STATE OF MONTANA
Department of Environmental Quality
Helena, Montana 59620

AIR QUALITY OPERATING PERMIT OP1564-02

Issued to: **ExxonMobil Refining and Supply Company**
Billings Refinery
700 ExxonMobil Road
P.O. Box 1163
Billings, MT 59103-1163

Final Date: **January 23, 2009**
Expiration Date: **January 23, 2014**

Effective Date: **January 23, 2009**
Date of Decision: **November 2, 2007**
End of EPA 45-day Review: **October 29, 2007**
Proposed Issue Date: **September 12, 2007**
Draft Issue Date: **August 3, 2007**

Application Deemed Technically Complete: **August 5, 2006**
Application Deemed Administratively Complete: **July 6, 2006**
Renewal Application Received: **June 6, 2006**
AFS Number: 030-**111-0013A**

Permit Issuance and Appeal Processes: In accordance with Montana Code Annotated (MCA) Sections 75-2-217 and 218 and the Administrative Rules of Montana (ARM), ARM Title 17, Chapter 8, Subchapter 12, Operating Permit Program, this operating permit is hereby issued by the Department of Environmental Quality (Department) as effective and final on January 23, 2009. The permit must be kept on-site at the above named facility.

Issued by the Department of Environmental Quality

_____ ___/___/
Signature Date

Montana Air Quality Operating Permit
Department of Environmental Quality

Table of Contents

SECTION I. GENERAL INFORMATION 1
SECTION II. SUMMARY OF EMISSION UNITS 2
SECTION III. PERMIT CONDITIONS 4
A. FACILITY-WIDE 4
B. EU00: RFG DEVICES (ALL HEATERS/BOILERS, INCLUDING 12 HEATERS AND BOILERS NOT LISTED IN OTHER EMITTING UNITS) 10
C. EU01 – CRUDE – APS AND VPS 17
D. EU03 – COKER – FLUID COKER 20
E. EU04 – CATALYTIC REFORMING UNIT (POFO – POWERFORMING UNIT) 24
F. EU09 – FCCU – CATALYTIC CRACKING UNIT 26
G. EU14 –OIL MOVEMENTS & UTILITIES (OM&U) 34
H. EU15 – OIL MOVEMENTS & SHIPPING (OM&S) / POLYMER MODIFIED ASPHALT (PMA) UNIT 37
I. EU17 – REFINERY-WIDE FUGITIVE EMISSIONS 41
J. EU18 – EMERGENCY STATIONARY ENGINES 42
SECTION IV. NON-APPLICABLE REQUIREMENTS 44
A. FACILITY-WIDE 44
B. EMISSION UNITS 46
C. CAUSE ORDERS 47
D. STREAMLINED REQUIREMENTS 47
SECTION V. GENERAL PERMIT CONDITIONS 49
A. COMPLIANCE REQUIREMENTS 49
B. CERTIFICATION REQUIREMENTS 49
C. PERMIT SHIELD 50
D. MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS 51
E. PROMPT DEVIATION REPORTING 52
F. EMERGENCY PROVISIONS 52
G. INSPECTION AND ENTRY 53
H. FEE PAYMENT 53
I. MINOR PERMIT MODIFICATIONS 53
J. CHANGES NOT REQUIRING PERMIT REVISION 54
K. SIGNIFICANT PERMIT MODIFICATIONS 55
L. REOPENING FOR CAUSE 55
M. PERMIT EXPIRATION AND RENEWAL 56
N. SEVERABILITY CLAUSE 56
O. TRANSFER OR ASSIGNMENT OF OWNERSHIP 56
P. EMISSIONS TRADING, MARKETABLE PERMITS, ECONOMIC INCENTIVES 56
Q. NO PROPERTY RIGHTS CONVEYED 57
R. TESTING REQUIREMENTS 57
S. SOURCE TESTING PROTOCOL 57
T. MALFUNCTIONS 57
U. CIRCUMVENTION 57
V. MOTOR VEHICLES 57
W. ANNUAL EMISSIONS INVENTORY 57
X. OPEN BURNING 57
Y. MONTANA AIR QUALITY PERMITS 57
Z. NATIONAL EMISSION STANDARD FOR ASBESTOS 58
AA. ASBESTOS 58
BB. STRATOSPHERIC OZONE PROTECTION – SERVICING OF MOTOR VEHICLE AIR CONDITIONERS 58

CC. STRATOSPHERIC OZONE PROTECTION – RECYCLING AND EMISSION REDUCTIONS 59
DD. EMERGENCY EPISODE PLAN 59
EE. DEFINITIONS 59
APPENDICES 60
APPENDIX A. INSIGNIFICANT EMISSION UNITS A-1
APPENDIX B. DEFINITIONS AND ABBREVIATIONS B-1
APPENDIX C. NOTIFICATION ADDRESSES C-1
APPENDIX D. AIR QUALITY INSPECTOR INFORMATION D-1
APPENDIX E. JUNE 12, 1998 AND MARCH 17, 2000 BOARD ORDERS ADOPTING AN SO_2 CONTROL PLAN E-1
APPENDIX F. CAM PLAN FOR KCOB F-1
APPENDIX G CONSENT DECREE ACID GAS/HYDROCARBON FLARING, BENZENE WASTE NESHAP AND LDAR G-1

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. Whenever there are conflicting definitions within this permit, the definition of terms used in ARM 17.8.1201 shall control.

SECTION I. GENERAL INFORMATION

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

Company Name: **ExxonMobil Refining and Supply Company, a division of Exxon Mobil Corporation (or sometimes referred to as "ExxonMobil Billings Refinery")**

Mailing Address: **P.O. Box 1163**

City: **Billings** State: **Montana** Zip: **59103-1163**

Plant Location: **700 ExxonMobil Road**

Responsible Official: **Geoffrey A. Craft** Phone: **(406) 657-5201**

Facility Contact Person: **Ronald J. Kuhler** Phone: **(406) 657-5336**

Primary SIC Code: **2911**

Nature of Business: **Petroleum Refining**

Description of Process: ExxonMobil Refining and Supply Company (ExxonMobil) operates a petroleum refinery designed to process high sulfur crude oil. The major processing equipment includes:

1. Atmospheric and vacuum crude distillation towers
2. Fluidized Catalytic Cracking Unit (FCCU)
3. Hydrocracker and Hydrogen Plant
4. Fluid Coker
5. Naphtha Fractionator
6. Catalytic Reformer
7. Hydrofluoric Alkylation Unit
8. Three Hydrotreaters for polishing the naphtha and distillate streams
9. Catalytic Hydrotreating Unit – Billings (CHUB) [previously referred to as Low Sulfur MoGas Unit]

ExxonMobil does not have a sulfur recovery unit at this refinery. Refinery gases high in Hydrogen Sulfide (H_2S) are piped to an off-site sulfur recovery plant owned and operated by the Montana Sulphur and Chemical Company (MSCC). MSCC extracts sulfur from the sour refinery fuel gas (RFG) and returns sweetened fuel gas to ExxonMobil. ExxonMobil sends Coker Process Gases to the Yellowstone Energy Limited Partnership (YELP) facility for treatment (combustion) in two boilers, except when YELP is down. The MSCC and YELP facilities are considered by the Federal Clean Air Act (CAA) and the Administrative Rules of Montana (ARM) as facilities that are separate from the ExxonMobil Billings Refinery. The refinery and the bulk terminal are considered one facility for the purpose of any permitting completed in accordance with the New Source Review Program. In addition, according to EPA and Department interpretations, ExxonMobil's bulk terminal is considered a "support facility" for the refinery, and is therefore considered as part of a Title V major source. At the request of the company, the bulk terminal will be permitted separately under the Title V operating permit program.

SECTION II. SUMMARY OF EMISSION UNITS

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

Unit ID	Descriptions	Pollution Control Device/Practices
EU00	RFG Combustion Devices (all heaters/boilers, including the following 12 heaters and boilers not listed in other emitting units) EU01b: F-3 Heater EU02a: F-3x Heater EU02b: F-5 Heater EU03a: Coker Co Boiler (also see EU03) EU03b: F-202 Heater EU04a: F-700 Heater EU05a: F-402 Heater EU07a: F-201 Heater EU09a: FCCU CO Boiler (also see EU09) EU11a: F-651 Heater EU12a: F-551 Heater EU13a: B-8 Backup Boiler EU14b: F-10 Heater EU16a: F-1201 Heater	None H_2S Continuous Emissions Monitoring System (CEMS) on RFG Header, and RFG Flow Meter F-1201 -Ultralow NOx Burner (ULNB)
EU01	Crude Unit – Atmospheric Pipe Still (APS) and Vacuum Pipe Still (VPS) EU01a: F-2 Crude/Vacuum Heater (F-1 Crude Furnace/F-401 Vacuum Heater) EU01c: D-4 Drum Atmospheric Stack	None CEMS on RFG Header (*see EU00*) None
EU02	HF #2/3 – Hydrofining Units #2 and #3 – *Eliminated EU (heaters moved to EU00)*	
EU03	Coker – Fluid Coker EU03a: Coker Unit Carbon Monoxide (CO) Boiler (KCOB) EU03c: Coker Process Gas (Group I Miscellaneous Process Vents)	YELP/ KCOB, Multiclone, Continuous Opacity Monitoring System (COMS)/Compliance Assurance Monitoring (CAM) Plan, Sulfur Dioxide (SO_2) CEMS, H_2S CEMS on RFG Header (*see EU00*)
EU04	Catalytic Reforming (Powerforming (POFO)) Unit	40 CFR 63, Subpart UUU
EU05	Alky/Splitter/Rerun/Diene – Alkylation Unit, Alky Feed Treater, Rerun of Alkylate for Avgas – *Eliminated EU (heater moved to EU00)*	
EU06	Treater – Cat Naphtha Caustic Treater (Merox Unit) after Cat Cracker – *Eliminated EU (requirements covered by EU17)*	
EU07	HF#1– *Eliminated EU (heater moved to EU00)*	
EU08	DEC2 – Deethanizer Unit– *Eliminated EU (requirements covered by EU17)*	
EU09	FCCU – Catalytic Cracking Unit EU09a: CCOB (FCCU CO Boiler) EU09b: CCOB – Bypass	None COMS, SO_2 CEMS, Carbon Monoxide (CO) CEMS, nitrogen oxides (NO_x) CEMS (by December 31, 2008), Sour Water Stripper Overheads (SWSOH) sent to CCOB 40 CFR 60, Subpart J 40 CFR 63, Subpart UUU

EU10	ULEB/SLEB – Unsaturated Light Ends Unit, Saturated Light Ends Unit, Sour Water Strippers, Gas Compression– *Eliminated EU (requirements covered by EU17)*	
EU11	HCBL – Hydrocracking Unit – *Eliminated EU (heater moved to EU00)*	
EU12	H_2 Plant/HRUB – H_2 Plant, H_2 Upgrade (Recovery) Facility, MDU Replacement – *Eliminated EU (heater moved to EU00)*	
EU13	Utilities – Air Compressors/Dryers, Boiler Feed Water System – *Eliminated EU (boilers moved to EU00)*	
EU14	Oil Movements and Utilities (OM&U) EU14a: Flare – Flare and Turnaround Flare EU14c: Flare Seal Drum	Steam assisted, CEMS on RFG Header (*see EU00*)
EU15	Oil Movements & Shipping (OM&S) /Polymer Modified Asphalt Unit (PMAU) EU15a: PMA Loading	Group I MACT Controls
EU16	Catalytic Hydrotreater Unit – Billings (CHUB) (or Low Sulfur Mogas) – *Eliminated EU (heater moved to EU00, other requirements covered by EU17)*	
EU17	Refinery-Wide Fugitive Emissions	LDAR
EU18	Emergency Stationary Engines EU18a: SE1 –SE6, IEU06a & IEU06b	None

