.1212(3)):

a. The monthly and rolling 12-month flare operation time as required by Section III.N.12
b. A summary of any source testing that was performed during the reporting period including date testing was performed, result of the test, and date the report was submitted or estimated to be submitted;
c. A summary explanation of compliance status with Section III.N.6
d. A summary demonstrating compliance status with 40 CFR 60 Subpart Ja including reference to submittal dates or reports made or included;
e. A summary demonstrating compliance status with 40 CFR 63 Subpart CC including reference to submittal dates or reports made or included;
f. A summary demonstrating compliance status with 40 CFR 60 Subpart GGGa including reference to submittal dates or reports made or included;
g. A summary demonstrating compliance status with 40 CFR 60 Subpart QQQ including reference to submittal dates or reports made or included;
h. A summary demonstrating compliance status with 40 CFR 61 Subpart FF including reference to submittal dates or reports made or included.

O. EU14 – PRODUCT LOADING

EU14a: Truck Loading Rack and VCU
EU14b: Railcar Loading Rack and VCU

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
O.1, O.10, O.12, O.13, O.16, O.17, O.24, O.35, O.36	Gasoline Truck Loading Rack VCU Emissions	VOC: 10 mg/L CO: 10 mg/L NO_X: 4 mg/L PM: 0.10 gr/dscf @ 12% CO_2	Source Testing and Operating Parameters	Ongoing	Semiannual and Section III.A.2
O.2, O.10, O.14, O.15, O.16, O.18, O.24, O.35, O.36	Gasoline Railcar Loading Rack VCU Emissions	VOC: 10 mg/L CO: 10 mg/L NO_X: 4 mg/L PM: 0.10 gr/dscf @ 12% CO_2	Source Testing and Operating Parameters	Ongoing	Semiannual and Section III.A.2
O.3, O.5, O.6, O.7, O.8, O.9, O.10, O.11, O.12, O.13, O.14, O.15, O.16, O.17, O.18, O.19, O.20, O.21, O.22, O.23, O.24, O.25, O.26, O.27, O.28, O.29, O.30, O.31, O.32, O.33, O.34, O.35, O.36	Truck Loading Rack Operations Requirements	Truck Loading Rack Operations Requirements	Recordkeeping	Ongoing	Semiannual
O.4, O.5, O.6, O.7, O.8, O.9, O.10, O.11, O.12, O.13, O.14, O.15, O.16, O.17, O.18, O.19, O.20, O.21, O.22, O.23, O.24, O.25, O.26, O.27, O.28, O.29, O.30, O.31, O.32, O.33, O.34, O.35, O.36	Railcar Loading Rack Operations Requirements	Railcar Loading Rack Operations Requirements	Recordkeeping	Ongoing	Semiannual

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
O.6, O.21, O.24, O.27, O.32, O.35, O.36	MACT EEEE	40 CFR 63 Subpart EEEE	40 CFR 63 Subpart EEEE	40 CFR 63 Subpart EEEE	Semiannual and 40 CFR 63 Subpart EEEE
O.5, O.19, O.24, O.25, O.30, O.35, O.36	MACT R	40 CFR 63 Subpart R	40 CFR 63 Subpart R	40 CFR 63 Subpart R	Semiannual and 40 CFR 63 Subpart R
O.7, O.20, O.24, O.26, O.31, O.35, O.36, O.8, O.22, O.24, O.28, O.33, O.35, O.36	MACT CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	Semiannual and 40 CFR 63 Subpart CC
O.8, O.22, O.24, O.28, O.33, O.35, O.36	NSPS QQQ	40 CFR 60 Subpart QQQ	40 CFR 60 Subpart QQQ	40 CFR 60 Subpart QQQ	Semiannual and 40 CFR 60 Subpart QQQ
O.9, O.23, O.24, O.29, O.34, O.35, O.36	NESHAP FF	40 CFR 61 Subpart FF	40 CFR 61 Subpart FF	40 CFR 61 Subpart FF	Semiannual and 40 CFR 61 Subpart FF

Conditions

O.1. Emissions from the gasoline truck loading rack VCU shall not exceed the following (ARM 17.8.1211):

a. The total VOC emissions to the atmosphere from the VCU due to loading liquid product into cargo tanks shall not exceed 10.0 milligrams per liter (mg/L) of gasoline loaded (ARM 17.8.342, ARM 17.8.302 and 40 CFR 63 Subpart R and ARM 17.8.752).

b. The total CO emissions to the atmosphere from the VCU due to loading liquid product into cargo tanks shall not exceed 10.0 mg/L of gasoline loaded (ARM 17.8.752).

c. The total NO_X emissions to the atmosphere from the VCU due to loading liquid product into cargo tanks shall not exceed 4.0 mg/L of gasoline loaded (ARM 17.8.752).

d. Visible emissions shall not exceed an opacity of 10% (ARM 17.8.752).

e. Particulate of 0.10 gr/dscf corrected to 12% carbon dioxide (CO_2) (ARM 17.8.752).

O.2. Emissions from the gasoline railcar loading rack VCU shall not exceed the following (ARM 17.8.1211):

a. The total VOC emissions to the atmosphere from the VCU due to loading gasoline into railcars shall not exceed 10.0 mg/L of gasoline loaded (ARM 17.8.342 and 40 CFR Part 63.422, and ARM 17.8.752).

b. The total CO emissions to the atmosphere from the VCU due to loading gasoline into cargo tanks shall not exceed 10.0 mg/L of gasoline loaded (ARM 17.8.752).

c. The total NO_X emissions to the atmosphere from the VCU due to loading gasoline into cargo tanks shall not exceed 4.0 mg/L of gasoline loaded (ARM 17.8.752).

d. Calumet shall not cause or authorize to be discharged into the atmosphere from the enclosed VCU:

i. Any visible emissions that exhibit an opacity of 10% or greater (averaged over 6 consecutive minutes in accord to Method 9) (ARM 17.8.752); and

ii. Any particulate emissions in excess of 0.10 gr/dscf corrected to 12% CO_2 (ARM 17.8.752).

O.3. The gasoline and distillates truck loading rack shall be operated and maintained as follows (ARM 17.8.1211):

a. Calumet's tank truck loading rack shall be equipped with a vapor collection system designed to collect the organic compound vapors displaced from cargo tanks during gasoline product loading (ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart R).

b. Calumet collected vapors shall be routed to the vapor combustion unit (VCU) at all times. In the event the VCU is inoperable, Calumet may continue to load distillates with a Reid vapor pressure of less than 27.6 kilopascals, provided the Department is notified in accordance with the requirements of ARM 17.8.110 (ARM 17.8.752).

c. The vapor collection and liquid loading equipment shall be designed and operated to prevent gauge pressure in the gasoline cargo tank from exceeding 4,500 Pascals (Pa) (450 millimeters [mm] of water) during product loading. This level shall not be exceeded when measured by the procedures specified in the test methods and procedures in 40 CFR 60.503(d) (ARM 17.8.342 and 40 CFR 63, Subpart CC).

d. No pressure-vacuum vent in the permitted terminal's vapor collection system shall begin to open at a system pressure less than 4,500 Pa (450 mm of water) (ARM 17.8.342).

e. The vapor collection system shall be designed to prevent any VOC vapors collected at one loading position from passing to another loading position (ARM 17.8.342).

f. Loadings of liquid products into gasoline cargo tanks shall be limited to vapor-tight gasoline cargo tanks, using the following procedures (ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart R):

i. Calumet shall obtain annual vapor tightness documentation described in the test methods and procedures in 40 CFR Part 63.425(e) for each gasoline cargo tank that is to be loaded at the truck loading rack;

ii. Calumet shall require the cargo tank identification number to be recorded as each gasoline cargo tank is loaded at the terminal;

iii. Calumet shall cross-check each tank identification number obtained during product loading with the file of tank vapor tightness documentation within 2 weeks after the corresponding cargo tank is loaded;

iv. Calumet shall notify the owner or operator of each non-vapor-tight cargo tank loaded at the truck loading rack within 3 weeks after the loading has occurred; and

v. Calumet shall take the necessary steps to ensure that any non-vapor-tight cargo tank will not be reloaded at the truck loading rack until vapor tightness documentation for that cargo tank is obtained which documents that:

A. The gasoline cargo tank meets the applicable test requirements in 40 CFR 63.425(e);

B. For each gasoline cargo tank failing the test requirements in 40 CFR 63.425(f) or (g), the gasoline cargo tank must either:

1. Before the repair work is performed on the cargo tank, meet the test requirements in 40 CFR 63.425(g) or (h), or

2. After repair work is performed on the cargo tank, before or during the tests in 40 CFR 63.425(g) or (h), subsequently passes, the annual certification test described in 40 CFR 63.425(e).

g. Calumet shall ensure that loadings of gasoline cargo tanks at the truck loading rack are made only into cargo tanks equipped with vapor collection equipment that is compatible with the terminal's vapor collection system (ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart R).

h. Calumet shall ensure that the terminal and the cargo tank vapor recovery systems are connected during each loading of a gasoline cargo tank at the truck loading rack (ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart R).

i. Calumet shall monitor and maintain all pumps, shutoff valves, relief valves, and other piping and valves associated with the gasoline loading rack as described in 40 CFR 60.482-1 through 60.482-10 (ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart R).

j. The truck loading rack VCU stack shall be at least 35 feet above grade (ARM 17.8.749).

O.4. The gasoline railcar loading rack and VCU shall be operated and maintained as follows (ARM 17.8.1211):

a. Gasoline and naphtha will be the only products loaded from the gasoline railcar loading rack (ARM 17.8.749).

b. Calumet's gasoline railcar loading rack shall be equipped with a vapor recovery system designed to collect the organic compounds displaced from railcar product loading and vent those emissions to the VCU (ARM 17.8.342 and 40 CFR 63, Subpart CC and ARM 17.8.752).

c. Calumet shall operate and maintain the VCU to control VOC and hazardous air pollutant (HAP) emissions during the loading of gasoline or naphtha in the gasoline railcar loading rack. Calumet's collected vapors shall be routed to the VCU at all times (ARM 17.8.752).

d. The vapor recovery system shall be designed to prevent any VOC vapors collected at one loading position from passing to another loading position (ARM 17.8.749).

e. Loading of gasoline and naphtha railcars shall be restricted to the use of submerged fill and dedicated normal service (ARM 17.8.752).

f. Calumet shall ensure that loading of railcars at the gasoline railcar loading rack are made only into railcars equipped with vapor recovery equipment that is compatible with the terminal's vapor recovery system (ARM 17.8.749).

g. Loadings of gasoline into gasoline cargo tanks shall be limited to vapor-tight gasoline cargo tanks, using procedures as listed in 40 CFR 63 Subpart R (ARM 17.8.342 and 40 CFR 63, Subpart CC, and ARM 17.8.752).

    i. Calumet shall obtain annual vapor tightness documentation described in the test methods and procedures in 40 CFR 63.425(e) for each gasoline cargo tank that is to be loaded at the railcar loading rack;

    ii. Calumet shall require the cargo tank identification number to be recorded as each gasoline cargo tank is loaded at the terminal;

    iii. Calumet shall cross-check each tank identification number obtained during product loading with the file of tank vapor tightness documentation within 2 weeks after the corresponding cargo tank is loaded;

    iv. Calumet shall notify the owner or operator of each non-vapor-tight cargo tank loaded at the railcar loading rack within 3 weeks after the loading has occurred; and

    v. Calumet shall take the necessary steps to ensure that any non-vapor-tight cargo tank will not be reloaded at the railcar loading rack until vapor tightness documentation for that cargo tank is obtained which documents that:

        A. The gasoline cargo tank meets the applicable test requirements in 40 CFR 63.425(e);

        B. For each gasoline cargo tank failing the test requirements in 40 CFR 63.425(f) or (g), the gasoline cargo tank must either:

            1. Before the repair work is performed on the cargo tank, meet the test requirements in 40 CFR 63.425(g) or (h), or

            2. After repair work is performed on the cargo tank, before or during the tests in 40 CFR 63.425(g) or (h), subsequently passes, the annual certification test described in 40 CFR 63.425(e).

h. Calumet shall ensure that the terminal's and the railcar's vapor recovery systems are connected during each loading of a railcar at the gasoline railcar loading rack (ARM 17.8.749).

i. The vapor recovery and liquid loading equipment shall be designed and operated to prevent gauge pressure in the gasoline railcar from exceeding 4,500 Pa (450 mm of water) during gasoline loading. This level shall not be exceeded when measured by the procedures specified in 40 CFR 60.503(d) (ARM 17.8.342 and 40 CFR 63, Subpart CC).

j. No pressure-vacuum vent in the permitted terminal's vapor recovery system shall begin to open at a system pressure less than 4,500 Pa (450 mm of water) (ARM 17.8.749).

k. Calumet shall comply with the applicable provisions of 40 CFR 60, Subpart VV, including Calumet shall monitor and maintain all pumps, shutoff valves, relief valves, and other piping and valves associated with the gasoline loading rack as described in 40 CFR 60.482-1 through 60.482-10 (ARM 17.8.749, ARM 17.8.342 and 40 CFR 63, Subpart CC).

l. The gasoline railcar loading rack VCU stack exhaust exit shall be at least 30 feet above grade (ARM 17.8.749).