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 Citations	Rule Description	Pollutant/Parameters	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 (PM), Airborne	Fugitive – Opacity	20%
A.7	ARM 17.8.308(2)	PM, Airborne	Reasonable Precautions	-------
A.8	ARM 17.8.308(3)	PM, Airborne	Reasonable Precaution, Construction	20%
A.9	ARM 17.8.309	PM, Fuel Burning Equipment	PM	$E = 0.882 * H^{-0.1664}$ or $E = 1.026 * H^{-0.233}$
A.10	ARM 17.8.310	PM, Industrial Processes	PM	$E = 4.10 * P^{0.67}$ or $E = 55 * P^{0.11} - 40$
A.11	ARM 17.8.322(4) and 1979 State Implementation Plan (SIP)	Sulfur Oxide Emissions, Sulfur in Fuel	Sulfur in Fuel (liquid or solid fuels)	1 lb/MMBtu fired
A.12	ARM 17.8.324(2)	Hydrocarbon Emissions, Petroleum Products	Oil-effluent Water Separator	-------
A.13	ARM 17.8.324(3)	Hydrocarbon Emissions, Petroleum Products	Gasoline Storage Tanks	-------
A.14, A.15	ARM 17.8.341	National Emission Standards for Hazardous Air Pollutants (NESHAPs)	All Applicable Provisions of 40 CFR 61, Subparts M & FF	-------
A.16	ARM 17.8.342	NESHAPs - General Provisions (40 CFR 63)	Start-up, Shutdown, Malfunction (SSM) Plans	Submittal
A.17	ARM 17.8.615	Firefighting Training Permit	Firefighting Requirements	
A.18	ARM 17.74.336	Asbestos Abatement – Annual Permits	Asbestos	-------
A.19	40 CFR 68	Chemical Accident Prevention	Risk Management Plan	-------
A.20	40 CFR 51	SIP	SO_2	-------
A.21	40 CFR 51	SIP	State-Only Requirements	-------
A.22	40 CFR 51	SIP	Sulfur Bearing Gases	-------
A.23	40 CFR 51	SIP	Quantify Emissions	-------
A.24	ARM 17.8.749 & 17.8.801(7)	Refinery and Terminal	One Source for NSR Purposes	-------
A.25, A.26	40 CFR 51	SIP	Reporting	-------

A.27	ARM 17.8.1212	Streamlining Conditions	Various	As specified
A.28	ARM 17.8.1212	Maintain Records	5 Years	-------
A.29	ARM 17.8.1212	Reporting Requirements	Compliance Monitoring	-------
A.30	ARM 17.8.1207	Reporting Requirements	Annual Certifications	-------

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 annual 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.

A.3. Pursuant to ARM 17.8.304(1), ExxonMobil 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), ExxonMobil 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), ExxonMobil shall not cause or authorize the production, handling, transportation, or storage of any material unless reasonable precautions to control emissions of particulate matter are taken. Such emissions of airborne particulate matter 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), ExxonMobil shall not cause or authorize the use of any street, road or parking lot without taking reasonable precautions to control emissions of airborne particulate matter, unless otherwise specified by rule or in this permit.

A.8. Pursuant to ARM 17.8.308(3), ExxonMobil shall not operate a construction site or demolition project unless reasonable precautions are taken to control emissions of airborne particulate matter. Such emissions of airborne particulate matter 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, ExxonMobil shall not cause or authorize particulate matter 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 particulate matter 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 Btu (MMBtu) per hour and E is the maximum allowable particulate emissions rate in pounds per MMBtu. When two or more fuel-burning units are connected to a single stack, the combined heat input of all units connected to the stack shall not exceed that allowable for the same unit connected to a single stack. 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.10. Pursuant to ARM 17.8.310, unless otherwise specified by rule or in this permit, ExxonMobil shall not cause or authorize particulate matter to be discharged from any operation, process, or activity into the outdoor atmosphere in excess of the maximum hourly allowable emissions of particulate matter 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), ExxonMobil shall not burn liquid or solid fuels containing sulfur in excess of 1 pound per million Btu fired, unless otherwise specified by rule or in this permit. This rule shall be interpreted to allow for a daily deviation of 0.1 pound of sulfur per million Btu 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 17.8.324(2), unless otherwise specified by rule or in this permit, ExxonMobil 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.13. Pursuant to ARM 17.8.324(3), ExxonMobil 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.14. ExxonMobil 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, as appropriate, of 40 CFR 61, Subpart M Asbestos.

A.15. ExxonMobil shall manage and treat the facility waste, including each process wastewater stream that meets the definition in 40 CFR 61.341, in accordance with the applicable requirements of 40 CFR 61.342(e) (Subpart FF "BQ6" Alternative). ExxonMobil shall comply with applicable testing, monitoring and inspection, recordkeeping and reporting requirements set out under 40 CFR 61, Subpart FF (ARM 17.8.341).

A.16. Pursuant to ARM 17.8.342 and 40 CFR 63.6, ExxonMobil shall submit to the Department a copy of any startup, shutdown, and malfunction (SSM) plan required under 40 CFR 63.6(e)(3) within 30 days of the effective date of this operating permit (if not previously submitted), within 30 days of the compliance date of any new NESHAPs or Maximum Achievable Control Technology (MACT) standard, and within 30 days of the revision of any such SSM plan, when applicable. The Department requests submittal of such plans in electronic form, when possible.

A.17. Pursuant to ARM 17.8.615, ExxonMobil shall maintain records that they have applied for and, if issued, complied with any Firefighter Training permit to conduct open burning for fire training purposes.

A.18. Pursuant to ARM 17.74.336, ExxonMobil shall comply with all the limitations and requirements of their Asbestos Abatement Annual Permit #MTF07-0004-00, or its' subsequent revisions.

A.19. ExxonMobil shall submit a certification statement to the Department that states ExxonMobil is in compliance with the requirements of 40 CFR 68, including registration and updates of their Risk Management Plan pursuant to §112(r) of the FCAA (40 CFR 68.150, 68.160 and 68.190).

A.20. Pursuant to the June 12, 1998, Board Order and subsequent revisions of March 17, 2000, adopting a SO_2 control plan (Appendix E of this permit), ExxonMobil shall comply with all requirements of Exhibit A and Attachment 1 of the plan. As provided in Section IV.D, the H_2S CEMS provision of the SO_2 Stipulation was subsumed by a streamlined condition. In addition, ExxonMobil shall comply with all terms as set forth by this permit (Board Order signed on June 12, 1998, and subsequent revisions of March 17, 2000; the control plan was partially approved/partially disapproved by EPA on May 2, 2002, and May 22, 2003; parts of the requirement that were disapproved remain "State Only" along with those provisions intended to be "State Only" that were not submitted to EPA).

A.21. Pursuant to the June 12, 1998, Board Order and subsequent revisions of March 17, 2000, adopting a SO_2 control plan (Appendix E of this permit), ExxonMobil shall comply with all requirements of Exhibit A-1 and corresponding attachments (Board Order signed on June 12, 1998, and subsequent revisions of March 17, 2000; this requirement is "State Only").

A.22. ExxonMobil shall utilize appropriate maintenance, repair, and operating practices to control emissions of sulfur bearing gases from minor sources such as ducts, stacks, valves, vents, vessels, and flanges that are not otherwise subject to the Stipulation and Exhibit A (Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002).

A.23. ExxonMobil shall use good engineering judgment and appropriate engineering calculations to quantify emissions from activities that are not otherwise addressed by the Stipulation and Exhibit A but are known to contribute to emissions from sources listed in Section 1(B) of the Stipulation. In addition, ExxonMobil shall account for such emissions in determining compliance with all applicable emission limits contained in Section 3 of the Stipulation (Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002).

A.24. Pursuant to ARM 17.8.749 and 17.8.801(7), the ExxonMobil Refining and Supply Company and the Exxon Mobil Corporation Billings Terminal shall be considered one source for the purpose of permitting these facilities. Based on the following determinations, the facilities are considered one source:

a. The refinery and the terminal are under common ownership and control;
b. The refinery and the terminal are contiguous and adjacent; and
c. The terminal is considered a support facility to the refinery.

A.25. ExxonMobil shall comply with all reporting requirements of Exhibit A and Attachment 1 of the plan (Billings/Laurel SO_2 Emission Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003).

A.26. ExxonMobil shall comply with all reporting requirements of Exhibit A-1 of the sulfur dioxide control plan (Board Order signed on June 12, 1998, and subsequent revisions of March 17, 2000; this requirement is "State Only").

A.27. ExxonMobil shall monitor compliance with subsumed conditions by certifying compliance with the streamlined conditions, as designated in Section IV. of this permit (ARM 17.8.1213).

A.28. ExxonMobil shall maintain, under ExxonMobil'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).

A.29. On or before April 15 and October 15 of each year, ExxonMobil shall submit to the Department the compliance monitoring reports required by Section V.D. These reports must contain all information required by Section V.D, as well as the information required by each individual emission unit. For the reports due by October 15 of each year, ExxonMobil may submit a single report provided that it contains all the information required by Section V.B and 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.30. By October 15 of each year, ExxonMobil 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 that 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. EU00: RFG Devices (all heaters/boilers, including 12 Heaters and Boilers not listed in other emitting units)

EU01b: F-3 Heater
EU02a: F-3x Heater
EU02b: F-5 Heater
EU03a: KCOB (also see EU03)
EU03b: F-202 Heater
EU04a: F-700 Heater
EU05a: F-402 Heater
EU07a: F-201 Heater
EU09a: CCOB (also see EU09)
EU11a: F-651 Heater
EU12a: F-551 Heater
EU13a: B-8 Backup Boiler
EU14b: F-10 Heater
EU16a: F-1201 Heater

Condition(s)	Pollutant/ Parameters	Permit Limits	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
B.1, B.17, B.33, B.39, B.40, B.43 & B.44	Opacity – Existing Sources	40%	Method 9	As required by the Department and Section III.A.1	Semiannually
B.2, B.17, B.33, B.39, B.40, B.43 & B.44	Opacity – New Sources	20%			
B.3, B.18, B.33, B.39, B.40, B.43 & B.44	PM – Existing Fuel-Burning Equipment	$E = 0.882*H^{-0.1664}$	Method 5	As required by the Department and Section III.A.1	
B.3, B.18, B.33, B.39, B.40, B.43 & B.44	PM – New Fuel-Burning Equipment	$E = 1.026 * H^{-0.233}$			
B.4, B.19, B.34, B.43 & B.44	Heaters & Boilers	ARM 17.8.342 and 40 CFR 63, Subpart DDDDD (State only)	40 CFR 63, Subpart DDDDD	40 CFR 63, Subpart DDDDD	
B.5, B.20, B.35, B.43 & B.44	Fuel Oil Consumption	Prohibited from firing Fuel Oil	Certify	On-going	
B.6, B.21, B.26, B.36, B.43 & B.44	RFG	40 CFR 60, Subpart J	Subpart J	Subpart J	
B.6, B.21, B.25 - B.27, B.33, B.36, B.39, B.40, B.42, B.43 & B.44	SO_2 (H_2S in RFG)	230 mg/dscm (or 0.10 gr/dscf) 3-hour average	H_2S CEMS	Continuous	Quarterly
			RATA (Method 11)	Annually	Semiannually
B.7, B.23, B.37, B.38, B.41- B.44	Coker Process Gas	Send Coker Process Gas to YELP	Recordkeeping	Ongoing, whenever YELP Operates	
B.8, B.22, B.24- B.26, B.33, B.36, B.38 - B.44	SO_2 RFG Units	92.4 lb/3-hour period 739.2 lb/day	SO_2/H_2S CEMS, Flow Rate Monitor	Ongoing	Quarterly
			Method 11	Annually	Semiannually

B.9, B.22, B.24 – B.26, B.33, B.36, B.38- B.44	SO_2 RFG Units	76.2 lb/3-hour period 609.6 lb/day	SO_2/H_2S CEMS, Flow Rate Monitor	Ongoing	Quarterly
			Method 11	Annually	Semiannually
B.10, B.27, B.43 & B.44	F-1201 RFG/Natural Gas Combustion	811 MMSCF/rolling 12-month period	Recordkeeping	Monthly	
B.11, B.28 – B.29, B.33, B.39, B.40, B.43 & B.44	F-1201 – oxides of nitrogen (NOx)	ULNB	Certify	On-going	
		5.94 lb/hr and 0.06 lb/MMBtu	Method 7E and Method 19	Every 5 years	
B.12, B.29, B.33, B.39, B.40, B.43 & B.44	F-1201 CO	7.77 lb/hr and 0.0785 lb/MMBtu	Method 10 and Method 19	As required by the Department and Section III.A.1	
B.13, B.30, B.33, B.39, B.40, B.43 & B.44	F-201 NOx	4.7 lb/hr	Method 7E and Method 19	As required by the Department and Section III.A.1	
B.14, B.30, B.33, B.39, B.40, B.43 & B.44	F-5 NOx	6.27 lb/hr	Method 7E and Method 19	As required by the Department and Section III.A.1	Semiannually
B.15, B.30, B.31, B.33, B.39, B.40, B.43 & B.44	F-5 & F-201 (combined) NOx	33.30 tons/ rolling 12 month period	Method 7E and Method 19	As required by the Department and Section III.A.1	
			Engineering Calculations	Monthly	
B.16, B.32, B.33, B.39, B.40, B.43 & B.44	F-551 NOx	23.35 lb/hr and 75.55 tons/ rolling 12 month period	Method 7E and Method 19	Every 5 years	

Conditions

B.1. ExxonMobil 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. 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. 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 (ARM 17.8.304(1) and ARM 17.8.304(3)).

B.2. ExxonMobil 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. 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. 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 (ARM 17.8.304(2) and ARM 17.8.304(3)).

B.3. Unless otherwise specified by rule or in this permit, ExxonMobil shall not cause or authorize particulate matter 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 particulate matter 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 MMBtu per hour and E is the maximum allowable particulate emissions rate in pounds per MMBtu. When two or more fuel-burning units are connected to a single stack, the combined heat input of all units connected to the stack shall not exceed that allowable for the same unit connected to a single stack (ARM 17.8.309).

B.4. ExxonMobil shall comply with 40 CFR 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants from Industrial Boilers and Process Heaters, as applicable (ARM 17.8.342 and 40 CFR 63, Subpart DDDDD, this condition is "State Only").

B.5. ExxonMobil shall not fire fuel oil, except during periods of natural gas curtailment. Nothing herein is intended to limit, or shall be interpreted as limiting, (i) the use of torch oil in an FCC Unit Regenerator to assist in starting, restarting, maintaining hot standby, or maintaining regenerator heat balance; or (ii) combustion of acid-soluble oil in a combustion device (ARM 17.8.749, Consent Decree paragraph 60).

B.6. ExxonMobil shall comply with all applicable requirements of 40 CFR 60, Subpart J-Standards of Performance for Petroleum Refineries, as it applies to fuel gas combustion devices. Each heater and boiler used to combust RFG at ExxonMobil are fuel gas combustion devices and are considered "affected facilities" under 40 CFR 60, Subparts A and J, except for the Atmospheric Pipestill (Crude Fractionator) Heater F-1, which shall comply with the requirements by December 31, 2008. Prior to December 31, 2008, the Heater F-1 shall comply with the emission limitation specified by 40 CFR 60.104(a)(1) at all times, except when SWS T-23 ammonia overhead gas is combusted in the unit as permitted by pertinent provisions of the Montana State Implementation Plan. Fuel-fired equipment exclusively burning natural gas are not "fuel gas combustion devices" and are not "affected facilities" under 40 CFR 60, Subparts A and J during such periods.

Except for periods of startup, shutdown, and malfunction, ExxonMobil shall not burn in any fuel gas combustion device any fuel gas that contains H_2S in excess of 230 milligrams per dry standard cubic meter (mg/dscm) (0.10 grains per dry standard cubic foot (gr/dscf, or ~160 parts per million volume dry basis (ppmvd)) per rolling 3-hour period (Consent Decree, ARM 17.8.749, ARM 17.8.340 and 40 CFR 60, Subpart J).

B.7. ExxonMobil shall, any time the YELP facility is operating, send all of its Coker process gas to either one or both of YELP's boilers. During start-up and shutdown conditions at YELP, ExxonMobil shall supply the maximum amount of Coker process gas that YELP can accept (ARM 17.8.749).

B.8. The following emission limitations shall apply whenever YELP is receiving ExxonMobil Coker process gas or whenever the ExxonMobil Coker unit is not operating (Billings/Laurel SO2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003; ARM 17.8.749):

a. Combined 3-hour emissions of SO_2 from the RFG combustion units shall not exceed 92.4 pounds per 3-hour period, and

b. Combined daily emissions of SO_2 from the RFG combustion units shall not exceed 739.2 pounds per calendar day.

B.9. The following emission limitations shall apply whenever YELP is not receiving ExxonMobil Coker process gas and the ExxonMobil Coker unit is operating (Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003; ARM 17.8.749):

a. Combined 3 hour emissions of SO_2 from the RFG combustion units shall not exceed 76.2 pounds per 3 hour period, and

b. Combined daily emissions of SO_2 from the RFG combustion units shall not exceed 609.6 pounds per calendar day.

B.10. Furnace F-1201 shall not consume more than 811 million standard cubic feet (MMscf) of RFG and natural gas combined during any rolling 12-month period (ARM 17.8.749).

B.11. Ultralow NO_x Burners (ULNB) shall be used in furnace F-1201 to control NO_x emissions. The NO_x emissions shall not exceed 5.94 pounds per hour (lb/hr) and 0.060 pounds per million British thermal units (lb/MMBtu) (ARM 17.8.752).

B.12. The CO emissions from furnace F-1201 shall not exceed 7.77 lb/hr and 0.0785 lb/MMBtu (ARM 17.8.749).

B.13. NO_x emissions from F-201 shall not exceed 4.70 lb/hr (ARM 17.8.752).

B.14. NO_x emissions from F-5 shall not exceed 6.27 lb/hr (ARM 17.8.752).

B.15. The combined NO_x emissions from F-201 and F-5 shall not exceed 33.30 tons per rolling 12-month period (ARM 17.8.752).

B.16. NO_x emissions from F-551 shall not exceed 23.35 lb/hr and 75.55 tons per rolling 12-month period (ARM 17.8.749 and ARM 17.8.752).

Compliance Demonstration

B.17. As required by the Department and Section III.A.1, compliance with the opacity limitations listed in Sections III.B.1 and III.B.2 shall be monitored using EPA reference Method 9 testing by a qualified observer (ARM 17.8.1213).

B.18. As required by the Department and Section III.A.1, compliance with the PM limits in Section III.B.3 shall be monitored by conducting Method 5 tests on the heater/boiler stacks (ARM 17.8.749 and ARM 17.8.105).

B.19. ExxonMobil shall conduct all monitoring and testing as required by 40 CFR 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants from Industrial Boilers and Process Heaters, as applicable (ARM 17.8.342 and 40 CFR 63, Subpart DDDDD, “State Only”).

B.20. Compliance with Section III.B.5. shall be documented by annual certification, unless fuel oil is burned during natural gas curtailment, whereby compliance will be documented by recordkeeping. Compliance with this requirement is considered to also monitor compliance with ARM 17.8.322(4) Sulfur in Fuel (liquid and solid) (ARM 17.8.1213).

B.21. ExxonMobil shall conduct all monitoring and testing as required by 40 CFR 60, Subpart J, Standards of Performance for Petroleum Refineries, to monitor compliance with Section III.B.6.

ExxonMobil shall install, calibrate, maintain, and operate a H_2S continuous monitoring system (CEMS) to continuously monitor and record the concentration (dry basis) of H_2S in the RFG before being burned in any fuel gas combustion device, or develop an AMP, as required by 40 CFR 60, Subparts A and J. Compliance with the fuel gas H_2S concentration limit set out in Section III.B.6 shall be determined based on 3-hour rolling average H_2S concentrations, determined by utilizing data taken from the CEMS and other Department-approved sampling methods. The H_2S CEMS shall be installed, certified, and operated in accordance with Performance Specification 7 (40 CFR 60, Appendix B) to meet applicable provisions of 40 CFR 60.105(a)(4), 60.7, and 60.13. The H_2S CEMS shall meet the quality assurance and quality control requirements set out in 40 CFR 60, Appendix F (annual RATA), as provided by the SO_2 Stipulation. The CEMS shall meet applicable quarterly data recovery rates and other provisions of §6(A) of the SO_2 Stipulation. Compliance with this requirement is considered to also monitor compliance with the refinery-block hourly limit of 0.96 lb/MMBtu (ARM 17.8.340 and 40 CFR 60, Subpart J; Consent Decree paragraph 59; Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003, and ARM 17.8.1212 and ARM 17.8.1213).

B.22. ExxonMobil shall operate and maintain a continuous flow rate monitor on the RFG header. Accuracy determinations for the refinery fuel flow rate monitor shall be required at least once every 48 months or more frequently as routine refinery turn-arounds allow (Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003).

B.23. Any time ExxonMobil diverts process Coker gases from YELP, ExxonMobil shall report said diversion to the Department within 24 hours or during the next regular working day. This information shall also be included in the quarterly CEMS sulfur-in-fuel report and shall include the period(s) of diversion, quantity of SO_2 emissions, reason for the diversion(s), and corrective measures taken to prevent reoccurrence (ARM 17.8.749).

B.24. Compliance with the combined SO_2 emission limitation for the fuel gas combustion units contained in Sections III.B.8 and III.B.9 of this permit shall be monitored by using hourly-average H_2S concentrations for the RFG as required by Section II.B.21, and hourly-average fuel gas-firing rates from the CEMS required by Exhibit A, Section 6(B)(8) of the Stipulation and in accordance with the appropriate equation(s) in Exhibit A, Section 2(A)(1), (8), (11), and (16) of the Stipulation except when CEMS data is not available as provided in Exhibit A, Section 2(A)(16) of the Stipulation (Appendix E of this permit) (Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003, ARM 17.8.340 and 40 CFR 60, Subpart J).

B.25. In the event the H_2S CEMS is unable to meet minimum availability requirements, ExxonMobil shall provide a back-up or alternative monitoring system and plan such that continuous compliance can be monitored. The Department shall approve such contingency plans. H_2S CEMS shall be required to be maintained such that they are available and operating at least 90% of the source operating time during any reporting period (quarterly) (ARM 17.8.749 and Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003).

B.26. ExxonMobil shall perform annual H_2S source testing using EPA-approved methods (40 CFR Part 60, Appendix A, Method 11) or an equivalent method approved by the Department and EPA, and in accordance with Section III.A.2 (ARM 17.8.106) (Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003, and ARM 17.8.749).

B.27. ExxonMobil shall document, by month, the total amount of RFG/natural gas consumed by furnace F-1201. By the 25th day of each month ExxonMobil shall calculate the total amount of RFG/natural gas consumed by furnace F-1201 during the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section

III.B.10. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

B.28. ExxonMobil shall monitor compliance with Section III.B.11 by certifying that an ULNB has been maintained and operated on furnace F-1201 (ARM 17.8.1213).

B.29. ExxonMobil shall test F-1201 for NO_x, in accordance with Section III.A.2 (ARM 17.8.106) on an every 5-year basis after the initial source test, or according to another testing/monitoring schedule as may be approved by the Department, and the results submitted to the Department to monitor compliance with the NO_x limitations found in Sections III.B.11. ExxonMobil shall test F-1201 for CO, in accordance with Section III.A.2 (ARM 17.8.106), as required by the Department and Section III.A.1 to monitor compliance with the CO limitations found in Sections III.B.12 (ARM 17.8.106 and ARM 17.8.749).