O.5. Calumet shall comply with all applicable requirements of 40 CFR 63 Subpart R – National Emission Standards for Gasoline Distribution Facilities, including as applicable to the truck and railcar loading rack (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart R).

O.6. Calumet shall comply with all applicable requirements of 40 CFR 63 Subpart EEEE – National Emissions Standards for Hazardous Air Pollutants: Organic Liquids Distribution (non-gasoline), including as applicable to the Railcar loading rack when loading Naptha (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart EEEE).

O.7. Calumet shall comply with all applicable requirements of 40 CFR 63 Subpart CC, including as applicable to the truck loading rack, truck rack equipment components, truck rack individual drain system, railcar loading rack, railcar rack equipment components, and railcar loading rack individual drain system (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

O.8. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart QQQ, including as applicable to the individual drain system of the truck and railcar loading rack (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

O.9. Calumet shall comply with all applicable requirements of 40 CFR 61 Subpart FF, including as applicable to the individual drain system of the truck and railcar loading rack (ARM 17.8.1211, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Compliance Demonstration

O.10. For both the gasoline truck loading rack and the gasoline railcar loading rack, Calumet shall install, calibrate, certify, operate and maintain a thermocouple with an associated recorder as a continuous parameter monitoring system (CPMS). A CPMS shall be located in each VCU firebox or in the ductwork immediately downstream from the firebox in a position before any substantial heat exchange occurs in accordance with 40 CFR 63.427, in order to monitor compliance with 40 CFR 63, Subpart R. Calumet shall operate the VCUs in a manner not to go below the operating parameter values established using the procedures in 40 CFR 63.425 (ARM 17.8.342 and 40 CFR 63, Subpart CC).

O.11. Calumet shall comply with all test methods and procedures as specified by 40 CFR 63.425(a) through (c), and 63.425(e) through (h). This shall apply to, but not be limited to, the gasoline and distillate truck loading rack, the gasoline railcar loading rack, the vapor processing systems, and all gasoline equipment (ARM 17.8.1212).

O.12. The gasoline truck loading rack VCU shall be tested for total organic compounds on an every 5-year basis or according to another testing/monitoring schedule as may be approved by the Department. Calumet shall perform the test methods and procedures as specified in 40 CFR 63.425 (ARM 17.8.1213, ARM 17.8.105).

O.13. The gasoline truck loading rack VCU shall be tested for CO and NO_X on an every 5 year basis or according to another testing/monitoring schedule as may be approved by the Department (ARM 17.8.1213, ARM 17.8.105).

O.14. The gasoline railcar loading rack VCU shall be initially tested for total organic compounds within 180 days of initial startup. Additional testing shall occur on an every 5-year basis or according to another testing/monitoring schedule as may be approved by the Department. Calumet shall perform the test methods and procedures as specified in 40 CFR 63.425 (ARM 17.8.105 and 17.8.342).

O.15. The gasoline railcar loading VCU shall be initially tested for CO and NO_X, concurrently, within 180 days of initial startup (ARM 17.8.105). Once during the term of this permit, Calumet shall test the VCU for NO_X and CO, concurrently (ARM 17.8.1213, ARM 17.8.105).

O.16. Fuel flow rates, production information, and any other data the Department believes is necessary shall be recorded during the performance of source tests (ARM 17.8.749).

O.17. Gasoline Truck Loading Rack VCU Compliance determinations for VOC, NO_X and CO emission limits for the gasoline truck loading rack VCU shall be based upon the most recent compliance source test as well as compliance with the designated operating parameter value using the thermocouple and recorder (ARM 17.8.1213).

O.18. Gasoline Railcar Loading Rack VCU compliance determinations for VOC, NO_X and CO emission limits for the gasoline railcar loading rack VCU shall be based upon the most recent compliance source test as well as compliance with the designated operating parameter value using the thermocouple and recorder (ARM 17.8.1213).

O.19. Calumet shall comply with all compliance demonstration requirements of 40 CFR 63 Subpart R (ARM 17.8.1213, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart R).

O.20. Calumet shall comply with all compliance demonstration requirements of 40 CFR 63 Subpart CC (ARM 17.8.1213, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

O.21. Calumet shall comply with all compliance demonstration requirements of 40 CFR 63 Subpart EEEE (ARM 17.8.1213, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart EEEE).

O.22. Calumet shall comply with all compliance demonstration requirements of 40 CFR 60 Subpart QQQ (ARM 17.8.1213, ARM 17.8.342, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

O.23. Calumet shall comply with all compliance demonstration requirements of 40 CFR 61 Subpart FF (ARM 17.8.1213, ARM 17.8.342, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Recordkeeping

O.24. Calumet shall maintain, under Calumet's control, all records required for compliance monitoring as a permanent business record for at least 5 years. Furthermore, the records must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.1212).

O.25. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 63 Subpart R (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart R).

O.26. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

O.27. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 63 Subpart EEEE (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart EEEE).

O.28. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

O.29. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Reporting

O.30. Calumet shall comply with all applicable reporting requirements of 40 CFR 63 Subpart R (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart R).

O.31. Calumet shall comply with all applicable reporting requirements of 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

O.32. Calumet shall comply with all applicable reporting requirements of 40 CFR 63 Subpart EEEE (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart EEEE).

O.33. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

O.34. Calumet shall comply with all applicable reporting requirements of 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 61 Subpart FF).

O.35. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements.

O.36. The semiannual monitoring report shall clearly identify all deviations from permit requirements and shall provide (ARM 17.8.1212(3)):

a. A summary of the of any source testing that was performed during the reporting period including date testing was performed, result of the test, and date the report was submitted or estimated to be submitted;
b. A summary demonstrating compliance status with 40 CFR 63 Subpart R including reference to submittal dates or reports made or included;
c. A summary demonstrating compliance status with 40 CFR 63 Subpart CC including reference to submittal dates or reports made or included;
d. A summary demonstrating compliance status with 40 CFR 60 Subpart EEEE including reference to submittal dates or reports made or included;
e. A summary demonstrating compliance status with 40 CFR 60 Subpart QQQ including reference to submittal dates or reports made or included;
f. A summary demonstrating compliance status with 40 CFR 61 Subpart FF including reference to submittal dates or reports made or included.

P. EU15 – COOLING TOWERS

EU15a: North Cooling Tower
EU15b: South Cooling Tower

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
P.1, P.4, P.7, P.12, P.13	PM	TDS of 1500 ppm	Conductivity	Quarterly	Semiannually
P.2, P.5, P.7, P.8, P.10, P.12, P.13	MACT CC - HAPs	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	Semiannually and 40 CFR 63 Subpart CC
P.3, P.6, P.9, P.11, P.12, P.13	MACT Q – Chromium Compounds	40 CFR 63 Subpart Q	Recordkeeping / 40 CFR 63 Subpart Q	Ongoing / 40 CFR 63 Subpart Q	Semiannual and 40 CFR 63 Subpart Q

Conditions

P.1. Calumet shall minimize particulate matter emissions from the cooling towers by maintaining the drift eliminators equipped on the cooling towers, and controlling the total dissolved solids in the cooling water. The maximum total dissolved solids of cooling tower water shall not exceed 1,500 parts per million (ARM 17.8.1211, ARM 17.8.752).

P.2. Calumet shall minimize VOC emissions from the cooling towers by complying with the applicable requirements of 40 CFR 63 Subpart CC as applicable to heat exchange systems, as defined in this subpart. This condition is not intended to expand the requirements and applicability of 40 CFR 63 Subpart CC (ARM 17.8.1211, ARM 17.8.752, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

P.3. Calumet shall comply with the requirements of 40 CFR 63 Subpart Q – National Emissions Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers, during any timeframe in which chromium-based water treatment chemicals are used (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart Q).

Compliance Demonstration

P.4. Calumet shall test a representative grab sample of cooling water tower water for conductivity no less than once per calendar quarter utilizing Method 120.1 conductivity test procedures, as found for use under 40 CFR 136, or alternatively, at a more frequent interval and/or with different methods as may be proposed in writing by Calumet and approved in writing by the Department. The results shall be recorded and compared to the conductivity that would represent the 1,500-ppm total dissolved solids limit in a log. Calumet shall maintain, on-site, documentation regarding the drift rate of drift eliminators maintained on each cooling tower (ARM 17.8.749, ARM 17.8.1213).

P.5. Calumet shall monitor compliance with 40 CFR 63 Subpart CC as required by 40 CFR 63 Subpart CC (ARM 17.8.1213, ARM 17.8.342, ARM 17.8.302, and 40 CFR 60 Subpart CC).

P.6. Calumet shall maintain records of cooling tower treatment chemicals to demonstrate no chromium compounds are used, or monitor compliance with 40 CFR 63 Subpart Q as required by 40 CFR 63 Subpart Q (ARM 17.8.1213, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart Q).

Recordkeeping

P.7. Calumet shall maintain, under Calumet's control, all records required for compliance monitoring as a permanent business record for at least 5 years. Furthermore, the records must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.1212).

P.8. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

P.9. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 63 Subpart Q (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart Q).

Reporting

P.10. Calumet shall comply with all applicable reporting requirements of 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

P.11. Calumet shall comply with all applicable reporting requirements of 40 CFR 63 Subpart Q (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart Q).

P.12. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements.

P.13. The semiannual monitoring report shall clearly identify all deviations from permit requirements and shall provide (ARM 17.8.1212(3)):

a. Summary of information used to monitor compliance with the cooling tower conductivity
b. Summary demonstrating compliance status with 40 CFR 63 Subpart CC
c. Summary demonstrating applicability status and compliance status with 40 CFR 63 Subpart Q

Q. EU16: WASTEWATER TREATMENT

EU16a: Individual drain systems including junction boxes, gauging and sampling devices
EU16b: API Separators
EU16c: Closed Vent Systems and Control Devices
EU16d: External Floating Roof Wastewater Storage Tank 143
EU16e: External Floating Roof Wastewater Storage Tank 145
EU16f: Fixed Roof Wastewater Storage Tank 144A
EU16g: Fixed Roof Wastewater Storage Tank 144B
EU16h: Fixed Roof Wastewater Storage Tank 147
EU16i: Fixed Roof Wastewater Storage Tank 186

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
Q.1, Q.4, Q.7, Q.8, Q.11, Q.14, Q.15	VOC	40 CFR 60 Subpart QQQ	40 CFR 60 Subpart QQQ	40 CFR 60 Subpart QQQ	Semiannual and 40 CFR 60 Subpart QQQ
Q.2, Q.5, Q.9, Q.12, Q.14, Q.15	HAPs	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	Semiannual and 40 CFR 63 Subpart CC
Q.3, Q.6, Q.10, Q.13, Q.14, Q.15	Benzene	40 CFR 61 Subpart FF	40 CFR 61 Subpart FF	40 CFR 61 Subpart FF	Semiannual and 40 CFR 61 Subpart FF

Conditions:

Q.1. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart QQQ (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

Q.2. Calumet shall comply with all applicable requirements of 40 CFR 63 Subpart CC (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

Q.3. Calumet shall comply with all applicable requirements of 40 CFR 61 Subpart FF (ARM 17.8.1211, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Compliance Demonstration:

Q.4. Calumet shall monitor compliance with 40 CFR 60 Subpart QQQ as required by 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

Q.5. Calumet shall monitor compliance with 40 CFR 63 Subpart CC as required by 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

Q.6. Calumet shall monitor compliance with 40 CFR 61 Subpart FF as required by 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Recordkeeping:

Q.7. Calumet shall maintain, under Calumet's control, all records required for compliance monitoring as a permanent business record for at least 5 years. Furthermore, the records must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.1212).