B.30. ExxonMobil shall test F-201 and F-5 for NO_x in accordance with Section III.A.2 (ARM 17.8.106), as required by the Department and Section III.A.1 to monitor compliance with the NO_x limitations found in Sections III.B.13, B.14 & B.15. In addition to any required testing, ExxonMobil shall document by month, the average monthly percent of maximum firing rate, the monthly gas consumption (MMscf per month), the input fuel heat content (MMBtu/MMscf), and the monthly hours of operation of F-201 and F-5 for use in the following equations (ARM 17.8.106 and ARM 17.8.749):

$$Y = m * (X/100) + b$$

Where:
Y = Emission factor at a specific firing rate (lb/MMBtu)
m = Slope factor (lb/MMBtu) / (% firing rate)
X = % of maximum firing rate
b = y-intercept (lb/MMBtu)

For F-201	For F-5
m = -0.0329	m = -0.1253
b = 0.141	b = 0.261

NO_X lb/hr = {(Y) * (gas consumption (MMscf/month)) * (fuel heat content (MMBtu/MMscf))} / (hours of operation per month (hr/month))

NO_X tons per month = {NO_X (lb/hr) * (hr/month)} / 2000 lb/ton

B.31. ExxonMobil shall document, by month, the amount of total NO_X emissions from F-201 and F-5. By the 25th day of each month ExxonMobil shall calculate the total amount of NO_X emissions from F-201 and F-5 during the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section III.B.15. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

B.32. ExxonMobil shall test F-551 for NO_x, in accordance with Section III.A.2 (ARM 17.8.106) on an every 5-year basis after the initial source test, or according to another testing/ monitoring schedule as may be approved by the Department, and the results submitted to the Department to monitor compliance with the NO_x limitations found in Section III.B.16 (ARM 17.8.106 and 17.8.749).

Recordkeeping

B.33. ExxonMobil shall perform all source test recordkeeping in accordance with the appropriate test method and Section III.A.2 (ARM 17.8.106).

B.34. ExxonMobil shall conduct recordkeeping in accordance with 40 CFR 63, Subpart DDDDD, as applicable (ARM 17.8.342 and 40 CFR 63, Subpart DDDDD, "State-Only").

B.35. ExxonMobil shall maintain records that fuel oil was not fired in this unit, to document compliance with Section III.B.20 (ARM 17.8.1213).

B.36. ExxonMobil shall conduct all applicable recordkeeping requirements in accordance with 40 CFR 60, Subpart J. ExxonMobil shall maintain a file of all fuel gas H_2S measurements and SO_2 emissions, including CEMS, monitoring device, and performance testing measurements; all CEMS performance evaluations; all CEMS or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 (Consent Decree, ARM 17.8.340 and 40 CFR Part 60).

B.37. ExxonMobil shall keep records of any time ExxonMobil diverts process Coker gases from YELP for five years. This information shall include the period(s) of diversion, quantity of sulfur oxide emissions, reason for the diversion(s), and corrective measures taken to prevent reoccurrence (ARM 17.8.749, ARM 17.8.1212).

B.38. In accordance with the Stipulation, ExxonMobil shall record, organize, report, and archive all the data specified in Section 7(C) of the Stipulation (Appendix E of this permit) (Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003).

Reporting

B.39. Any required compliance source test report(s) shall be submitted in accordance with Section III.A.2 (ARM 17.8.106).

B.40. ExxonMobil shall notify the Department in writing of each source test or RATA a minimum of 25 working days prior to the actual testing, unless otherwise specified by the Department (Billings/Laurel SO_2 Emission Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003).

B.41. In accordance with Section 7 of the Stipulation (Appendix E of this permit), ExxonMobil shall submit quarterly reports within 30 days of the end of each calendar quarter. The quarterly reports shall be submitted to the Department's Permitting and Compliance office in Helena and the Billings Regional Office. The quarterly report format shall consist of both a comprehensive electronic-magnetic report and a written or hard copy data summary report (Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003).

B.42. ExxonMobil shall provide quarterly emission reports within 30 days of the end of each calendar quarter. Emission reporting for SO_2 from all point source locations shall consist of 24-hour calendar-day totals per quarter. The quarterly report shall also include the following:

a. Source or unit operating times during the reporting period;

b. Monitoring downtime that occurred during the reporting period;

c. A summary of excess H_2S concentrations and/or SO_2 emissions and averaging period;

d. Any time ExxonMobil diverts process Coker gases from YELP, ExxonMobil shall include the following information in the quarterly CEMS sulfur-in-fuel report: the period(s) of diversion, quantity of SO_2 emissions, reason for the diversion(s), and corrective measures taken to prevent reoccurrence; and

e. Reasons for any emissions in excess of those specifically allowed in Sections III.B.6, III.B.8, and III.B.9, with mitigative measures utilized and corrective actions taken to prevent a recurrence of the upset situation.

B.43. The annual compliance certification report required by Section V.B must contain a certification stating whether ExxonMobil is in compliance with the above applicable requirements (ARM 17.8.1212).

B.44. The semiannual compliance monitoring reports must provide (ARM 17.8.1212):

a. A summary of the results of any required reference method tests performed during the reporting period; and

b. Reports of any required monitoring performed during the reporting period, with all instances of deviations from any permit requirements identified.

C. EU01 – Crude – APS and VPS

EU01a: F-2 Crude Vacuum Heater (F-1 Crude Furnace/F-401 Vacuum Heater)
EU01c: D-4 Drum Atmospheric Stack

Condition(s)	Pollutant/Parameters	Permit Limits	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
C.1, C.5, C.10, C.14 – C.16	Opacity	40%/60% for Soot Blowing	Method 9	As Required by the Department and Section III.A.1	Semiannually
C.2, C.6, C.15 & C.16	H_2S – D-4 Drum Vent	------	Steam Injection	As necessary	
C.3, C.7, C.8, C.11, C.13, C.15 & C.16	SO_2 F-2 Crude/ Vacuum Heater Stack	271.4 lb/3-Hr 2,171.2 lb/day	SWS CEMS, & Sampling	Ongoing	Quarterly
C.4, C.9, C.11 – C.13, C.15 & C.16	Burning SWSOH in F-1 Crude Furnace or the Flare	Electronic Sensor on Valve Supplying SWSOH	Operate Sensor on the Valve and Perform Recordkeeping	Whenever Valve is Opened	Semiannually

Conditions

C.1. ExxonMobil shall not cause or authorize emissions to be discharged into the outdoor atmosphere, from the F-2 Crude Vacuum Heater stack and the D-4 Drum atmospheric stack, that exhibit opacity of 40% or greater averaged over 6 consecutive minutes. 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 (ARM 17.8.304(1) and ARM 17.8.304(3)).

C.2. The D-4 Drum atmospheric vent stack shall have steam injection capability and shall be used whenever H_2S is being released or is expected to be released from a process unit to the D-4 Drum (ARM 17.8.749).

C.3. The following emission limitations shall apply to the F-2 Crude/Vacuum Heater Stack (Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003).

a. SO_2 3-hour emissions from the F-2 Crude/Vacuum Heater Stack shall not exceed 271.4 pounds per 3-hour period, and

b. Daily emissions of SO_2 from the F-2 Crude/Vacuum Heater Stack shall not exceed 2,171.2 pounds per calendar day.

C.4. SWSOH may be burned in the F-1 Crude Furnace (and exhausted through the F-2 Crude/Vacuum Heater stack) or in the flare during periods when the CCOB is unable to burn the SWSOH, provided that:

a. Such periods do not exceed 55 days per calendar year and 65 days for any 2 consecutive calendar years, and

b. During such periods, the sour water stripper system is operating in a two-tower configuration.

(Board Order signed on June 12, 1998, and subsequent revisions of March 17, 2000; this requirement is "State Only").

Compliance Demonstration

C.5. As required by the Department and Section III.A.1, ExxonMobil shall perform a Method 9 test in accordance with Section III.A.2 (ARM 17.8.105, ARM 17.8.106, and ARM 17.8.1213).

C.6. ExxonMobil shall provide comment and explanation whenever the steam injection capability did not operate during periods when H_2S was being released or was expected to be released from a process unit to the D-4 Drum (ARM 17.8.1213).

C.7. In accordance with the Stipulation (Appendix E of this permit), ExxonMobil shall operate and maintain a continuous flow rate monitor to determine the sour water flow rate to the T-23 stripper tower. Accuracy determinations for the sour water flow rate monitor shall be required at least once every 48 months and within three months prior to any scheduled shutdown of the CCOB and shall be conducted in accordance with Attachment #2 of the Stipulation (or another method approved by the Department and EPA) (Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003).

C.8. Whenever SWSOH are being burned in the F-1 Crude (and exhausted through the F-2 Crude/Vacuum Heater stack) Furnace or in the flare, compliance with the emission limitations contained in Section III.C.3 of this permit shall be monitored using flow rate monitoring data required by Exhibit A, Section 6(B)(9) of the Stipulation (Appendix E of this permit or Section III.C.9) and from sampling and analysis of the sour water feed to the T-23 sour water stripper tower. Except for the first 2 hours after SWSOH are directed to the F-1 Crude Furnace, ExxonMobil shall collect at least one sample from the sour water feed to the T-23 sour water stripper tower for each of the eight non-overlapping 3-hour periods in a calendar day. In addition, the time elapsed before collection of the first sample shall not exceed 4 hours. ExxonMobil shall analyze the sample for H_2S in accordance with the procedures contained in Attachment #2 of the Stipulation (or another method approved by the Department and EPA), and ExxonMobil shall use the results to calculate the hourly SO_2 emission rate for each of the hours in the 3-hour period in accordance with the equations in Exhibit A, Section 2 (A) (1), (8), (11), and (16) of the Stipulation (Appendix F of this permit).

Notwithstanding the fact that fuel gas combustion emissions from the F-2 Crude/Vacuum Heater are measured by the fuel gas system CEMS and counted against the emission limitations contained in Section 3 (A)(1) and (B)(2) of the Stipulation (Appendix E of this permit), such emission are also counted against the emission limitations contained in Section 3 (A)(2) and (B)(3) of the Stipulation (Appendix E of this permit) if for any reason source testing is conducted on the F-2 Crude/Vacuum Heater stack (Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003).

C.9. ExxonMobil shall operate an electronic sensor on the valve, which supplies SWSOH to the F-1 Crude Furnace and/or the flare. The electronic sensor shall be electronically integrated with the Data Acquisition System (DAS) to insure that each time the valve is opened (SWSOH to the F-1 Crude Furnace or the flare) the DAS automatically records the date and time that the valve is opened and the length of time the SWSOH are directed to the F-1 Crude Furnace or the flare (Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003; Flare requirements are "State-only").

Recordkeeping

C.10. All source test recordkeeping shall be performed in accordance with the test method being used and Section III.A.2 (ARM 17.8.106).

C.11. In accordance with the Stipulation, ExxonMobil shall record, organize, report, and archive all the data specified in Section 7(C) of the Stipulation (Appendix E of this permit) (Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003).

C.12. Whenever the valve, which supplies SWSOH to the F-1 Crude Furnace, is opened, ExxonMobil shall log the date and time and the reasons for such action (Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003).

Reporting

C.13. In accordance with Section 7 of the Stipulation (Appendix E of this permit), ExxonMobil shall submit quarterly reports within 30 days of the end of each calendar quarter. The quarterly reports shall be submitted to the Department's Permitting and Compliance office in Helena and the Billings Regional Office. The quarterly report format shall consist of both a comprehensive electronic-magnetic report and a written or hard copy data summary report (Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003).

C.14. Any required compliance source test report(s) shall be submitted in accordance with Section III.A.2 (ARM 17.8.106).

C.15. The annual compliance certification report required by Section V.B must contain a certification stating whether ExxonMobil is in compliance with the above applicable requirements (ARM 17.8.1212).

C.16. The semiannual compliance monitoring reports must provide (ARM 17.8.1212):

a. A summary of the results of any required reference method tests performed during the reporting period;

b. A summary of any excursions for operating the D-4 Drum atmospheric vent stack steam injection as described under Section III.C.6; and

c. Reports of any required monitoring performed during the reporting period, with all instances of deviations from any permit requirements identified.