Q.8. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

Q.9. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

Q.10. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Reporting:

Q.11. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

Q.12. Calumet shall comply with all applicable reporting requirements of 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

Q.13. Calumet shall comply with all applicable reporting requirements of 40 CFR 61 Subpart FF (ARM 17.8.1212, ARM 17.8.341, ARM 17.8.302, and 40 CFR 61 Subpart FF).

Q.14. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements.

Q.15. The semiannual monitoring report shall clearly identify all deviations from permit requirements and shall provide (ARM 17.8.1212(3)):

a. A summary demonstrating compliance status with 40 CFR 60 Subpart QQQ including reference to submittal dates of reports made or included;
b. A summary demonstrating compliance status with 40 CFR 63 Subpart CC including reference to submittal dates of reports made or included;

c. A summary demonstrating compliance status with 40 CFR 61 Subpart FF including reference to submittal dates of reports made or included.

R. EU17: BOILERS

EU17a: Boiler #1 and #2
EU17b: Boiler #3

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
R.1, R.2, R.14, R.23, R.30, R.38, R.39	Boiler #1 and #2 NO_X	76.50 lb/hr and Umbrella Limit	Method 7	Biennial Testing	Semiannual and Section III.A.2
R.1, R.2, R.15, R.23, R.30, R.38, R.39	Boiler #1 and #2 CO	4.4 TPY 1.00 lb/hr Umbrella Limit	Method 10	Biennial Testing	Semiannual and Section III.A.2
R.2, R.4, R.11, R.13, R.17, R.38, R.39	Boiler #1 and #2 SO_2	148 lb/hr, 1 yr average 174 lb/hr, 24hr average 355 lb/hr, 3hr average	CEMS	Continuous	Quarterly
R.3, R.16, R.23, R.38, R.39	Boiler #3 Capacity	60.5 MMBtu/hr - HHV	Record-keeping	Ongoing	Semiannual
R.3, R.16, R.23, R.38, R.39	Boiler #3 NO_X	0.019 lb/hr, 3-hr average	Method 7	Annual	Semiannual and Section III.A.2
R.3, R.12, R.13, R.16, R.38, R.39	Boiler #3 SO_2	20 ppmvd, 0% O_2	CEMS	Continuous	Quarterly
R.3, R.16, R.23, R.38, R.39	Boiler #3 CO	0.034 lb/MMBtu, 3hr average	Method 10	Biennial	Quarterly
R.3, R.16, R.23, R.38, R.39	Boiler #3 Design	ULNB; flue gas recirculation; fire NG, RFG, SWSOH	Record-keeping	Ongoing	Semiannual
R.4, R.17, R.23, R.38, R.39	SWSOH Incineration	Only when SO_2 CEMS operational	Record-keeping	Ongoing	Semiannual
R.5, R.18, R.23, R.25, R.33, R.38, R.39	MACT DDDDD: HAPs	40 CFR 63 Subpart DDDDD	40 CFR 63 Subpart DDDDD	40 CFR 63 Subpart DDDDD	Semiannual and 40 CFR 63 Subpart DDDDD
R.6, R.11, A.24, R.19, R.26, R.34, R.38, R.39	Boiler #1 and #2 NSPS J: SO_2	0.10 gr/dscf H_2S in fuel gas, 3-hr rolling average basis	40 CFR 60 Subpart J	40 CFR 60 Subpart J	Quarterly and 40 CFR 60 Subpart J

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
R.7, R.16, R.27, R.35, R.38, R.39	Boiler #3 NSPS Ja: SO_2	<u>SO_2:</u> 20 ppmvd, 0% O_2 on a 3-hr average basis, and 8 ppmvd, 0% O_2, daily on a 365-day rolling average basis <u>H_2S in fuel gas:</u> 162 ppmv on a 3-hr rolling average basis, and 60 ppmv on a 365-calendar day rolling average basis	40 CFR 60 Subpart Ja	40 CFR 60 Subpart Ja	Semiannual and 40 CFR 60 Subpart Ja
R.8, R.21, R.28, R.36, R.38, R.39	NSPS QQQ: VOC	40 CFR 60 Subpart QQQ	40 CFR 60 Subpart QQQ	40 CFR 60 Subpart QQQ	Semiannual and 40 CFR 60 Subpart QQQ
R.9, R.22, R.29, R.37, R.38, R.39	NSPS Dc: SO_2 and PM	40 CFR 60 Subpart Dc	40 CFR 60 Subpart Dc	40 CFR 60 Subpart Dc	Semiannual and 40 CFR 60 Subpart Dc

Conditions:

R.1. Calumet shall comply with the NO_X and CO Umbrella limitations of Section III.B.5 and Section III.B.6.

R.2. Boiler #1 and #2 emissions combined shall not exceed:

a. SO_2 (ARM 17.8.749):

i. Annual: 648 TPY
ii. Hourly: 148 pounds per hour (lb/hr) averaged over 1 year
iii. 174 lb/hr averaged over a 24-hour period
iv. 355 lb/hr averaged over a 3-hour period

b. NO_X: 76.50 lb/hr (ARM 17.8.752)

c. CO (ARM 17.8.752):

i. Annual 4.4 TPY
ii. Hourly 1.00 lb/hr

R.3. Boiler #3:

a. The maximum rated capacity of Boiler #3 shall not exceed 60.5 MMBtu/hr on a higher heating value basis (ARM 17.8.749).

b. NO_X emission limit shall be based on the actual performance as demonstrated by the required initial performance test, but shall not exceed 0.019 pounds per million British thermal units (lb/MMBtu) (1.15 lb/hr) on a 3-hour average basis (Consent Decree, ARM 17.8.752, ARM 17.8.749).

c. SO_2 emissions shall not exceed 20 parts per million volume, dry (ppmvd) at 0% oxygen (ARM 17.8.752).

d. CO emissions shall not exceed 0.034 lb/MMBtu based on a 3-hour average (ARM 17.8.752).

e. Calumet must install, operate, and maintain an ULNB and flue gas recirculation on Boiler #3 (ARM 17.8.1211, ARM 17.8.752).

f. Boiler #3 shall only combust pipeline quality natural gas or, refinery fuel gas, or sour water striper overhead (ARM 17.8.1211, ARM 17.8.752).

R.4. When the SO_2/O_2 CEMS is operational on the boiler stacks, Calumet may incinerate Sour Water Stripper Overhead in the #1, #2, and #3 boilers. Incineration of the SWSOH and combustion of any refinery fuel gas shall meet the applicable limitations in 40 CFR 60 Subpart J (Boiler #1 and #2) or Subpart Ja (Boiler #3), as applicable (Consent Decree, ARM 17.8.749, ARM 17.8.340, ARM 17.8.302, 40 CFR 60 Subpart J, and 40 CFR 60 Subpart Ja).

R.5. Calumet shall comply with all applicable requirements of 40 CFR 63 Subpart DDDDD, including as applicable to the #1, #2, and #3 Boilers (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart DDDDD).

R.6. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart J, including as applicable to the #1 and #2 Boilers (ARM 17.8.1211, Consent Decree, ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart J).

R.7. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart Ja, including as applicable to the #3 Boiler (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Ja).

R.8. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart QQQ, including as applicable to the individual drain system (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

R.9. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart Dc, including as applicable to Boiler #3 (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Dc).

Compliance Demonstration:

R.10. Calumet shall utilize an emissions factor as derived from the last source test completed as required in below conditions, and fuel usage, to determine mass emissions of NO_X and CO emissions from Boilers #1, #2, and #3 against the NO_X and CO Umbrella Limitation. (ARM 17.8.1213).

R.11. By July 1, 2008, Calumet shall install and operate an SO_2 and O_2 CEMS and a volumetric flow rate monitor on the stack for the #1 and #2 Boilers, to be used as the primary analytical instrument to determine compliance with state and federal SO_2 requirements. By July 1, 2008, Calumet shall initially certify the #1 and #2 Boiler SO_2/O_2 CEMS and the volumetric flow rate monitor in accordance with 40 CFR Part 60, Performance Specifications 2 and 3 and 6. After initial certification, Calumet shall conduct annual Relative Accuracy Test Audits (RATA) of the #1 and #2 Boiler SO_2/O_2 CEMS, and volumetric flow rate monitoring conformance with 40 CFR 60, Appendix F. After initial certification, Calumet shall also continue to implement all of the requirements of 40 CFR 60.13 and 40 CFR 60, Appendices B and F for the #1 and #2 Boilers SO_2/O_2 CEMS and flow rate monitor (May 2008 Administrative Order on Consent and ARM 17.8.749).

R.12. Calumet shall install and operate an SO_2 and O_2 CEMS, and a volumetric flow rate monitor on the stack for the Boiler #3, to be used as the primary analytical instrument to determine compliance with state and federal SO_2 requirements. Calumet shall initially certify the Boiler #3 SO_2/O_2 CEMS, and the volumetric flow rate monitor in accordance with 40 CFR 60, Performance Specifications 2, 3, and 6. After initial certification, Calumet shall conduct annual RATA of the Boiler #3 SO_2/O_2 CEMS and the volumetric flow rate monitor in conformance with 40 CFR 60, Appendix F. After initial certification, Calumet shall also continue to implement all of the requirements of 40 CFR 60.13 and 40 CFR 60, Appendices B and F for the Boiler #3 SO_2/O_2 CEMS (ARM 17.8.749).

R.13. In the event that SO_2/O_2 CEMS or volumetric flow monitor is not operational, Calumet must (ARM 17.8.749):

a. notify the Department of the problem within 24 hours (by phone) followed by written notification within 7 days;

b. continue to monitor using the H_2S CEMS at the fuel gas drum (pre-combustion);

c. route all SWSOH to the NaHS unit;

d. repair and/or replace the SO_2/O_2 CEMS equipment and continue to monitor compliance as required in Section III.R.11; and

e. notify the Department within 24-hours when the SO_2/O_2 CEMS is back on-line.

R.14. Biennially, Calumet shall test the #1 and #2 Boiler for NO_X. Such testing shall occur while sending all Sour Water Stripper Overhead to Boiler #1 and #2. The actual fuel burning rates and the emission factors developed from the most recent compliance source test shall be used to monitor compliance with Section III.R.1 as well as the NO_X Umbrella Limit. Testing shall occur concurrently with CO testing (ARM 17.8.1213, ARM 17.8.105, ARM 17.8.106).

R.15. Compliance with the #1 and #2 Boiler CO emission limits shall be determined through biennial compliance source testing concurrent with NO_X testing and by using the actual fuel burning rates and the emission factors developed from the most recent compliance source test (ARM 17.8.749).

R.16. Boiler #3 compliance shall be monitored as follows:

a. Compliance with the Boiler #3 SO_2 emission limitations shall be based on the data from the SO_2/O_2 CEMS (ARM 17.8.749).

b. In the event that SO_2/O_2 CEMS is not operational, Calumet must (ARM 17.8.749):

i. notify the Department of the problem within 24 hours (by phone) followed by written notification within 7 days;

ii. continue to monitor using the H_2S CEMS at the fuel gas drum (pre-combustion);

iii. route all SWSOH to the NaHS unit;

iv. repair and/or replace the SO_2/O_2 CEMS equipment and continue to monitor compliance as required in Section III.R.12;

v. notify the Department within 24 hours when the SO_2/O_2 CEMS is back on-line.

c. Once every calendar year, Calumet shall test Boiler #3 for NO_X emissions. The test shall include tracking the amount of fuel burned during the test, and testing of the fuel burned during the test, to report emissions on a lb/MMBtu basis as well as a lb/hr basis (ARM 17.8.1213).

d. Compliance with the Boiler #3 CO emission limits shall be demonstrated through compliance source testing and by using the actual fuel burning rates and the emission factors developed from the most recent compliance source test (ARM 17.8.749). Testing shall occur concurrently with NO_X testing (ARM 17.8.1213, ARM 17.8.105, ARM 17.8.106).

e. Calumet shall maintain records of the MMBtu/hr burned by hour (ARM 17.8.1213).

R.17. Calumet shall, during any time that any Boiler SO_2 CEMS are experiencing downtime, note the operational status of the sour water stripper and how overhead is handled during that timeframe (ARM 17.8.1213).

R.18. Calumet shall monitor compliance with 40 CFR 63 Subpart DDDDD as required by 40 CFR 63 Subpart DDDDD (ARM 17.8.1213, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart DDDDD).

R.19. Calumet shall monitor compliance with 40 CFR 60 Subpart J as required by 40 CFR 60 Subpart J (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart J).

R.20. Calumet shall monitor compliance with 40 CFR 60 Subpart Ja as required by 40 CFR 60 Subpart Ja (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Ja).

R.21. Calumet shall monitor compliance with 40 CFR 60 Subpart QQQ as required by 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

R.22. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart Dc (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Dc).

Recordkeeping:

R.23. Calumet shall comply with the NO_X and CO Umbrella limit recordkeeping requirements of Section III.B.17 for Boilers #1, #2, and #3 (ARM 17.8.1212).

R.24. Calumet shall maintain, under Calumet's control, all records required for compliance monitoring as a permanent business record for at least 5 years. Furthermore, the records must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.1212).

R.25. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 63 Subpart DDDDD (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart DDDDD).

R.26. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart J (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart J).

R.27. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart Ja (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Ja).

R.28. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

R.29. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart Dc (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Dc).

Reporting:

R.30. Calumet shall comply with the NO_X and CO Umbrella limit reporting requirements of Section III.B.26 for Boilers #1, 2 and 3 (ARM 17.8.1212).

R.31. Boilers #1 and #2:

Calumet shall provide quarterly emission reports which shall include the following (ARM 17.8.749):

a. SO_2 emission estimates for #1 and #2 Boilers, for each month of the quarter, including:

   i. Hourly SO_2 CEMS data for the reporting period;

   ii. Fuel gas H_2S analyzer data for the reporting the period;

   iii. SWSOH – either the daily H_2S concentration and SWSOH combustion amount of the HTU SWSOH, or the #1 and #2 Boiler stack SO_2 concentration on a daily basis;

b. NO_X emission estimates for each month of the quarter. The NO_X emission rates shall be reported as an hourly average and a monthly total;

c. CO emission estimates for the #1 and #2 Boilers, for each month of the quarter. The CO emission rate shall be reported as an hourly average;

d. Operating times for #1 and #2 Boilers and the HTU SWS unit during the reporting period;

e. Compliance source test data used to update emission factors, conducted during the reporting period;

f. Calumet shall maintain records of daily fuel usage (in MMscf/yr) in the #1 and # 2 Boilers. The fuel usage shall be reported annually for each Boiler based on a 12-month total (ARM 17.8.749);

g. Identification of any periods of excess emissions or other excursions during the reporting period; and

h. Monitoring downtime that occurred during the reporting period.

R.32. Boiler #3:

Calumet shall provide quarterly emission reports to monitor compliance with Section II.C.4 using data required in Section II.F.3. The quarterly report shall include the following (ARM 17.8.749):

a. SO_2 emission estimates for the Boiler #3, for each month of the quarter, including:

   i. Hourly SO_2/O_2 CEMS data for the reporting period;

ii. Fuel gas H_2S analyzer data for the reporting the data;

iii. SWSOH – either the daily H_2S concentration and SWSOH combustion amount of the HTU SWSOH, or the Boiler #3 stack SO_2 concentration on a daily basis;

b. NO_X emission estimates for each month of the quarter. The NO_X emission rates shall be reported as an hourly average;

c. CO emission estimates for the Boiler #3, for each month of the quarter. The CO emission rate shall be reported as an hourly average;

d. Operating times for Boiler #3 and the HTU SWSOH unit during the reporting period;

e. Compliance source test data used to update emission factors, conducted during the reporting period;

f. Identification of any periods of excess emissions or other excursions during the reporting period; and

g. Monitoring downtime that occurred during the reporting period.

R.33. Calumet shall comply with all applicable reporting requirements of 40 CFR 63 Subpart DDDDD (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart DDDDD).

R.34. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart J (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart J).

R.35. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart Ja (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Ja).

R.36. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart QQQ (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart QQQ).

R.37. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart Dc (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Dc).

R.38. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements.

R.39. The semiannual monitoring report shall clearly identify all deviations from permit requirements and shall provide (ARM 17.8.1212(3)):

a. A summary of any source testing that was performed during the reporting period including date testing was performed, result of the test, and date the report was submitted or estimated to be submitted;

b. A summary demonstrating compliance status with 40 CFR 60 Subpart J including reference to submittal dates of reports made or included;

c. A summary demonstrating compliance status with 40 CFR 60 Subpart Ja including reference to submittal dates of reports made or included;

d. A summary demonstrating compliance status with 40 CFR 60 Subpart QQQ including reference to submittal dates of reports made or included;

e. A summary demonstrating compliance status with 40 CFR 60 Subpart Dc including reference to submittal dates of reports made or included;

f. Reference to dates that quarterly reports were submitted

g. Any data indicating an hourly MMBtu/hr rate exceeding 60.5 MMBtu/hr on a HHV basis

h. The records required by Section III.R.17 for the semiannual reporting period.

S. EU18: TANKS

Tank #	Tank Service	MTVP	Size bbls	Roof Type	Constructed /Modified	Comments
1	Jet Fuel Additive	--	152	Fixed	1962	40 CFR 63 Subpart EEEE
2	Propane	--	800	PV	1965	Pressure Vessel
3	Isobutane	--	2,000	PV	1973	Pressure Vessel
4	Butane	--	600	PV	1939	Pressure Vessel
5	Isobutane	--	600	PV	1960	Pressure Vessel
10	Transmix	--	375	Fixed	1944	40 CFR 63 Subpart CC (Group 2)
14	Isobutane	--	1,400	PV	1960	Pressure Vessel
15	Butane	--	1,400	PV	1960	Pressure Vessel
29	Distillate	<0.75	20,600	Fixed	2013	40 CFR 63 Subpart CC (Group 2)
47	Kerosene / Jet Fuel	<0.75	20,500	Fixed	2013	40 CFR 63 Subpart CC (Group 2)
48	Kerosene / Jet Fuel	<0.75	20,500	Fixed	2013	40 CFR 63 Subpart CC (Group 2)
49	Kerosene / Jet Fuel	<0.75	20,500	Fixed	2013	40 CFR 63 Subpart CC (Group 2)
51	Treated Gas Oil	<0.75	21,000	Fixed	2013	40 CFR 63 Subpart CC (Group 2)
52	Gasoline	>0.75	19,000	EFR	2014	40 CFR 60 Subpart Kb; 40 CFR 63 Subpart CC (Group 1)
54	Kerosene / Jet Fuel	<0.75	18,000	Fixed	2015	40 CFR 63 Subpart CC (Group 2)
57	Naphtha	>0.75	10,000	IFR	-- / 1990	40 CFR 60 Subpart Kb; 40 CFR 63 Subpart CC (Group 1)
58	Kerosene / Jet Fuel	<0.75	9,900	Fixed	1935	40 CFR 63 Subpart CC (Group 2)

Tank #	Tank Service	MTVP	Size bbls	Roof Type	Constructed /Modified	Comments
100	#5 Fuel Oil	<0.75	1,100	Fixed	1959	40 CFR 63 Subpart CC (Group 2)
101	#5 Fuel Oil	<0.75	1,100	Fixed	1959	40 CFR 63 Subpart CC (Group 2)
116	Distillate	<0.75	44,900	Fixed	1972	40 CFR 63 Subpart CC (Group 2)
118	Asphalt Emulsion	<0.75	2,000	Fixed	1973	40 CFR 63 Subpart CC (Group 2)
119	Asphalt Emulsion	<0.75	2,000	Fixed	1973	40 CFR 63 Subpart CC (Group 2)
120	Asphalt Emulsion	<0.75	2,200	Fixed	1980	40 CFR 63 Subpart CC (Group 2)
121	Asphalt Emulsion	<0.75	2,200	Fixed	1980	40 CFR 63 Subpart CC (Group 2)
122	Gasoline	>0.75	21,900	EFR	2014	40 CFR 60 Subpart Kb; 40 CFR 63 Subpart CC (Group 1)
123	Gasoline	>0.75	21,900	EFR	2014	40 CFR 60 Subpart Kb; 40 CFR 63 Subpart CC (Group 1)
124	Naphtha	>0.75	21,500	EFR	1986	40 CFR 60 Subpart Kb; 40 CFR 63 Subpart CC (Group 1)
125	Distillate / Gas Oil	<0.75	38,500	Fixed	1990	40 CFR 63 Subpart CC (Group 2)
126	Gasoline	>0.75	29,500	EFR	1990	40 CFR 60 Subpart Kb; 40 CFR 63 Subpart CC (Group 1)
127	Gasoline	>0.75	21,500	EFR	1960	40 CFR 63 Subpart CC (Group 1)
128	Raw Diesel	<0.75	21,500	EFR	1960	40 CFR 63 Subpart CC (Group 2)
150	Raw Kerosene	<0.75	30,100	Fixed	2008	40 CFR 63 Subpart CC (Group 2)
170	Distillate	<0.75	10,200	Fixed	2008	40 CFR 63 Subpart CC (Group 2)
171	Distillate	<0.75	10,200	Fixed	2008	40 CFR 63 Subpart CC (Group 2)
175	Ethanol	>0.75	400	Fixed	< 1992	40 CFR 63 Subpart CC (Group 2)
176	Ethanol	>0.75	5,000	IFR	2011	40 CFR 60 Subpart Kb; 40 CFR 63 Subpart CC (Group 2)
201	Crude Oil	>0.75	69,700	EFR	2015	40 CFR 60 Subpart Kb; 40 CFR 63 Subpart CC (Group 1)
202	Crude Oil	>0.75	69,700	EFR	2015	40 CFR 60 Subpart Kb; 40 CFR 63 Subpart CC (Group 1)
203	Crude Oil	>0.75	69,700	EFR	Not Yet Installed	40 CFR 60 Subpart Kb; 40 CFR 63 Subpart CC (Group 1)
Tank Farm Equipment Components						40 CFR 63 Subpart CC (LDAR)
Individual Drain System		40 CFR 60 Subpart QQQ, 40 CFR 63 Subpart CC, 40 CFR 61 Subpart FF				

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
S.1, S.16, S.19, S.20, S.23, S.26, S.27	NSPS Kb - VOC	40 CFR 60 Subpart Kb	40 CFR 60 Subpart Kb	40 CFR 60 Subpart Kb	Semiannual and 40 CFR 60 Subpart Kb
S.2, S.17, S.19, S.21, S.24, S.26, S.27	MACT CC - HAPs	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	40 CFR 63 Subpart CC	Semiannual and 40 CFR 63 Subpart CC
S.3, S.18, S.19, S.22, S.25, S.26, S.27	MACT EEEE - HAPs	40 CFR 63 Subpart EEEE	40 CFR 63 Subpart EEEE	40 CFR 63 Subpart EEEE	Semiannual and 40 CFR 63 Subpart EEEE
S.4, S.15, S.19, S.26, S.27	Tank Storage and Design	Tank Storage and Design	Recordkeeping	Ongoing	Semiannual
S.5, S.15, S.19, S.26, S.27	Tank Storage and Design	Tank Storage and Design	Recordkeeping	Ongoing	Semiannual
S.6, S.15, S.19, S.26, S.27	Tank Storage and Design	Tank Storage and Design	Recordkeeping	Ongoing	Semiannual
S.7, S.15, S.19, S.26, S.27	Tank Storage and Design	Tank Storage and Design	Recordkeeping	Ongoing	Semiannual
S.8, S.15, S.19, S.26, S.27	Tank Storage and Design	Tank Storage and Design	Recordkeeping	Ongoing	Semiannual
S.9, S.15, S.19, S.26, S.27	Tank Storage and Design	Tank Storage and Design	Recordkeeping	Ongoing	Semiannual
S.10, S.15, S.19, S.26, S.27	Tank Storage and Design	Tank Storage and Design	Recordkeeping	Ongoing	Semiannual
S.11, S.15, S.19, S.26, S.27	Tank Storage and Design	Tank Storage and Design	Recordkeeping	Ongoing	Semiannual
S.12, S.15, S.19, S.26, S.27	Tank Storage and Design	Tank Storage and Design	Recordkeeping	Ongoing	Semiannual
S.13, S.15, S.19, S.26, S.27	Tank Storage and Design	Tank Storage and Design	Recordkeeping	Ongoing	Semiannual
S.14, S.15, S.19, S.26, S.27	Tank Storage and Design	Tank Storage and Design	Recordkeeping	Ongoing	Semiannual

Conditions:

S.1. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart Kb (ARM 17.8.1211, AMR 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Kb).