D. EU03 – Coker – Fluid Coker

EU03a: Coker CO Boiler (KCOB)
EU03c: Coker Process Gas Group I Miscellaneous Process Vent

Condition(s)	Pollutant/Parameters	Permit Limits	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
D.1, D.7, D.11, D.18, D.19, D.23, D.24, D.27 & D.28	Opacity KCOB and F-202 (exhausts through KCOB stack)	20%/60% for Soot Blowing	Method 9	As required by the Department and Section III.A.1	Semiannually
			COMS	Ongoing	Quarterly
D.2, D.8, D.12, D.18, D.19, D.23, D.24, D.26 - D.28	PM, Fuel-Burning Equipment (KCOB and F-202 (exhausts through KCOB stack))	$E = 0.882 * H^{-0.1664}$ or $E = 1.026 * H^{-0.233}$	Method 5	Once every 5 yrs when YELP is down	Semiannually
			CAM (COMS)	Continuous	Quarterly
D.3, D.8, D.12, D.18, D.19, D.23 -D.24, D.26 - D.28	PM, Process Weight KCOB	$E = 4.10 * P^{0.67}$ or $E = 55.0 * P^{0.11} – 40$	Method 5	Once every 5 yrs when YELP is down	Semiannually
			CAM (COMS)	Continuous	Quarterly
D.8, D.12, D.19, D.24, D.27 & D.28	CAM Plan	Develop and maintain PM CAM Plan for KCOB	Recordkeeping	Ongoing	Semiannually
D.7 – D.10, D.19, D.24, D.27 & D.28	COMS	Operate and maintain COMS	40 CFR 51, Appendix P and 40 CFR Part 60, Appendix B, Specification 1	Ongoing	Quarterly
D.4, D.13, D.20, D.21, D.25 - D.28	Coker Process Gas	Send all Coker Process gas to YELP	Recordkeeping	Ongoing, whenever YELP Operates	Semiannually
D.5, D.14 - D.16, D.18, D.21, D.23, D.26 - D.28	SO_2 KCOB (when YELP is not operating)	2,142.9 lb/3-Hr 17,143.1 lb/day	SO_2 CEMS	Ongoing (when YELP is not operating)	Quarterly
			RATA Methods 1-4 & 6/6C	Annually	Semiannually
D.6, D.17, D.22, D.27 & D.28	Misc. Process Vents	As required by 40 CFR 63.643	Monitoring and Testing	As required by 40 CFR 63.644 & 645	Semiannually or as required by 40 CFR 63.654

Conditions

D.1. ExxonMobil shall not cause or authorize emissions to be discharged into the outdoor atmosphere, from the KCOB stack, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes. 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 (ARM 17.8.304(2) and ARM 17.8.304(3)).

D.2. ExxonMobil shall not cause or authorize particulate matter 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 particulate matter 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 (F-202 Heater Stack)

For new fuel-burning equipment (installed on or after November 23, 1968):
E = 1.026 * H-0.233 (KCOB Coker CO Boiler Stack)

Where H is the heat input capacity in MMBtu per hour and E is the maximum allowable particulate emissions rate in pounds per MMBtu (ARM 17.8.309(2)). When two or more fuel-burning units are connected to a single stack, the combined heat input of all units connected to the stack shall not exceed that allowable for the same unit connected to a single stack (ARM 17.8.309(3)).

D.3. ExxonMobil shall not cause or authorize particulate matter to be discharged from any operation, process, or activity into the outdoor atmosphere in excess of the maximum hourly allowable emissions of particulate matter 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 (ARM 17.8.310).

D.4. ExxonMobil shall, any time the YELP facility is operating, send all of its Coker process gas to either or both of YELP's boilers. During start-up and shutdown conditions at YELP, ExxonMobil shall supply the maximum amount of Coker process gas that YELP can accept (ARM 17.8.749).

D.5. The following emission limitations shall apply to the KCOB stack (includes process exhaust gases and F-202 Heater fuel gas-firing emissions) whenever YELP is not receiving ExxonMobil Coker process gas and the ExxonMobil Coker unit is operating (Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003).

a. SO_2 emissions from the KCOB stack shall not exceed 2,142.9 pounds per 3-hour period, and

b. Daily emissions of SO_2 from the KCOB stack shall not exceed 17,143.1 pounds per calendar day.

D.6. ExxonMobil shall comply with the miscellaneous process vent provisions in 40 CFR 63.643 as appropriate (ARM 17.8.342 and 40 CFR 63, Subpart CC).

Compliance Demonstration

D.7. ExxonMobil shall operate and maintain a COMS on the KCOB stack to monitor compliance with the KCOB opacity limitation in Section D.1 (ARM 17.8.105, ARM 17.8.106, and ARM 17.8.1213).

D.8. ExxonMobil shall use the COMS specified in Section III.D.7 to satisfy the compliance assurance monitoring requirements of ARM 17.8 Subchapter 15 for the Coker/KCOB Bahco Multiclones. Operation within the designated indicator ranges of <20% opacity is deemed reasonable assurance of on-going compliance with the PM limitations in Sections III.D.2 and D.3. (see the Compliance Assurance Monitoring (CAM) Plan in Appendix F of this permit) (ARM 17.8.1212).

D.9. ExxonMobil shall operate the COMS in accordance with ARM 17.8.1511. Upon detecting an opacity excursion, ExxonMobil shall restore operation of the Coker/KCOB/Bahco Multiclones as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions (ARM 17.8.1511).

D.10. Opacity monitoring, COMS operation and maintenance, and reporting shall be performed by ExxonMobil consistent with the requirements of both 40 CFR 51, Appendix P and 40 CFR Part 60, Appendix B, Performance Specification 1 (ARM 17.8.1213).

D.11. As required by the Department and Section III.A.1, ExxonMobil shall perform a Method 9 test in accordance with Section III.A.2 (ARM 17.8.105, ARM 17.8.106, and ARM 17.8.1213).

D.12. In addition to the COMS, once every 5 years (within the permit term), when YELP is not operating, ExxonMobil shall perform a Method 5 test in accordance with Section III.A.2, in order to demonstrate compliance with the PM limitations in Sections III.D.2 and D.3. The COMS indicator range will be updated for the CAM Plan, as necessary, based on data from the Method 5 test (ARM 17.8.105, ARM 17.8.106, and ARM 17.8.1213 and ARM 17.8.1504).

D.13. Any time ExxonMobil diverts process Coker gases from YELP, ExxonMobil shall report said diversion to the Department within 24 hours or during the next regular working day. This information shall also be included in the quarterly CEMS sulfur-in-fuel report and shall include the period(s) of diversion, quantity of SO_2 emissions, reason for the diversion(s), and corrective measures taken to prevent reoccurrence. Compliance with this will demonstrate compliance with Section III.D.4 (ARM 17.8.749).

D.14. ExxonMobil shall install, calibrate, maintain, and operate a CEMS to continuously monitor and record the concentration of SO_2 and flow rate of the flue gas discharged from the KCOB stack during periods when Coker Process Gas is not being directed to YELP. The CEMS shall be installed, certified and operated in accordance with the applicable performance specifications set out in 40 CFR Part 60, Appendix B and (for stack flow) Method A-1 of Attachment #1 of the SO_2 Stipulation. Compliance with the emission limitations in Section III.D.5 shall be determined using data from the CEMS and in accordance with the appropriate equation(s) in Section 2(A)(1), (8), (11), and (16) of the SO_2 Stipulation, except when CEMS data is not available as provided in Section 2(A)(16) of the Stipulation. The CEMS shall be subject to and shall meet the quality assurance and quality control requirements of 40 CFR 60, Appendix F and Method B-1 of Attachment #1 of the SO_2 Stipulation. The CEMS shall meet applicable quarterly data recovery rates and other provisions of the SO_2 Stipulation (Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003).

D.15. ExxonMobil shall perform annual source testing using EPA-approved methods (40 CFR Part 60, Appendix A, Methods 1-4 and 6/6c as appropriate for this Stipulation and Exhibit A) or an equivalent method approved by the Department and EPA, and in accordance with Section III.A.2, in order to certify the SO_2 emission rates in pounds per hour for the KCOB stack. The annual Relative Accuracy Test Audits (RATAs) required by Sections 6(C and D) of the Stipulation, may substitute for the annual source tests provided that the flow rate RATA and the concentration RATA are performed simultaneously and additional calculations are made to determine and report the data in pounds per hour of SO_2 (ARM 17.8.106 and Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003).

D.16. After installation and certification of the monitors required by Section 6(B)(4)(a) of the Stipulation, ExxonMobil may remove the monitors from the KCOB stack whenever Coker process gas is not being exhausted through the stack. However, at any time after initial installation and certification of the monitors ExxonMobil exhausts Coker process gas through the KCOB stack, ExxonMobil shall within 48 hours:

a. Reinstall the monitors at the same location on the KCOB stack (including probe position in the stack);

b. Perform a cylinder gas audit (CGA) or Relative Accuracy Audit (RAA) which meets the requirements and specifications of 40 CFR Part 60, Appendix F; and

c. Operate the monitors in accordance with the quality assurance requirements of Section 6 as long as Coker process gas continues to be exhausted through the KCOB stack.

(Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003).

D.17. ExxonMobil shall monitor compliance with the miscellaneous process vent provisions by performing the monitoring and testing specified in 40 CFR 63.644 and 645 (ARM 17.8.342 and 40 CFR 63, Subpart CC).

Recordkeeping

D.18. All source test recordkeeping shall be performed in accordance with the test method being used and Section III.A.2 (ARM 17.8.106 and ARM 17.8.1212).

D.19. Recordkeeping associated with the COMS shall be performed consistently with the requirements of both 40 CFR 51, Appendix P and 40 CFR Part 60, Appendix B, Performance Specification 1. In addition, ExxonMobil shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to ARM 17.8.1512 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under ARM 17.8 Subchapter 15 (ARM 17.8.1212 and ARM 17.8.1513).

D.20. ExxonMobil shall keep records of any time ExxonMobil diverts process Coker gases from YELP for five years. This information shall include the period(s) of diversion, quantity of sulfur oxide emissions, reason for the diversion(s), and corrective measures taken to prevent reoccurrence (ARM 17.8.749, ARM 17.8.1212).

D.21. In accordance with the Stipulation, ExxonMobil shall record, organize, report, and archive all the data specified in Section 7(C) of the Stipulation (Appendix E of this permit) (Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003).

D.22. ExxonMobil shall comply with the recordkeeping requirements for miscellaneous process vent provisions in accordance with 40 CFR 63.654 (ARM 17.8.342 and 40 CFR 63, Subpart CC).

Reporting

D.23. Any compliance source test report(s) shall be submitted in accordance with Section III.A.2 (ARM 17.8.106 and ARM 17.8.1212).

D.24. ExxonMobil shall submit COMS data reports to the Department quarterly. In addition, ExxonMobil shall report to the Department, on a calendar quarterly basis, opacity results from the COMS, which exceed the 20% provided in ARM 17.8.304(2) (ARM 17.8.1212).

D.25. Any time ExxonMobil diverts Coker Process Gas from YELP, ExxonMobil shall report said diversion to the Department within 24 hours or during the next regular working day. This information shall also be included in the quarterly report, and shall include the period(s) of diversion, hours that Coker Process Gas was exhausted through the KCOB, the quantity of SO_2 emissions, reason for the diversion(s), and corrective measures taken to prevent reoccurrence (ARM 17.8.749).

D.26. In accordance with Section 7 of the Stipulation (Appendix E of this permit), ExxonMobil shall submit quarterly reports within 30 days of the end of each calendar quarter. The quarterly reports shall be submitted to the Department's Permitting and Compliance office in Helena and the Billings Regional Office. The quarterly report format shall consist of both a comprehensive electronic-magnetic report and a written or hard copy data summary report. The quarterly reports shall also include the report on the COMS for the Coker CO Boiler stack (Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003).

D.27. The annual compliance certification report required by Section V.B must contain a certification stating whether ExxonMobil is in compliance with the above applicable requirements (ARM 17.8.1212).

D.28. The semiannual compliance monitoring reports must provide (ARM 17.8.1212):

a. A summary of the results of any required reference method tests performed during the reporting period; and

b. Reports of any required monitoring performed during the reporting period, with all instances of deviations from any permit requirements identified.