S.2. Calumet shall comply with all applicable requirements of 40 CFR 63 Subpart CC (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

S.3. Calumet shall comply with all applicable requirements of 40 CFR 63 Subpart EEEE (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart EEEE).

S.4. Storage tanks #47, #48, #49, #54, and #58 shall be used to store kerosene/Jet A and shall be equipped with fixed roof tanks (ARM 17.8.749 and ARM 17.8.752).

S.5. Storage tanks #50 and #102 shall be equipped with a fixed roof (ARM 17.8.752).

S.6. Storage tanks #100 and #101 shall be used to store #5 Fuel Oil and shall be equipped with a fixed roof (ARM 17.8.749).

S.7. Storage tank #52 shall be used to store premium gasoline and shall be equipped with external floating roofs and a mechanical shoe seal (ultracheck safe sleeve or equivalent) (ARM 17.8.752).

S.8. Storage tanks #123, #126 and #127 shall be used to store unleaded gasoline and shall be equipped with an external floating roof and a mechanical shoe seal (ultracheck safe sleeve guide pole) (ARM 17.8.749 and ARM 17.8.752).

S.9. Storage tanks #57 and #124 shall be used to store Naptha, and Tank #57 shall be equipped with a double seal internal floating roof (ARM 17.8.752).

S.10. Storage tanks #122, #124, #126, #201, #202, and #203 shall be equipped with dual-seal external floating roofs with guide pole sleeves (ARM 17.8.752).

S.11. Storage tanks #125 and #128 shall be maintained in heavy liquids service only, with maximum vapor pressure of contents contained not to exceed 0.5 pounds per square inch absolute (psia). The tanks shall be equipped and operated as a fixed roof tank with pressure/vacuum vent and submerged fill (ARM 17.8.749 and ARM 17.8.752).

S.12. Storage tanks #50, #55, #56, #69, #102, #110, #112, #130, #132, #133, #135, #137, #139, and #140 shall be used for heavy oil (ARM 17.8.749).

S.13. Storage tanks #201, #202, and #203 shall be used for crude oil service (ARM 17.8.749).

S.14. Storage tank #9 shall be used for caustic service (ARM 17.8.749).

Compliance Demonstration:

S.15. Calumet shall maintain records on-site as to tank size, location, identifying number, design, contents/service, and throughput, such that tank service on any one specific day can be identified, compliance with the above requirements can be demonstrated, and emissions from any tank can be determined (ARM 17.8.1213).

S.16. Calumet shall monitor compliance with 40 CFR 60 Subpart Kb as required by 40 CFR 60 Subpart Kb (ARM 17.8.1213, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Kb).

S.17. Calumet shall monitor compliance with 40 CFR 63 Subpart CC as required by 40 CFR 63 Subpart CC (ARM 17.8.1213, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

S.18. Calumet shall monitor compliance with 40 CFR 63 Subpart EEEE as required by 40 CFR 63 Subpart EEEE (ARM 17.8.1213, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart EEEE).

Recordkeeping:

S.19. Calumet shall maintain, under Calumet's control, all records required for compliance monitoring as a permanent business record for at least 5 years. Furthermore, the records must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.1212).

S.20. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart Kb (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Kb).

S.21. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

S.22. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 63 Subpart EEEE (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart EEEE).

Reporting:

S.23. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart Kb (ARM 17.8.1212, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart Kb).

S.24. Calumet shall comply with all applicable reporting requirements of 40 CFR 63 Subpart CC (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart CC).

S.25. Calumet shall comply with all applicable reporting requirements of 40 CFR 63 Subpart EEEE (ARM 17.8.1212, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart EEEE).

S.26. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements.

S.27. The semiannual monitoring report shall clearly identify all deviations from permit requirements and shall provide (ARM 17.8.1212(3)):

a. A summary demonstrating compliance status with 40 CFR 60 Subpart Kb including reference to submittal dates of reports made or included;

b. A summary demonstrating compliance status with 40 CFR 63 Subpart CC including reference to submittal dates of reports made or included;

c. A summary of any tank service changes during the semiannual reporting period.

T. EU19– STATIONARY INTERNAL COMBUSTION ENGINES

EU19a – 2011 John Deere 400hp Emergency Generator Engine
EU19b – 2006 Caterpillar 540hp Emergency Air Compressor Engine
EU19c – 2006 Cummins 165hp Emergency API Storm Water Pump
EU19d – 1986 Cummins 240hp Emergency Fire Water Pump
EU19e – 2015 John Deere 300hp Emergency Fire Water Pump
EU19f– 2015 John Deere 300hp Emergency Fire Water Pump

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
T.1, T.3, T.5, T.7, T.9, T.10	NSPS IIII	40 CFR 60 Subpart IIII	40 CFR 60 Subpart IIII	40 CFR 60 Subpart IIII	Semiannual and 40 CFR 60 Subpart IIII
T.2, T.4, T.6, T.8, T.9, T.10	MACT ZZZZ	40 CFR 63 Subpart ZZZZ	40 CFR 63 Subpart ZZZZ	40 CFR 63 Subpart ZZZZ	Semiannual and 40 CFR 63 Subpart ZZZZ

Conditions

T.1. Calumet shall comply with all applicable requirements of 40 CFR 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart IIII).

T.2. Calumet shall comply with all applicable requirements of 40 CFR 63 Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart ZZZZ).

Compliance Demonstration

T.3. Calumet shall demonstrate compliance with 40 CFR 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines as required by 40 CFR 60 Subpart IIII (ARM 17.8.1213, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart IIII).

T.4. Calumet shall demonstrate compliance with 40 CFR 63 Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines as required by 40 CFR 63 Subpart ZZZZ (ARM 17.8.1213, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart ZZZZ).

Recordkeeping

T.5. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 60 Subpart IIII (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart IIII).

T.6. Calumet shall comply with all applicable recordkeeping requirements of 40 CFR 63 Subpart ZZZZ (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart ZZZZ).

Reporting

T.7. Calumet shall comply with all applicable reporting requirements of 40 CFR 60 Subpart IIII (ARM 17.8.1211, ARM 17.8.340, ARM 17.8.302, and 40 CFR 60 Subpart IIII).

T.8. Calumet shall comply with all applicable reporting requirements of 40 CFR 63 Subpart ZZZZ (ARM 17.8.1211, ARM 17.8.342, ARM 17.8.302, and 40 CFR 63 Subpart ZZZZ).

T.9. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements.

T.10. The semiannual monitoring report shall clearly identify all deviations from permit requirements and shall provide a summary of compliance with 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ (ARM 17.8.1212(3)).

SECTION IV. NON-APPLICABLE REQUIREMENTS

Air Quality Administrative Rules of Montana and Federal Regulations identified by Calumet as not applicable to the facility or to a specific emissions unit at the time of the permit issuance for which the Department provided a shield are listed below (ARM 17.8.1214).

Citation	Title	Basis
Federal Regulations		
Standard of Performance for New Stationary Sources (NSPS)		
40 CFR 60 Subpart D	Performance Standards for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971	There are no >250 MMBtu/hour steam generating units at the refinery
40 CFR 60 Subpart Da	Performance Standards for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After September 18, 1978.	There are no electric utility steam generating units at the refinery.
40 CFR 60 Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	There are no >100 MMBtu/hour steam generating units at the refinery.
40 CFR 60 Subpart GG	Standards of Performance for Stationary Gas Turbines	There are no combustion turbines at the refinery.
40 CFR 60 Subpart III	Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes	Refinery does not operate any SOCMI air oxidation unit processes that make a chemical listed in 40 CFR 60.617.
National Emission Standards for Hazardous Air Pollutants (NESHAPS)		
40 CFR 61 Subpart Y	National Emission Standards for Benzene Emissions from Benzene Storage Devices	The refinery does not have the ability to the produce benzene products listed as applicable under Subpart Y §61.270.
40 CFR 61 Subpart BB	National Emission Standards for Benzene Emissions from Benzene Storage Vessels	The refinery does not have this source category.
National Emission Standards for Hazardous Air Pollutants for Source Categories (a.k.a. MACT)		
40 CFR 63 Subpart F	National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry	40 CFR 63 Subpart F §63.100(j) exempts petroleum refining process units.
40 CFR 63 Subpart G	National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater	40 CFR 63 Subpart F §63.100(j) exempts petroleum refining process units.

40 CFR 63 Subpart H	National Emission Standards for Organic Hazardous Air Pollutants from Equipment Leaks	40 CFR 63 Subpart F §63.100(j) exempts petroleum refining process units.
Citation	Title	Basis
40 CFR 63 Subpart I	National Emission Standards for Organic Hazardous Air Pollutants for Certain Processes Subject to the Negotiated Regulation for Equipment Leaks	The refinery is not subject to the Negotiated Regulations for Equipment Leaks.
40 CFR 63 Subpart OO	National Emissions Standards for Tanks	No other portion of the applicable sections of 40 CFR 63 references this section, as required.
40 CFR 63 Subpart QQ	National Emissions Standards for Surface Impoundments	No other portion of the applicable sections of 40 CFR 63 references this section, as required.
40 CFR 63 Subpart RR	National Emission Standards for Individual Drain Systems	No other portion of the applicable sections of 40 CFR 63 references this section, as required.
40 CFR 63 Subpart SS	National Emission Standards for Hazardous Air Pollutants for Closed Vent Systems, Control Devices, Recovery Devices, and Routing to a Fuel Gas System or a Process.	Refinery is not subject to any subpart that references the use of this subpart for air emission.
40 CFR 63 Subpart EEE	National Emission Standards for Hazardous Air Pollutants for Hazardous Waste Incinerators	Refinery does not own or operate a Hazardous Waste Incinerator, Cement Kiln, or Aggregate Kiln.
40 CFR 63 Subpart YYYY	National Emission Standards for Combustion Turbines	There are no combustion turbines at the refinery.

SECTION V. GENERAL PERMIT CONDITIONS

A. Compliance Requirements

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(a)-(c)&(e), §1206(6)(c)&(b)

Duty to Comply

1. The permittee must comply with all conditions of the permit. Any noncompliance with the terms or conditions of the permit constitutes a violation of the Montana Clean Air Act, and may result in enforcement action, permit modification, revocation and reissuance, or termination, or denial of a permit renewal application under ARM Title 17, Chapter 8, Subchapter 12.

2. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

3. Any schedule of compliance for applicable requirements with which the source is not in compliance with at the time of permit issuance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it was based.

4. For applicable requirements that will become effective during the permit term, the source shall meet such requirements on a timely basis unless a more detailed plan or schedule is required by the applicable requirement or the Department.

Need to Halt or Reduce Activity Not a Defense

1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. If appropriate, this factor may be considered as a mitigating factor in assessing a penalty for noncompliance with an applicable requirement if the source demonstrates that both the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continuing operations, and that such health, safety or environmental impacts were unforeseeable and could not have otherwise been avoided.

Duty to Provide Information

1. The permittee shall furnish to the Department, within a reasonable time set by the Department (not to be less than 15 days), any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Department copies of those records that are required to be kept pursuant to the terms of the permit. This subsection does not impair or otherwise limit the right of the permittee to assert the confidentiality of the information requested by the Department, as provided in 75-2-105, MCA.

Credible Evidence

1. Pursuant to ARM 17.8.132, for the purpose of submitting a compliance certification, nothing in these rules shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance. However, when compliance or noncompliance is demonstrated by a test or procedure provided by permit or other applicable requirements, the source shall then be presumed to be in compliance or noncompliance unless that presumption is overcome by other relevant credible evidence.

B. Certification Requirements

ARM 17.8, Subchapter 12, Operating Permit Program §1207 and §1213(7)(a)&(c)-(d)

1. Any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12, shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

2. Compliance certifications shall be submitted by February 15 of each year, or more frequently if otherwise specified in an applicable requirement or elsewhere in the permit. Each certification must include the required information for the previous calendar year (i.e., January 1 – December 31).

3. Compliance certifications shall include the following:

   a. The identification of each term or condition of the permit that is the basis of the certification;

   b. The identification of the method(s) or other means used by the owner or operator for determining the status of compliance with each term and condition during the certification period, consistent with ARM 17.8.1212;

   c. The status of compliance with each term and condition for the period covered by the certification, *including whether compliance during the period was continuous or intermittent* (based on the method or means identified in ARM 17.8.1213(7)(c)(ii), as described above); and

   d. Such other facts as the Department may require to determine the compliance status of the source.

4. All compliance certifications must be submitted to the EPA, as well as to the Department, at the addresses listed in the Notification Addresses Appendix of this permit.

C. Permit Shield

ARM 17.8, Subchapter 12, Operating Permit Program §1214(1)-(4)

1. The applicable requirements and non-federally enforceable requirements are included and specifically identified in this permit, and the permit includes a precise summary of the requirements not applicable to the source. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements and any non-federally enforceable requirements as of the date of permit issuance.

2. The permit shield described in 1 above shall remain in effect during the appeal of any permit action (renewal, revision, reopening, or revocation and reissuance) to the Board of Environmental Review (Board), until such time as the Board renders its final decision.

3. Nothing in this permit alters or affects the following:

   a. The provisions of Section 7603 of the FCAA, including the authority of the administrator under that section;

   b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

   c. The applicable requirements of the Acid Rain Program, consistent with Section 7651g(a) of the FCAA;

   d. The ability of the administrator to obtain information from a source pursuant to Section 7414 of the FCAA;

   e. The ability of the Department to obtain information from a source pursuant to the Montana Clean Air Act, Title 75, Chapter 2, MCA;

   f. The emergency powers of the Department under the Montana Clean Air Act, Title 75, Chapter 2, MCA; and

   g. The ability of the Department to establish or revise requirements for the use of Reasonably Available Control Technology (RACT) as defined in ARM Title 17, Chapter 8. However, if the inclusion of a RACT into the permit pursuant to ARM Title 17, Chapter 8, Subchapter 12, is appealed to the Board, the permit shield, as it applies to the source's existing permit, shall remain in effect until such time as the Board has rendered its final decision.

4. Nothing in this permit alters or affects the ability of the Department to take enforcement action for a violation of an applicable requirement or permit term demonstrated pursuant to ARM 17.8.106, Source Testing Protocol.

5. The permit shield will not extend to minor permit modifications or changes not requiring a permit revision (see Sections I & J).

6. The permit shield will extend to significant permit modifications and transfer or assignment of ownership (see Sections K & O).

D. Monitoring, Recordkeeping, and Reporting Requirements

ARM 17.8, Subchapter 12, Operating Permit Program §1212(2)&(3)

1. Unless otherwise provided in this permit, the permittee shall maintain compliance monitoring records that include the following information:
   a. The date, place as defined in the permit, and time of sampling or measurement;

   b. The date(s) analyses were performed;

   c. The company or entity that performed the analyses;

   d. The analytical techniques or methods used;

   e. The results of such analyses; and

   f. The operating conditions at the time of sampling or measurement.

2. The permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. All monitoring data, support information, and required reports and summaries may be maintained in computerized form at the plant site if the information is made available to Department personnel upon request, which may be for either hard copies or computerized format. Strip-charts must be maintained in their original form at the plant site and shall be made available to Department personnel upon request.

3. The permittee shall submit to the Department, at the addresses located in the Notification Addresses Appendix of this permit, reports of any required monitoring by February 15 and August 15 of each year, or more frequently if otherwise specified in an applicable requirement or elsewhere in the permit. The monitoring report submitted on February 15 of each year must include the required monitoring information for the period of July 1 through December 31 of the previous year. The monitoring report submitted on August 15 of each year must include the required monitoring information for the period of January 1 through June 30 of the current year. All instances of deviations from the permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official, consistent with ARM 17.8.1207.

E. Prompt Deviation Reporting

ARM 17.8, Subchapter 12, Operating Permit Program §1212(3)(b)

The permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions, the probable cause of such deviations, and any corrective actions or preventive measures taken. To be considered prompt, deviations shall be reported to the Department within the following timeframes (unless otherwise specified in an applicable requirement):

1. For deviations which may result in emissions potentially in violation of permit limitations:

a. An initial phone notification (or faxed or electronic notification) describing the incident within 24 hours (or the next business day) of discovery; and,

b. A follow-up written, faxed, or electronic report within 30 days of discovery of the deviation that describes the probable cause of the reported deviation and any corrective actions or preventative measures taken.

2. For deviations attributable to malfunctions, deviations shall be reported to the Department in accordance with the malfunction reporting requirements under ARM 17.8.110; and

3. For all other deviations, deviations shall be reported to the Department via a written, faxed, or electronic report within 90 days of discovery (as determined through routine internal review by the permittee).

Prompt deviation reports do not need to be resubmitted with regular semiannual (or other routine) reports, but may be referenced by the date of submittal.

F. Emergency Provisions

ARM 17.8, Subchapter 12, Operating Permit Program §1201(13) and §1214(5), (6)&(8)

1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation and causes the source to exceed a technology-based emission limitation under this permit due to the unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of reasonable preventive maintenance, careless or improper operation, or operator error.

2. An emergency constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the permittee demonstrates through properly signed, contemporaneous logs, or other relevant evidence, that:

   a. An emergency occurred and the permittee can identify the cause(s) of the emergency;

   b. The permitted facility was, at the time, being properly operated;

   c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in the permit; and

   d. The permittee submitted notice of the emergency to the Department within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirements of ARM 17.8.1212(3)(b). This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

3. These emergency provisions are in addition to any emergency, malfunction or upset provision contained in any applicable requirement.

G. Inspection and Entry

ARM 17.8, Subchapter 12, Operating Permit Program §1213(3)&(4)

1. Upon presentation of credentials and other requirements as may be required by law, the permittee shall allow the Department, the administrator, or an authorized representative (including an authorized contractor acting as a representative of the Department or the administrator) to perform the following:

    a. Enter the premises where a source required to obtain a permit is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;

    b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;

    c. Inspect at reasonable times any facilities, emission units, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

    d. As authorized by the Montana Clean Air Act and rules promulgated thereunder, sample or monitor, at reasonable times, any substances or parameters at any location for the purpose of assuring compliance with the permit or applicable requirements.

2. The permittee shall inform the inspector of all workplace safety rules or requirements at the time of inspection. This section shall not limit in any manner the Department's statutory right of entry and inspection as provided for in 75-2-403, MCA.

H. Fee Payment

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(f) and ARM 17.8, Subchapter 5, Air Quality Permit Application, Operation, and Open Burning Fees §505(3)-(5) (STATE ONLY)

1. The permittee must pay application and operating fees, pursuant to ARM Title 17, Chapter 8, Subchapter 5.

2. Annually, the Department shall provide the permittee with written notice of the amount of the fee and the basis for the fee assessment. The air quality operation fee is due 30 days after receipt of the notice, unless the fee assessment is appealed pursuant to ARM 17.8.511. If any portion of the fee is not appealed, that portion of the fee that is not appealed is due 30 days after receipt of the notice. Any remaining fee, which may be due after the completion of an appeal, is due immediately upon issuance of the Board's decision or upon completion of any judicial review of the Board's decision.

3. If the permittee fails to pay the required fee (or any required portion of an appealed fee) within 90 days of the due date of the fee, the Department may impose an additional assessment of 15% of the fee (or any required portion of an appealed fee) or $100, whichever is greater, plus interest on the fee (or any required portion of an appealed fee), computed at the interest rate established under 15-31-510(3), MCA.

I. Minor Permit Modifications

ARM 17.8, Subchapter 12, Operating Permit Program §1226(3)&(11)

1. An application for a minor permit modification need only address in detail those portions of the permit application that require revision, updating, supplementation, or deletion, and may reference any required information that has been previously submitted.

2. The permit shield under ARM 17.8.1214 will not extend to any minor modifications processed pursuant to ARM 17.8.1226.

J. Changes Not Requiring Permit Revision

ARM 17.8, Subchapter 12, Operating Permit Program §1224(1)-(3), (5)&(6)

1. The permittee is authorized to make changes within the facility as described below, provided the following conditions are met:

    a. The proposed changes do not require the permittee to obtain a MAQP under ARM Title 17, Chapter 8, Subchapter 7;

    b. The proposed changes are not modifications under Title I of the FCAA, or as defined in ARM Title 17, Chapter 8, Subchapters 8, 9, or 10;

    c. The emissions resulting from the proposed changes do not exceed the emissions allowable under this permit, whether expressed as a rate of emissions or in total emissions;

    d. The proposed changes do not alter permit terms that are necessary to enforce applicable emission limitations on emission units covered by the permit; and

    e. The facility provides the administrator and the Department with written notification at least 7 days prior to making the proposed changes.

2. The permittee and the Department shall attach each notice provided pursuant to 1.e above to their respective copies of this permit.

3. Pursuant to the conditions above, the permittee is authorized to make Section 502(b)(10) changes, as defined in ARM 17.8.1201(30), without a permit revision. For each such change, the written notification required under 1.e above shall include a description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

4. The permittee may make a change not specifically addressed or prohibited by the permit terms and conditions without requiring a permit revision, provided the following conditions are met:

    a. Each proposed change does not weaken the enforceability of any existing permit conditions;

    b. The Department has not objected to such change;

c. Each proposed change meets all applicable requirements and does not violate any existing permit term or condition; and

d. The permittee provides contemporaneous written notice to the Department and the administrator of each change that is above the level for insignificant emission units as defined in ARM 17.8.1201(22) and 17.8.1206(3), and the written notice describes each such change, including the date of the change, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

5. The permit shield authorized by ARM 17.8.1214 shall not apply to changes made pursuant to ARM 17.8.1224(3) and (5), but is applicable to terms and conditions that allow for increases and decreases in emissions pursuant to ARM 17.8.1224(4).

K. Significant Permit Modifications
ARM 17.8, Subchapter 12, Operating Permit Program §1227(1), (3)&(4)

1. The modification procedures set forth in 2 below must be used for any application requesting a significant modification of this permit. Significant modifications include the following:

   a. Any permit modification that does not qualify as either a minor modification or as an administrative permit amendment;

   b. Every significant change in existing permit monitoring terms or conditions;

   c. Every relaxation of permit reporting or recordkeeping terms or conditions that limit the Department's ability to determine compliance with any applicable rule, consistent with the requirements of the rule; or

   d. Any other change determined by the Department to be significant.