E. EU04 – Catalytic Reforming Unit (POFO – Powerforming Unit)

EU04b: Catalytic Reforming Unit Process Vent

Condition(s)	Pollutant/Parameters	Permit Limits	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
E.1, E.5 – E.10	Catalytic Reforming Unit	40 CFR 63, Subpart UUU	40 CFR 63, Subpart UUU	40 CFR 63, Subpart UUU	Semiannually
E.2, E.4 – E.10	Catalytic Reforming Unit - Organic HAP	Vent emissions to RFG system when pressure > 5 psig	Operation, Maintenance and Monitoring Plan (OMMP)	During unit depressurization and catalyst purging	
E.3 – E.10	Catalytic Reforming Unit - Inorganic HAP	<30 ppm HCl dry corrected @ 3% O_2 (daily average)	OMMP	During each coke burn-off and catalyst rejuvenation cycle	

Conditions

E.1. ExxonMobil shall comply with all applicable requirements of 40 CFR 63, Subpart UUU – NESHAPs for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units. These regulations shall apply to the Powerforming Unit and any other equipment, as appropriate (ARM 17.8.342 and 40 CFR 63, Subpart UUU).

E.2. At all times except startup, shutdown, and malfunction, ExxonMobil shall meet applicable requirements for organic HAP emissions from catalytic reforming units, set out under 40 CFR 63, Subpart UUU. During unit depressurization and catalyst purging, the catalytic reforming unit vent emissions must be routed to the RFG system until unit pressure is less than or equal to 5 psig (ARM 17.8.342 and 40 CFR 63, Subpart UUU).

E.3. At all times except startup, shutdown, and malfunction, ExxonMobil shall meet applicable requirements for inorganic HAP emissions from catalytic reforming units, set out under 40 CFR 63, Subpart UUU. During each coke burnoff and catalyst rejuvenation cycle, ExxonMobil shall operate an internal caustic scrubber to meet the applicable HCl limit and catalytic reforming unit operation limits set out under 40 CFR 63.1567 (ARM 17.8.342 and 40 CFR 63, Subpart UUU).

E.4. ExxonMobil shall prepare an OMMP according to the requirements in 40 CFR 63.1574 and operate at all times according to the procedures in the plan (ARM 17.8.342, 40 CFR 63, Subpart UUU).

Compliance Demonstration

E.5. ExxonMobil shall conduct all monitoring and testing as required by 40 CFR 63, Subpart UUU, including maintaining records to document conformance with procedures in ExxonMobil's required OMMP (ARM 17.8.742 and 40 CFR 63, Subpart UUU).

Recordkeeping

E.6. All source test recordkeeping shall be performed in accordance with the test method being used and Section III.A.2 (ARM 17.8.106 and ARM 17.8.1212).

E.7. ExxonMobil shall conduct all applicable recordkeeping requirements in accordance with 40 CFR 63, Subpart UUU (ARM 17.8.342 and 40 CFR 63, Subpart UUU).

Reporting

E.8. Any compliance source test report(s) shall be submitted in accordance with Section III.A.2 (ARM 17.8.106).

E.9. The annual compliance certification report required by Section V.B must contain a certification stating whether ExxonMobil is in compliance with the above applicable requirements (ARM 17.8.1212).

E.10. The semiannual compliance monitoring reports must provide (ARM 17.8.1212):

a. A summary of the results of any reference method tests performed during the reporting period; and

b. Reports of any required monitoring performed during the reporting period, with all instances of deviations from any permit requirements identified.

F. EU09 – FCCU – Catalytic Cracking Unit

EU09a: CCOB - FCC CO Boiler

EU09b: CCOB Bypass Line

Condition(s)	Pollutant/Parameters	Permit Limits	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
F.1, F.17 – F.19, F.30, F.34 – F.37	Opacity – FCCU Catalyst Regenerator (through CCOB Stack)	30% (except one 6-minute period in each hour)	COMS	Ongoing	Quarterly
			Method 9	As required by the Department and Section III.A.1	Semiannually
F.2, F.17 – F.19, F.30, F.34 – F.37	Opacity – CCOB (when FCCU Catalyst Regenerator is down)	40%/60% for Soot Blowing	COMS	Ongoing	Quarterly
			Method 9	As required by the Department and Section III.A.1	Semiannually
F.3, F.20, F.32, F.36 & F.37	FCCU Catalyst Regenerator (PM, CO and opacity)	40 CFR 60, Subpart J	40 CFR 60, Subpart J	40 CFR 60, Subpart J	
F.20, F.23, F.36 & F.37	CCOB	Comply with Alternative Monitoring Plan (AMP)	40 CFR 60, Subpart A & J	40 CFR 60, Subpart A & J	
F.4, F.16, F.21, F.33, F.36 & F.37	FCCU Catalyst Regenerator (PM, CO, HAPs and opacity)	40 CFR 63, Subpart UUU	40 CFR 63, Subpart UUU	40 CFR 63, Subpart UUU	
F.5, F.22, F.30, F.34, F.36 & F.37	PM, Process Weight	$E = 4.10 * P^{0.67}$ Or $E = 55.0 * P^{0.11} – 40$	Method 5	Every 2 Yrs	
F.6, F.22, F.24, F.30, F.34, F.36 & F.37	PM – FCC Unit	1.0 lb/1000 lb coke burned (calendar daily average, after December 31, 2008)	Methods 5B or 5F	As required by the Department and Section III.A.1	
F.7, F.17, F.25 – F.28, F.30, F.31, F.34-F.37	SO_2 -- ExxonMobil Coker Process Gas going to YELP and CCOB Stack	Lb/3-hr limit See K.4 (Table 1a)	SO_2 CEMS	Ongoing	Quarterly
			Method6/6C	Annually	Semiannually
F.7, F.17, F.25 – F.28, F.30, F.31, F.34-F.37	SO_2 -- ExxonMobil Coker Process Gas going to YELP and CCOB Stack	Lb/day limit See K.4 (Table 1b)	SO_2 CEMS	Ongoing	Quarterly
			Method6/6C	Annually	Semiannually
F.8, F.17, F.25 – F.28, F.30, F.31, F.34-F.37	SO_2 – ExxonMobil Coker Process Gas not going to YELP and CCOB Stack	Lb/3-hr limit See K.5 (Table 2a)	SO_2 CEMS	Ongoing	Quarterly
			Method6/6C	Annually	Semiannually
F.8, F.17, F.25 – F.28, F.30, F.31, F.34 -F.37	SO_2 -- ExxonMobil Coker Process Gas not going to YELP and CCOB Stack	Lb/day limit See K.5 (Table 2b)	SO_2 CEMS	Ongoing	Quarterly
			Method6/6C	Annually	Semiannually
F.9, F.17, F.25, F.36-F.38	SWSOH	Burning the SWSOH in the CCOB or the Flare	SO_2 CEMS	Ongoing	Quarterly

F.10, F.36 & F.37	CCOB	Treat or re-route SWS T-23 overhead gas from CCOB (by December 31, 2008)	40 CFR 60, Subpart J	40 CFR 60, Subpart J	Semiannually
F.11, F.17, F.36 & F.37	CCOB – SO_2	FCCU Full Burn Operation	Certification	Continuous	
		SO_2-reducing catalyst – final limits to be established	SO_2 CEMS	Continuous	
F.12, F.17, F.24, F.29, F.30, F.34, F.36 & F.37	CCOB – CO	500 ppm_{vd} @ 0% O_2, 1-hr average	CO CEMS	Continuous	
			RATA Method 10	Every 3 years	
			Cylinder Gas Audit (CGA)	Quarterly	
F.13, F.17, F.24, F.30, F.34, F.36 & F.37	CCOB - NOx	40 ppm_{vd} @ 0% O_2 365-day rolling average; and 80 ppm_{vd} @ 0% O_2 7-day rolling average	NOx CEMS	Continuous	
			RATA Method 7E	Annually	
F.14, F.16, F.21, F.33, F.36 & F.37	FCCU – Metal HAP	Nickel: 0.029 lb/hr, until subject to NSPS Subpart J PM limits	OMMP	Continuous	
F.15, F.16, F.21, F.33, F.36 & F.37	FCCU – Organic HAP	Meet CO limits	OMMP	Continuous	

Conditions

F.1. Except during periods of startup, shutdown, or malfunction, as defined by 40 CFR 60.2, ExxonMobil shall not cause or authorize emissions to be discharged into the outdoor atmosphere, from the FCCU catalyst regenerator, measured at the CCOB stack, gases that exhibit greater than 30% opacity, except for one 6-minute average opacity reading in any one hour period. At all times, including periods of startup, shutdown, and malfunction, ExxonMobil shall, to the extent practicable, maintain and operate each FCCU catalyst regenerator and any associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (ARM 17.8.749; Consent Decree paragraph 43; ARM 17.8.740 and 40 CFR 60, Subpart J).

F.2. When the FCCU catalyst regenerator is down, ExxonMobil shall not cause or authorize emissions to be discharged into the outdoor atmosphere, from the CCOB that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes. 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 (ARM 17.8.304(1) and ARM 17.8.304(3)).

F.3. ExxonMobil shall comply with all the applicable requirements in 40 CFR 60, Subpart A and Subpart J – Standards of Performance for Petroleum Refineries. The FCCU catalyst regenerator shall comply with the applicable emission limitations in 40 CFR 60, Subpart J for CO and opacity, and PM after December 31, 2008, except during periods of startup, shutdown, or malfunction as defined by 40 CFR 60.2 (ARM 17.8.340 and 40 CFR 60, Subpart J; and Consent Decree Paragraphs 43, and 59).

F.4. ExxonMobil shall comply with all the applicable requirements in 40 CFR 63, Subpart UUU– National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units. The FCC Regenerator is subject to the Subpart UUU requirements for PM, CO, HAPs and opacity (ARM 17.8.342 and 40 CFR 63, Subpart UUU).

F.5. ExxonMobil shall not cause or authorize particulate matter to be discharged from any operation, process, or activity into the outdoor atmosphere in excess of the maximum hourly allowable emissions of particulate matter 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. This PM requirement will become subsumed into the PM limit in Section III.F.6, no later than December 31, 2008 (ARM 17.8.310).

F.6. ExxonMobil shall install and operate a third-stage cyclone on the FCC Unit, and take any additional steps necessary, in order to comply with a PM emission limit of 1.0 lb of PM per 1,000 lb of coke burned by no later than December 31, 2008, unless ExxonMobil accepts an FCC PM limit of 0.5 lbs per 1000 lbs coke burned (ARM 17.8.749; ARM 17.8.340 and 40 CFR 60, Subpart J; and Consent Decree paragraph 34 and 35).

F.7. The following emission limitations shall apply to the CCOB stack whenever YELP is receiving ExxonMobil Coker process gas or whenever the ExxonMobil Coker unit is not operating (Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003).

a. SO_2 3-hour emissions from the CCOB stack shall not exceed those values set forth in the following Table 1a. The 3-hour SO_2 emission limitations from the CCOB stack shall be determined by the 3-hour average FCC fresh feed rate, expressed in thousands of barrels per day (kBD), rounded up to the nearest whole barrel.

Table 1a

3-Hour Average FCC Fresh Feed Rate (kBD)	3-Hour SO_2 Emission Limit (lb of SO_2 per 3-hours)
less than 12.999	5886.8
13.000 to 13.999	6052.0
14.000 to 14.999	6103.7
15.000 to 15.999	6130.6
16.000 to 16.999	6221.8
Greater than 17.000	6280.4

b. Daily emissions of SO_2 from the CCOB stack shall not exceed those values set forth in the following Table 1b. The daily SO_2 emission limitations from the CCOB stack shall be determined by the daily average FCC fresh feed rate, expressed in thousands of barrels per day (kBD), rounded up to the nearest whole barrel.

Table 1b

Daily Average FCC Fresh Feed Rate (kBD)	Daily SO_2 Emission Limit (lb of SO_2 per Calendar Day)
less than 12.999	47,094.3
13.000 to 13.999	48,416.3
14.000 to 14.999	48,829.7
15.000 to 15.999	49,044.9
16.000 to 16.999	49,774.5
greater than 17.000	50,243.1

F.8. The following emission limitations shall apply to CCOB stack whenever YELP is not receiving ExxonMobil Coker process gas and the ExxonMobil Coker unit is operating (Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003).

a. SO_2 3-hour emissions from the CCOB stack shall not exceed those values set forth in the following Table 2a. The 3-hour SO_2 emission limitations from the CCOB stack shall be determined by the 3-hour average FCC fresh feed rate expressed in thousands of barrels per day (kBD), rounded up to the nearest whole barrel.