2. Significant modifications shall meet all requirements of ARM Title 17, Chapter 8, including those for applications, public participation, and review by affected states and the administrator, as they apply to permit issuance and renewal, except that an application for a significant permit modification need only address in detail those portions of the permit application that require revision, updating, supplementation or deletion.

3. The permit shield provided for in ARM 17.8.1214 shall extend to significant modifications.

L. Reopening for Cause
ARM 17.8, Subchapter 12, Operating Permit Program §1228(1)&(2)

This permit may be reopened and revised under the following circumstances:

1. Additional applicable requirements under the FCAA become applicable to the facility when the permit has a remaining term of 3 or more years. Reopening and revision of the permit shall be completed not later than 18 months after promulgation of the applicable requirement. No reopening is required under ARM 17.8.1228(1)(a) if the effective date of the applicable requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms or conditions have been extended pursuant to ARM 17.8.1220(12) or 17.8.1221(2);

2. Additional requirements (including excess emission requirements) become applicable to an affected source under the Acid Rain Program. Upon approval by the administrator, excess emission offset plans shall be deemed incorporated into the permit;

3. The Department or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit; or

4. The administrator or the Department determines that the permit must be revised or revoked and reissued to ensure compliance with the applicable requirements.

M. Permit Expiration and Renewal

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(g), §1220(11)&(12), and §1205(2)(d)

1. This permit is issued for a fixed term of 5 years.

2. Renewal of this permit is subject to the same procedural requirements that apply to permit issuance, including those for application, content, public participation, and affected state and administrator review.

3. Expiration of this permit terminates the permittee's right to operate unless a timely and administratively complete renewal application has been submitted consistent with ARM 17.8.1221 and 17.8.1205(2)(d). If a timely and administratively complete application has been submitted, all terms and conditions of the permit, including the application shield, remain in effect after the permit expires until the permit renewal has been issued or denied.

4. For renewal, the permittee shall submit a complete Air Quality Operating Permit application to the Department not later than 6 months prior to the expiration of this permit, unless otherwise specified. If necessary to ensure that the terms of the existing permit will not lapse before renewal, the Department may specify, in writing to the permittee, a longer time period for submission of the renewal application. Such written notification must be provided at least 1 year before the renewal application due date established in the existing permit.

N. Severability Clause

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(i)&(l)

1. The administrative appeal or subsequent judicial review of the issuance by the Department of an initial permit under this subchapter shall not impair in any manner the underlying applicability of all applicable requirements, and such requirements continue to apply as if a final permit decision had not been reached by the Department.

2. If any provision of a permit is found to be invalid, all valid parts that are severable from the invalid part remain in effect. If a provision of a permit is invalid in one or more of its applications, the provision remains in effect in all valid applications that are severable from the invalid applications.

O. Transfer or Assignment of Ownership
ARM 17.8, Subchapter 12, Operating Permit Program §1225(2)&(4)

1. If an administrative permit amendment involves a change in ownership or operational control, the applicant must include in its request to the Department a written agreement containing a specific date for the transfer of permit responsibility, coverage and liability between the current and new permittee.

2. The permit shield provided for in ARM 17.8.1214 shall not extend to administrative permit amendments.

P. Emissions Trading, Marketable Permits, Economic Incentives
ARM 17.8, Subchapter 12, Operating Permit Program §1226(2)

Notwithstanding ARM 17.8.1226(1) and (7), minor air quality operating permit modification procedures may be used for permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that such minor permit modification procedures are explicitly provided for in the Montana State Implementation Plan or in applicable requirements promulgated by the administrator.

Q. No Property Rights Conveyed
ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(d)

This permit does not convey any property rights of any sort, or any exclusive privilege.

R. Testing Requirements
ARM 17.8, Subchapter 1, General Provisions §105

The permittee shall comply with ARM 17.8.105.

S. Source Testing Protocol
ARM 17.8, Subchapter 1, General Provisions §106

The permittee shall comply with ARM 17.8.106.

T. Malfunctions
ARM 17.8, Subchapter 1, General Provisions §110

The permittee shall comply with ARM 17.8.110.

U. Circumvention
ARM 17.8, Subchapter 1, General Provisions §111

The permittee shall comply with ARM 17.8.111.

V. Motor Vehicles
ARM 17.8, Subchapter 3, Emission Standards §325

The permittee shall comply with ARM 17.8.325.

W. Annual Emissions Inventory

ARM 17.8, Subchapter 5, Air Quality Permit Application, Operation and Open Burning Fees §505 (STATE ONLY)

The permittee shall supply the Department with annual production and other information for all emission units necessary to calculate actual or estimated actual amount of air pollutants emitted during each calendar year. Information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request, unless otherwise specified in this permit. Information shall be in the units required by the Department.

X. Open Burning

ARM 17.8, Subchapter 6, Open Burning §604, 605 and 606

The permittee shall comply with ARM 17.8.604, 605 and 606.

Y. Montana Air Quality Permits

ARM 17.8, Subchapter 7, Permit, Construction and Operation of Air Contaminant Sources §745 and 764

1. Except as specified, no person shall construct, install, modify or use any air contaminant source or stack associated with any source without first obtaining a permit from the Department or Board. A permit is not required for those sources or stacks as specified by ARM 17.8.744(1)(a)-(k).

2. The permittee shall comply with ARM 17.8.743, 744, 745, 748, and 764.

3. ARM 17.8.745(1) specifies de minimis changes as construction or changed conditions of operation at a facility holding a MAQP issued under Chapter 8 that does not increase the facility's potential to emit by more than 5 tons per year of any pollutant, except:

    a. Any construction or changed condition that would violate any condition in the facility's existing MAQP or any applicable rule contained in Chapter 8 is prohibited, except as provided in ARM 17.8.745(2);

    b. Any construction or changed conditions of operation that would qualify as a major modification under Subchapters 8, 9 or 10 of Chapter 8;

    c. Any construction or changed condition of operation that would affect the plume rise or dispersion characteristic of emissions that would cause or contribute to a violation of an ambient air quality standard or ambient air increment as defined in ARM 17.8.804;

    d. Any construction or improvement project with a PTE more than 5 tons per year may not be artificially split into smaller projects to avoid Montana Air Quality Permitting; or

    e. Emission reductions obtained through offsetting within a facility are not included when determining the potential emission increase from construction or changed conditions of operation, unless such reductions are made federally enforceable.

4. Any facility making a de minimis change pursuant to ARM 17.8.745(1) shall notify the Department if the change would include a change in control equipment, stack height, stack diameter, stack gas temperature, source location or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1).

Z. National Emission Standard for Asbestos
40 CFR 61, Subpart M

The permittee shall not conduct any asbestos abatement activities except in accordance with 40 CFR 61, Subpart M (National Emission Standard for Hazardous Air Pollutants for Asbestos).

AA. Asbestos
ARM 17.74, Subchapter 3, General Provisions and Subchapter 4, Fees

The permittee shall comply with ARM 17.74.301, *et seq.*, and ARM 17.74.401, *et seq.* (State only).

BB. Stratospheric Ozone Protection – Servicing of Motor Vehicle Air Conditioners
40 CFR 82, Subpart B

If the permittee performs a service on motor vehicles and this service involves ozone-depleting substance/refrigerant in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR 82, Subpart B.

CC. Stratospheric Ozone Protection – Recycling and Emission Reductions
40 CFR 82, Subpart F

The permittee shall comply with the standards for recycling and emission reductions in 40 CFR 82, Subpart F, except as provided for MVACs in Subpart B.

DD. Emergency Episode Plan

The permittee shall comply with the requirements contained in Chapter 9.7 of the State of Montana Air Quality Control Implementation Plan.

Each major source emitting 100 tons per year located in a Priority I Air Quality Control Region, shall submit to the Department a legally enforceable Emergency Episode Action Plan (EEAP) that details how the source will curtail emissions during an air pollutant emergency episode. The industrial EEAP shall be in accordance with the Department's EEAP and shall be submitted according to a timetable developed by the Department, following Priority I reclassification.

EE. Definitions

Terms not otherwise defined in this permit or in the Definitions and Abbreviations Appendix of this permit, shall have the meaning assigned to them in the referenced regulations.

APPENDICES

APPENDIX A INSIGNIFICANT EMISSION UNITS

Disclaimer: The information in this appendix is not State or Federally enforceable, but is presented to assist Calumet, the permitting authority, inspectors, and the public.

Pursuant to ARM 17.8.1201(22)(a), an insignificant emission unit means any activity or emission unit located within a source that: (i) has a potential to emit (PTE) less than 5 tons per year of any regulated pollutant; (ii) has a PTE less than 500 lb/yr of lead; (iii) has a PTE less than 500 lb/yr of HAPs listed pursuant to Section 7412 (b) of the FCAA; and (iv) is not regulated by an applicable requirement, other than a generally applicable requirement that applies to all emission units subject to Subchapter 12.

List of Insignificant Activities:

The following table of insignificant sources and/or activities was provided by Calumet. Because there are no requirements to update such a list, the emission units and/or activities may change from those specified in the table.

Emissions Unit ID	Description	Associated Unit(s)
IEU 1	Chemical Additive Pots	Crude Unit, Cat Poly Unit, Cat Reformer Unit, Storage Loadout Unit, Utility Unit, Asphalt Polymerization Unit
IEU 2	Chemical Additive Tanks	Hydrogen Unit
IEU 3	Tank 117 – Sodium Hydrosulfide Tank	H_2S Scrubbing
IEU 4	Tank 217 – Off Spec Sodium Hydrosulfide Tank	H_2S Scrubbing
IEU 5	1,042-gallon Diesel Tank	Mobil source diesel fuel tank
IEU 6	11,900 barrel Fixed Roof Ammonia Tank	Tank 160

APPENDIX B DEFINITIONS and ABBREVIATIONS

"Act" means the Clean Air Act, as amended, 42 U.S. 7401, *et seq.*

"Administrative permit amendment" means an air quality operating permit revision that:

(a) Corrects typographical errors;

(b) Identifies a change in the name, address or phone number of any person identified in the air quality operating permit, or identifies a similar minor administrative change at the source;

(c) Requires more frequent monitoring or reporting by Calumet;

(d) Requires changes in monitoring or reporting requirements that the Department deems to be no less stringent than current monitoring or reporting requirements;

(e) Allows for a change in ownership or operational control of a source if the Department has determined that no other change in the air quality operating permit is necessary, consistent with ARM 17.8.1225; or

(f) Incorporates any other type of change that the Department has determined to be similar to those revisions set forth in (a)-(e), above.

"Applicable requirement" means all of the following as they apply to emission units in a source requiring an air quality operating permit (including requirements that have been promulgated or approved by the Department or the administrator through rule making at the time of issuance of the air quality operating permit, but have future-effective compliance dates, provided that such requirements apply to sources covered under the operating permit):

(a) Any standard, rule, or other requirement, including any requirement contained in a consent decree or judicial or administrative order entered into or issued by the Department, that is contained in the Montana State Implementation Plan approved or promulgated by the administrator through rule making under Title I of the FCAA;

(b) Any federally enforceable term, condition or other requirement of any Montana Air Quality Permit issued by the Department under Subchapters 7, 8, 9 and 10 of this chapter, or pursuant to regulations approved or promulgated through rule making under Title I of the FCAA, including Parts C and D;

(c) Any standard or other requirement under Section 7411 of the FCAA, including Section 7411(d);

(d) Any standard or other requirement under Section 7412 of the FCAA, including any requirement concerning accident prevention under Section 7412(r)(7), but excluding the contents of any risk management plan required under Section 7412(r);

(e) Any standard or other requirement of the acid rain program under Title IV of the FCAA or regulations promulgated thereunder;

(f) Any requirements established pursuant to Section 7661c(b) or Section 7414(a)(3) of the FCAA;

(g) Any standard or other requirement governing solid waste incineration, under Section 7429 of the FCAA;

(h) Any standard or other requirement for consumer and commercial products, under Section 7511b(e) of the FCAA;

(i) Any standard or other requirement for tank vessels, under Section 7511b(f) of the FCAA;

(j) Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the FCAA, unless the administrator determines that such requirements need not be contained in an air quality operating permit;

(k) Any national ambient air quality standard or increment or visibility requirement under part C of Title I of the FCAA, but only as it would apply to temporary sources permitted pursuant to Section 7661c(e) of the FCAA; or

(l) Any federally enforceable term or condition of any air quality open burning permit issued by the Department under Subchapter 6.

"Department" means the Montana Department of Environmental Quality.

"Emissions unit" means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under Section 7412(b) of the FCAA. This term is not meant to alter or affect the definition of the term "unit" for purposes of Title IV of the FCAA.

"Excess Emissions" means any visible emissions from a stack or source, viewed during the visual surveys, that meets or exceeds 15% opacity (or 30% opacity if associated with a 40% opacity limit) during normal operating conditions.

"FCAA" means the Federal Clean Air Act, as amended.

"Federally enforceable" means all limitations and conditions which are enforceable by the administrator, including those requirements developed pursuant to 40 CFR Parts 60 and 61, requirements within the Montana State Implementation Plan, and any permit requirement established pursuant to 40 CFR Part 52.21 or under regulations approved pursuant to 40 CFR Part 51, Subpart I, including operating permits issued under an Environmental Protection Agency approved program that is incorporated into the Montana State Implementation Plan and expressly requires adherence to any permit issued under such program.

"Fugitive emissions" means those emissions, which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

"General air quality operating permit" or **"general permit"** means an air quality operating permit that meets the requirements of ARM 17.8.1222, covers multiple sources in a source category, and is issued in lieu of individual permits being issued to each source.

"Hazardous air pollutant" means any air pollutant listed as a hazardous air pollutant pursuant to Section 112(b) of the FCAA.

"Non-federally enforceable requirement" means the following as they apply to emission units in a source requiring an air quality operating permit:

(a) Any standard, rule, or other requirement, including any requirement contained in a consent decree, or judicial or administrative order entered into or issued by the Department, that is not contained in the Montana State Implementation Plan approved or promulgated by the administrator through rule making under Title I of the FCAA;

(b) Any term, condition or other requirement contained in any MAQP issued by the Department under Subchapters 7, 8, 9 and 10 of this chapter that is not federally enforceable;

(c) Does not include any Montana ambient air quality standard contained in Subchapter 2 of this chapter.

"Permittee" means the owner or operator of any source subject to the permitting requirements of this subchapter, as provided in ARM 17.8.1204, that holds a valid air quality operating permit or has submitted a timely and complete permit application for issuance, renewal, amendment, or modification pursuant to this subchapter.

"Regulated air pollutant" means the following:

(a) Nitrogen oxides or any volatile organic compounds;

(b) Any pollutant for which a national ambient air quality standard has been promulgated;

(c) Any pollutant that is subject to any standard promulgated under Section 7411 of the FCAA;

(d) Any Class I or II substance subject to a standard promulgated under or established by Title VI of the FCAA; or

(e) Any pollutant subject to a standard or other requirement established or promulgated under Section 7412 of the FCAA, including but not limited to the following:

(i) Any pollutant subject to requirements under Section 7412(j) of the FCAA. If the administrator fails to promulgate a standard by the date established in Section 7412(e) of the FCAA, any pollutant for which a subject source would be major shall be considered to be regulated on the date 18 months after the applicable date established in Section 7412(e) of the FCAA;

(ii) Any pollutant for which the requirements of Section 7412(g)(2) of the FCAA have been met but only with respect to the individual source subject to Section 7412(g)(2) requirement.

"Responsible official" means one of the following:

(a) For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars); or

(ii) The delegation of authority to such representative is approved in advance by the Department.

(b) For a partnership or sole proprietorship: a general partner or the proprietor, respectively.

(c) For a municipality, state, federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a regional administrator of the environmental protection agency).

(d) For affected sources: the designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the FCAA or the regulations promulgated thereunder are concerned, and the designated representative for any other purposes under this subchapter.

Abbreviations:

ARM	Administrative Rules of Montana
ASTM	American Society of Testing Materials
BACT	Best Available Control Technology
Btu	British thermal unit
CEMS	Continuous Emissions Monitoring System
COMS	Continuous Opacity Monitoring System
CFR	Code of Federal Regulations
CMS	Continuous Monitoring System
CO	carbon monoxide
DEQ	Department of Environmental Quality
dscf	dry standard cubic foot
dscfm	dry standard cubic foot per minute
EEAP	Emergency Episode Action Plan
EPA	U.S. Environmental Protection Agency
EPA Method	Test methods contained in 40 CFR 60, Appendix A
EU	emissions unit
FCAA	Federal Clean Air Act
FCCU	Fluid Catalytic Cracking Unit
gr	grains
H_2S	hydrogen sulfide
HAP	hazardous air pollutant
hr	hour
IEU	insignificant emissions unit
MACT	Maximum Achievable Control Technology (40 CFR Part 63)
Method	40 CFR 60, Appendix A, Method
MMBtu	million British thermal units
NESHAP	National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
NSPS	New Source Performance Standard (40 CFR Part 60)
NO_x	oxides of nitrogen
NO_2	nitrogen dioxide
O_2	oxygen
OMMP	Operations, Malfunctions, and Maintenance Plan
Pb	lead
PM	particulate matter
PM_{10}	particulate matter with an aerodynamic diameter of 10 microns and less
$PM_{2.5}$	particulate matter with an aerodynamic diameter of 2.5 microns and less
PMA	Polymer Modified Asphalt
ppm	parts per million
ppmvd	parts per millions on a dry volumetric basis
psi	pounds per square inch
RATA	Relative Accuracy Test Audit
scf	standard cubic feet
SIC	Source Industrial Classification
SO_2	sulfur dioxide
SO_x	oxides of sulfur
SWSOH	Sour water stripper overhead
TDS	total dissolved solids
TPD	tons per day
TPY	tons per year

U.S.C.	United States Code
VCU	vapor combustion unit
VE	visible emissions
VOC	volatile organic compound

APPENDIX C NOTIFICATION ADDRESSES

Compliance Notifications:

Montana Department of Environmental Quality
Air, Energy & Mining Division
Air Quality Bureau
P.O. Box 200901
Helena, MT 59620-0901

United States EPA
Air Program Coordinator
Region VIII, Montana Office
10 W. 15th Street, Suite 3200
Helena, MT 59626

Permit Modifications:

Montana Department of Environmental Quality
Air, Energy & Mining Division
Air Quality Bureau
P.O. Box 200901
Helena, MT 59620-0901

Office of Partnerships and Regulatory Assistance
Air and Radiation Program
US EPA Region VIII 8P-AR
1595 Wynkoop Street
Denver, CO 80202-1129

APPENDIX D AIR QUALITY INSPECTOR INFORMATION

Disclaimer: The information in this appendix is not State or Federally enforceable, but is presented to assist Calumet, permitting authority, inspectors, and the public.

Direction to Plant: Calumet is located at 1900 10th Street Northeast along the Missouri River in the city of Great Falls, Montana.

Safety Equipment Required: Hardhat, steel-toed shoes/boots, and hearing protection (ear plugs will be provided by Calumet) are required at the facility. A detailed safety manual is available at the site, and a Calumet employee will conduct a safety briefing for any inspector prior to entering the plant area.

Facility Plot Plan: The facility plot plan was submitted as part of the application on May 17, 1995, and an update submitted with the renewal application on June 5, 2006.

APPENDIX E AMBIENT AIR MONITORING PLAN

1. This Ambient Air Monitoring Plan applies to Calumet's crude oil refinery located at 1900 10th Street, in Great Falls, Montana. The Department may modify the requirements of this monitoring plan. All requirements of this plan are considered conditions of the permit.

2. The requirements of this attachment shall take effect within 30 days of the relevant MAQP issuance, unless otherwise approved in writing by the Department.

3. Calumet shall operate and maintain one air monitoring site northeast of the refinery. The exact location of the monitoring site must be approved by the Department and meet all the siting requirements contained in the Montana Quality Assurance Manual, including revisions, the EPA Quality Assurance Manual, including revisions, and 40 Code of Federal Regulations (CFR) Part 58, or any other requirements specified by the Department.

4. Calumet shall submit a topographic map to the Department identifying UTM coordinates, air monitoring site locations in relation to the facility, and the general area present.

5. Within 30 days prior to any changes of the location of the ambient monitors, Calumet shall submit a topographic map to the Department identifying UTM coordinates, air monitoring site locations in relation to the facility, and the general area present.

6. Calumet shall continue air monitoring for at least 2 years after installation of the monitor described in Section 2 above. The Department will review the air monitoring data and the Department will determine if continued monitoring or additional monitoring is warranted. The Department may require continued air monitoring to track long-term impacts of emissions from the facility or require additional ambient air monitoring or analyses if any changes take place in regard to quality and/or quantity of emissions or the area of impact from the emissions.

7. Calumet shall monitor the following parameters at the site and frequencies described below:

AIRS # 30-013-2001 Site Name – Race Track Site

UTM Coordinates	Code & Parameter	Frequency
Zone 12	42401 SO_2[1]	Continuous
N 5263700	61101 Wind Speed and Direction	"
E 478600	61106 Standard Deviation of Wind Direction (sigma theta)	"

[1]SO_2= sulfur dioxide

8. Data recovery for all parameters shall be at least 80% computed on a quarterly and annual basis. The Department may require continued monitoring if this condition is not met. (Data recovery = (Number of data points collected in evaluation period)/(number of scheduled data points in evaluation period)*(100%)).

9. Any ambient air monitoring changes proposed by Calumet must be approved, in writing, by the Department.

10. Calumet shall utilize air monitoring and Quality Assurance (QA) procedures that are equal to or exceed the requirements described in the Montana Quality Assurance Manual, including revisions, the EPA Quality Assurance Manual, including revisions, 40 CFR Parts 50 and 58 of the Code of Federal Regulations, and any other requirements specified by the Department.

11. Calumet shall submit two hard copies of quarterly data reports within 45 days after the end of the calendar quarter and two hard copies of the annual data report within 90 days after the end of the calendar year.

12. The quarterly data submittals shall consist of a hard copy narrative data summary and a digital submittal of all data points in AIRS batch code format. The electronic data must be submitted to the Air Monitoring Section as digital text files readable by an office personal computer (PC) with a Windows operating system.

    The narrative data hard copy summary must be submitted to the Air Compliance Section and shall include:

    a. A hard copy of the individual data points,

    b. The first and second highest 24-hour rolling and block concentrations for SO_2,

    c. The first and second highest 3-hour concentrations for SO_2,

    d. The first and second highest hourly concentrations for SO_2,

    e. The quarterly and monthly wind roses,

    f. A summary of data completeness,

    g. A summary of the reasons for missing data,

    h. A precision data summary,

    i. A summary of any ambient air standard exceedances, and

    j. Quality Assurance/Quality Control (QA/QC) information such as zero/span/precision, calibration, audit forms, and standards certifications.

13. The annual data report shall consist of a narrative data summary. The narrative data hard copy summary must be submitted to the Air Compliance Section and shall include:

    a. A topographic map of appropriate scale with UTM coordinates and a true north arrow showing the air monitoring site location in relation to the refinery and the general area,

    b. The annual average concentration for SO_2;

c. The year's four highest 24-hour rolling and block concentrations for SO_2,

d. The year's four highest 3-hour concentrations for SO_2,

e. The year's four highest hourly SO_2 concentrations,

f. The annual wind rose,

g. A summary of any ambient air standard exceedances, and

h. An annual summary of data completeness.

14. All records compiled in accordance with this Attachment must be maintained by Calumet as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).

15. The Department may audit (or may require Calumet to contract with an independent firm to audit) the air monitoring network, the laboratory performing associated analyses, and any data handling procedures at unspecified times.

16. The hard copy reports should be sent to:
    Department of Environmental Quality
    Attention: Air Compliance Section Supervisor

17. The electronic data from the quarterly monitoring shall be sent to:
    Department of Environmental Quality
    Attention: Air Monitoring Section Supervisor