Table 2a

3-Hour Average FCC Fresh Feed Rate (kBD)	3-Hour SO_2 Emission Limit (lb of SO_2 per 3-hours)
less than 12.999	5231.5
13.000 to 13.999	5485.3
14.000 to 14.999	5743.7
15.000 to 15.999	5966.6
16.000 to 16.999	6190.4
Greater than 17.000	6416.4

b. Daily Emissions of SO_2 from the CCOB stack shall not exceed those values set forth in the following Table 2b. The daily SO_2 emission limitations from the CCOB stack shall be determined by the daily average FCC fresh feed rate expressed in thousands of barrels per day (kBD), rounded up to the nearest whole barrel

Table 2b

Daily Average FCC Fresh Feed Rate (kBD)	Daily SO_2 Emission Limit (lb of SO_2 per Calendar Day)
less than 12.999	41,852.1
13.000 to 13.999	43,882.7
14.000 to 14.999	45,949.5
15.000 to 15.999	47,732.5
16.000 to 16.999	49,523.1
greater than 17.000	51,330.8

F.9. ExxonMobil shall burn the SWSOH in the CCOB and exhaust those emissions through the CCOB stack, except that the SWSOH may be burned in the F-1 Crude Furnace (and exhausted through the F-2 Crude/Vacuum Heater stack) or in the Flare during periods when the CCOB is unable to burn the SWSOH, provided that:

a. Such periods do not exceed 55 days per calendar year and 65 days for any 2 consecutive calendar years, and

b. During such periods the SWS system is operating in a two-tower configuration.

(Board Order signed on June 12, 1998, and subsequent revisions of March 17, 2000; this requirement is "State Only").

F.10. ExxonMobil shall treat or re-route SWS T-23 overhead gas combusted in the CCOB by no later than December 31, 2008 (ARM 17.8.340 and 40 CFR 60, Subpart J; and Consent Decree Paragraphs 43, 59, 71 & 73).

F.11. ExxonMobil shall operate the FCCU in a Full Burn Operation and comply with Consent Decree paragraphs 29a and 29b which addresses implementing a SO_2 emissions control program and establishing a SO_2 emission limit, unless and until ExxonMobil accepts FCCU SO_2 limits of 25 ppm_{vd} on a 365-day rolling average and 50 ppm_{vd} on a 7-day rolling average basis (both at 0% oxygen (O_2)) (ARM 17.8.749, Consent Decree Paragraphs 29 – 30).

F.12. ExxonMobil shall comply with 500 ppm_{vd} CO corrected to 0% O_2 on a 1-hour average basis on the FCCU, except during periods of startup, shutdown, or malfunction provided that during such periods ExxonMobil implements good air pollution control practices to minimize CO emissions (Consent Decree paragraph 39; ARM 17.8.340 and 40 CFR 60, Subpart J).

F.13. By no later than December 31, 2008, ExxonMobil shall comply with the following NO_x emission limits on the FCCU (ARM 17.8.749, Consent Decree paragraph 17b):

a. 40 ppm_{vd} at 0% O_2 on a 365-day rolling average basis; and

b. 80 ppm_{vd} at 0% O_2 on a 7-day rolling average basis, other than FCCU NO_x emissions during a period of natural gas curtailment when fuel oil is burned. During such period of natural gas curtailment, ExxonMobil shall comply with an alternate short-term NO_x limit of 120 ppm_{vd} at 0% O_2 on a 24-hour rolling average basis.

F.14. By no later than December 31, 2008, ExxonMobil shall meet the metal HAP emissions limitations on the FCCU under 40 CFR 63, Subpart UUU by meeting the PM emission limitations for the FCCU set out at 40 CFR 60, Subpart J. Prior to such a date, ExxonMobil shall meet the nickel lb/hr emission limit set out under 40 CFR 63.1564(a)(1)(iii). The metal HAP emissions limitations shall apply at all times except startup, shutdown and malfunction, or during periods of planned maintenance preapproved by the Department according to the requirements in 40 CFR 63, Subpart UUU (ARM 17.8.342 and 40 CFR 63, Subpart UUU).

F.15. ExxonMobil shall meet the organic HAP emissions limitations on the FCCU under 40 CFR 63, Subpart UUU by meeting the CO emission limitations for catalytic cracking units under 40 CFR 60, Subpart J. The organic HAP emission limitations shall apply at all times except startup, shutdown and malfunction, or during periods of planned maintenance preapproved by the Department according to the requirements in 40 CFR 63, Subpart UUU (ARM 17.8.342 and 40 CFR 63, Subpart UUU).

F.16. ExxonMobil shall prepare an operation, maintenance, and monitoring plan (OMMP) according to the requirements in 40 CFR 63, Subpart UUU and operate at all times according to the procedures in the plan.

Compliance Demonstration

F.17. ExxonMobil shall install and operate the following CEMS/COMS/Continuous Emission Rate Monitor System (CERMS) on the CCOB stack:

a. Opacity (Consent Decree paragraph 43; ARM 17.8.340 and 40 CFR 60, Subpart J; ARM 17.8.342 and 40 CFR 63, Subpart UUU; and 40 CFR Part 51, Appendix P);

b. SO_2 (ARM 17.8.749, Consent Decree Paragraph 32, and Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003);

c. CO (ARM 17.8.749, Consent Decree Paragraph 42, ARM 17.8.340 and 40 CFR 60, Subpart J);

d. NO_x by no later than December 31, 2008 (ARM 17.8.749, Consent Decree Paragraph 21);

e. O_2 (Consent Decree paragraphs 21, 32 and 42); and

f. Volumetric Flow (Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003).

The CEMS/COMS/CERMS are to be in operation at all times when the CCOB is operating, except for quality assurance and control checks, breakdowns, and repairs (ARM 17.8.749).

F.18. Compliance with opacity limits in Sections III.F.1 and III.F.2 shall be monitored using data from the COMS. The COMS shall meet applicable provisions of 40 CFR 60.105(a)(1) and 60.13. Opacity monitoring, COMS operation and maintenance, and reporting shall be performed by ExxonMobil consistent with the requirements of both 40 CFR 51, Appendix P and 40 CFR Part 60, Appendix B, Performance Specification 1 (ARM 17.8.1213, ARM 17.8.103(d) and 40 CFR 51, Appendix P).

F.19. In addition to the COMS, as required by the Department and Section III.A.1, compliance with the opacity limits may also be monitored via EPA Reference Method 9 performed by a certified observer in accordance with Section III.A.2. (ARM 17.8.105, ARM 17.8.106, and ARM 17.8.1213).

F.20. ExxonMobil shall conduct all monitoring and testing as required by 40 CFR 60, Subpart J, Standards of Performance for Petroleum Refineries. These regulations shall apply to the FCCU Catalyst Regenerator and any other equipment, as appropriate (ARM 17.8.340 and 40 CFR 60, Subpart J).

F.21. ExxonMobil shall conduct all monitoring and testing as required by 40 CFR 63, Subpart UUU, including maintaining records to document conformance with procedures in ExxonMobil's required OMMP (ARM 17.8.342 and 40 CFR 63, Subpart UUU).

F.22. ExxonMobil shall perform a Method 5 test every two years, in accordance with Section III.A.2, in order to demonstrate compliance with the PM limitations in Section III.F.5. After December 31, 2008, ExxonMobil shall perform a Method 5B/5F test once a year, or another schedule as may be agreed upon by the EPA, in writing, to monitor compliance with Section III.F.6 (ARM 17.8.105, ARM 17.8.106, ARM 17.8.342 and 40 CFR 60, Subpart J, and ARM 17.8.1213).

F.23. ExxonMobil shall install, operate and maintain the applicable CEMS or develop an AMP as required by 40 CFR 60, Subparts A & J. Emission monitoring shall comply with all applicable provisions of 40 CFR 60.7 through 60.13; 40 CFR 60, Appendix A; Appendix B (Performance Specifications 1, 2, 3, 4, 6, and 7); and Appendix F (Quality Assurance/Quality Control) provisions (ARM 17.8.749, Consent Decree paragraphs 21, 32, 42, and 43).

F.24. Emissions (i) caused by or attributable to the startup, shutdown, or Malfunction of an FCC Unit and/or (ii) during periods of Malfunction of the relevant FCC Unit's Control System(s) will not be used in monitoring compliance with the PM limits or short-term (7-day for NO_x, 7-day for SO_2, or 1-hour and/or 24-hour for CO) limits, provided that during such periods ExxonMobil implements good air pollution control practices to minimize said emissions. NO_x, SO_2, and CO emissions during any such period of startup, shutdown, or Malfunction shall either be: (i) monitored with CEMS; or (ii) monitored in accordance with an alternative monitoring plan approved by the EPA if it is necessary to bypass the FCC Unit's main stack (Consent Decree Paragraph 20, 31, 36, and 41).

F.25. ExxonMobil shall operate and maintain a continuous flow rate meter to determine the fresh feed rate to the FCC reactor. In addition, ExxonMobil shall maintain a spare parts inventory (at a minimum, a spare transducer) that together with the FCC-specific Programmable Logic Controller (PLC) module is capable of functioning as a back-up continuous flow rate meter to measure the fresh feed rate to the FCC reactor. The back-up continuous flow rate meter shall be a completely redundant system capable of obtaining flow rate data in the event of the failure of the primary continuous flow rate meter required by this section. The back-up system may rely upon the in-pipe orifice plate and associated mechanical connections that are components of the primary continuous flow rate meter up to, but not including, the transducer. Accuracy determinations for the FCC Fresh Feed Rate Meter shall be required at least once every 48 months or more frequently as routine refinery turn-arounds allow (Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003).

F.26. If continuous flow rate meter data (used to determine the FCC fresh feed rate) is unavailable, the emission limitation shall be determined using a substitute hourly average fresh feed rate determined in accordance with the requirements of Section 2(A)(15) of the SO_2 Stipulation (Appendix E of this permit) (Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003).

F.27. ExxonMobil shall operate and maintain a CEMS to measure SO_2 concentrations and a CERMS to measure stack gas flow rate of the flue gas discharged from the CCOB stack. Compliance with the emission limitations contained in Section III.F.7 and F.8 shall be monitored using data from the CEMS required by Section 6(B)(1) and (2) of the Stipulation (Appendix E of this permit) and in accordance with the appropriate equation(s) in Section 2(A)(1), (8), (11), and (16) of the Stipulation, except when CEMS data is not available as provided in Section 2(A)(16) of the Stipulation.

In the event the primary SO_2 CEMS are unable to meet minimum availability requirements, ExxonMobil shall provide a back-up or alternative monitoring system and plan such that continuous compliance can be demonstrated. The Department shall approve such contingency plans. SO_2 CEMS shall be required to be maintained such that they are available and operating at least 90% of the source operating time during any reporting period (quarterly).

Although the CEMS data is the method of monitoring compliance on a continuous basis, the data from the testing required by Section 5(A) or Section 6(C and D) of the Stipulation shall also be used to demonstrate compliance. Notwithstanding the fact that fuel gas combustion emissions from the CCOB are measured by the fuel gas system CEMS and counted against the emission limitations contained in Section 3 (A)(1) and (B)(2) of the Stipulation, such emissions are also

measured by the CCOB CEMS and shall be counted against the emission limitations contained in Section 3(A)(3) and (B)(4) of the Stipulation (ARM 17.8.749 and Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003).

F.28. In order to accurately monitor the SO_2 emission rates in pounds per hour for the CCOB stack, ExxonMobil shall perform annual source testing using EPA-approved methods (40 CFR Part 60, Appendix A, Methods 1-4 and 6/6c as appropriate for this Stipulation and Exhibit A) or an equivalent method approved by the Department and EPA, and in accordance with Section III.A.1 (ARM 17.8.106). The annual RATAs required by Sections 6(C and D) of the Stipulation (Appendix E of this permit) may substitute for the annual source tests provided that the flow rate RATA and the concentration RATA are performed simultaneously and additional calculations are made to determine and report the data in pounds per hour of SO_2 (Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003).

F.29. Unless compliance with 40 CFR 60, Appendix F is otherwise required by the NSPS, state law or regulation, or a permit or SO_2 SIP, in lieu of the requirements of 40 CFR 60, Appendix F Sections 5.1.1, 5.1.3 and 5.1.4, during the life of the Consent Decree, ExxonMobil may conduct for the FCC CO Boiler CO CEMS: (1) either an CO Relative Accuracy Audit ("RAA") or a Relative Accuracy Test Audit (RATA) once every 3 years; and (2) CO Cylinder Gas Audit (CGA) each calendar quarter in which a RAA or RATA is not performed (Consent Decree Paragraphs 21, 32, and 42).

Recordkeeping

F.30. ExxonMobil shall perform all source test recordkeeping in accordance with the appropriate test method and Section III.A.2. ExxonMobil shall maintain COMS data and submit the reports to the Department quarterly (ARM 17.8.1212).

F.31. In accordance with the Stipulation, ExxonMobil shall record, organize, report, and archive all the data specified in Section 7(C) of the Stipulation (Appendix E of this permit) (Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003).

F.32. ExxonMobil shall conduct all applicable recordkeeping requirements in accordance with 40 CFR 60, Subpart J (ARM 17.8.340 and 40 CFR 60, Subpart J).

F.33. ExxonMobil shall conduct all applicable recordkeeping requirements in accordance with 40 CFR 63, Subpart UUU (ARM 17.8.342 and 40 CFR 63, Subpart UUU).

Reporting

F.34. Any compliance source test report(s) shall be submitted in accordance with Section III.A.2 (ARM 17.8.106).

F.35. In accordance with Section 7 of the Stipulation (Appendix E of this permit), ExxonMobil shall submit quarterly reports within 30 days of the end of each calendar quarter. The quarterly reports shall be submitted to the Department's Permitting and Compliance office in Helena and the Billings Regional Office. The quarterly report format shall consist of both a comprehensive electronic-magnetic report and a written or hard copy data summary report. The quarterly reports shall also include the report on the COMS for the CCOB Stack (Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, and May 22, 2003).

F.36. The annual compliance certification report required by Section V.B must contain a certification stating whether ExxonMobil is in compliance with the above applicable requirements (ARM 17.8.1212).

F.37. The semiannual compliance monitoring reports must provide (ARM 17.8.1212):

a. A summary of the results of any required reference method tests performed during the reporting period; and

b. Reports of any required monitoring performed during the reporting period, with all instances of deviations from any permit requirements identified.

G. EU14 –Oil Movements & Utilities (OM&U)

EU14a: Flare - Flare or Turnaround Flare
EU14c: Flare Seal Drum (Group I Miscellaneous Process Vents)

Condition(s)	Pollutant/Parameters	Permit Limits	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
G.1, G.8, G.13, G17, G.20, G.21	Opacity Flare	40%/60% for Soot Blowing	Method 9	As required by the Department and Section III.A.1	Semiannually
G.2, G.8, G.13, G17, G.20, G.21	Opacity Turnaround Flare	20%/60% for Soot Blowing			
G.6, G.12, G.20, G.21	Flare and Turnaround Flare	40 CFR 63, Subpart CC	40 CFR 60, Subpart VV	40 CFR 60, Subpart VV	
G.3, G.9, G.14, G.15, G.18, G.20, G.21	H_2S: Flare	Burn SWSOH in CCOB, F-1 Crude Furnace or Flare	Operate Sensor on the Valve and Perform Recordkeeping	Whenever Valve is Opened	
G.4, G.5, G.10, G.15, G.18 – G.21	SO_2	Minor Flaring and 150 lb/3-Hr	Reporting & Corrective Action	As required by the SO_2 Stipulation	Quarterly & as necessary
G7, G.11, G.16, G.20, G.21	Misc. Process Vents	As Required by 40 CFR 63.643	Pilot Monitoring	As required by 40 CFR 63.644 & 645	Semiannually or as required by 40 CFR 63.654

Conditions

G.1. ExxonMobil shall not cause or authorize emissions to be discharged into the outdoor atmosphere, from the Flare, that exhibit opacity of 40% or greater averaged over 6 consecutive minutes. 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 (ARM 17.8.304(1) and ARM 17.8.304(3)).

G.2. ExxonMobil shall not cause or authorize emissions to be discharged into the outdoor atmosphere, from the Turnaround Flare, that exhibit opacity of 20% or greater averaged over 6 consecutive minutes. 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 (ARM 17.8.304(2) and ARM 17.8.304(3)).

G.3. ExxonMobil shall burn the SWSOH in the F-1 Crude Furnace or in the flare during periods when the CCOB is unable to burn the SWSOH, provided that:

a. Such periods do not exceed 55 days per calendar year and 65 days for any 2 consecutive calendar years, and

b. During such periods the sour water stripper system is operating in a two-tower configuration.

(Board Order signed on June 12, 1998, and subsequent revisions of March 17, 2000; this requirement is "State Only").

G.4. ExxonMobil shall not allow SO_2 emissions from any flare, unless the emissions are a minor flaring event, as defined in Exhibit A-1 of the Stipulation, or are the result of start-up, shutdown, or a malfunction as defined in ARM 17.8.110 (Board Order signed on June 12, 1998, and subsequent revisions of March 17, 2000; this requirement is "State Only").

G.5. Except for minor flaring events, ExxonMobil shall minimize SO_2 emissions from flaring. In addition, when flaring of sulfur bearing gases occurs due to a malfunction, ExxonMobil shall take immediate action to correct the malfunction (Board Order signed on June 12, 1998, and subsequent revisions of March 17, 2000; this requirement is "State Only").

G.6. ExxonMobil shall reduce emissions of organic HAPs from process vent emissions by using a flare that operates with a continuous pilot flame and meets applicable control device requirements of 40 CFR 60.18, 40 CFR 63.11, and 40 CFR 63, Subpart CC (ARM 17.8.340 and 40 CFR 60, Subpart J, and ARM 17.8.342, 40 CFR 63.11, and 40 CFR 63, Subpart CC).

G.7. ExxonMobil shall comply with the miscellaneous process vent provisions in 40 CFR 63.643 as appropriate (ARM 17.8.342 and 40 CFR 63, Subpart CC).

Compliance Demonstration

G.8. As required by the Department and Section III.A.1, ExxonMobil shall perform a Method 9 test in accordance with Section III.A.2 (ARM 17.8.105, ARM 17.8.106, and ARM 17.8.1213).

G.9. ExxonMobil shall operate an electronic sensor on the valve that supplies SWSOH to the F-1 Crude Furnace and/or Flare. The electronic sensor shall be electronically integrated with the Data Acquisition System (DAS) to insure that each time the valve is opened (SWSOH to Flare) the DAS automatically records the date and time that the valve is opened and the length of time the SWSOH are directed to the Flare (Board Order signed on June 12, 1998, and subsequent revisions of March 17, 2000; this requirement is "State Only").

G.10. For flaring events in excess of 150 lbs/3-hr period, ExxonMobil shall comply with the reporting requirements identified in Section (3)(A)(5) of Exhibit A-1 of the Stipulation (Appendix E of this permit) (Board Order signed on June 12, 1998, and subsequent revisions of March 17, 2000; this requirement is "State Only").

G.11. Compliance with the miscellaneous process vent provisions shall be performed in accordance with 40 CFR 63.644, 63.645, and 63.654, as appropriate (ARM 17.8.342 and 40 CFR 63, Subpart CC).

G.12. ExxonMobil shall install a device (including but not limited to a thermocouple, ultraviolet beam sensor, or infrared sensor) capable of continuously detecting the presence of a pilot flame for the flare (ARM 17.8.342 and 40 CFR 63, Subpart CC).

Recordkeeping

G.13. Method 9 test reports shall be maintained under ExxonMobil's control and must be submitted to the Department in accordance with Section III.A.2 (ARM 17.8.106).

G.14. Whenever the valve that supplies SWSOH to the Flare is opened, ExxonMobil shall log the date and time and the reasons for such action (Board Order signed on June 12, 1998, and subsequent revisions of March 17, 2000; this requirement is "State Only").

G.15. ExxonMobil shall maintain a record of all flaring events other than de minimis activities, including reviewer's initials (Board Order signed on June 12, 1998, and subsequent revisions of March 17, 2000; this requirement is "State Only," and ARM 17.8.1212).

G.16. ExxonMobil shall comply with the recordkeeping requirements for miscellaneous process vent provisions in accordance with 40 CFR 63.654 (ARM 17.8.342 and 40 CFR 63, Subpart CC).

Reporting

G.17. Any required compliance source test report(s) shall be submitted in accordance with Section III.A.2 (ARM 17.8.106).

G.18. In accordance with Section 7 of the Stipulation (Appendix E of this permit), ExxonMobil shall submit quarterly reports within 30 days of the end of each calendar quarter. The quarterly reports shall be submitted to the Department's Permitting and Compliance office in Helena and the Billings Regional Office. The quarterly report format shall consist of both a comprehensive electronic-magnetic report and a written or hard copy data summary report (Board Order signed on June 12, 1998, and subsequent revisions of March 17, 2000; this requirement is "State Only").

G.19. For flaring events in excess of 150 lbs/3-hr period, ExxonMobil shall comply with the reporting requirements identified in Section (3)(A)(5) of Exhibit A-1 of the Stipulation (Appendix E of this permit) (Board Order signed on June 12, 1998, and subsequent revisions of March 17, 2000; this requirement is "State Only").

G.20. The annual compliance certification report required by Section V.B must contain a certification stating whether ExxonMobil is in compliance with the above applicable requirements (ARM 17.8.1212).

G.21. The semiannual compliance monitoring reports must provide (ARM 17.8.1212):

a. A summary of the results of any required reference method tests performed during the reporting period; and

b. Reports of any required monitoring performed during the reporting period, with all instances of deviations from any permit requirements identified.

H. EU15 – Oil Movements & Shipping (OM&S) / Polymer Modified Asphalt (PMA) Unit

Group 1 Storage Vessels
Group 2 Storage Vessels
Wastewater Provision Vessels
Asphalt PMA Unit Tanks
EU15a: PMA Loading

Condition(s)	Pollutant/Parameters	Permit Limits	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
H.1, H.13, H.23, H.28 – H.30	Opacity	20%/ 60% for Soot Blowing	Method 9	As required by the Department and Section III.A.1	Semiannually
H.2, H.14, H.24, H.29 & H.30	Tanks #40 & #101 (and any installed since 1983)	40 CFR 60, Subpart Kb	40 CFR 60, Subpart Kb	40 CFR 60, Subpart Kb	
H.3, H.11 – H.13, H.22, H.23, H.29 & H.30	Tank #55 (Upon modification to asphalt service)	40 CFR 60, Subpart UU - 0% Opacity	Method 9	As required by the Department and Section III.A.1	
		VOC Coalescer	Monitor Coalescer pressure drop	Daily	
H.4, H.15, H.25, H.29 & H.30	PMA Unit Valves	Packing	Log	Semiannually	
H.4, H.15, H.25, H.29 & H.30	PMA Unit Open-Ended Valves	Plugged or Capped	Log		
H.4, H.15, H.25, H.29 & H.30	PMA Unit Pumps	Single Seals	Log		
H.4, H.15, H.25, H.29 & H.30	PMA Unit Flanges	Process Compatible	Log		
H.5, H.16, H.26, H.29 & H.30	Group 1 Storage Vessels	40 CFR 63.646	40 CFR 63.119 - 63.121	As required by 63.123 & 63.654	
H.6, H.17, H.27, H.29 & H.30	PMA Unit Materials Processed	Non-polymerized or PMA	Log	Semiannually	
H.7, H.18, H.27, H.29 & H.30	VOC fugitive emissions from Tank 26	515 tons/ 12-month rolling	Engineering calculation/ equation	Monthly	
H.8, H.19, H.27, H.29 & H.30	VOC PMA Tanks: 72, #73, #76 & #77	28.3 tons/12-month rolling	Calculation (EPA's TANKS)		
H.9, H.20, H.27, H.29 & H.30	VOC – PMA Loading	22.7 tons/12-month rolling period	Engineering calculation		
H.10, H.21, H.27, H.29 & H.30	VOC – PMA Tanks plus PMA Loading	46.6 tons/12-month rolling period (combined)	Engineering calculation		

Conditions

H.1. ExxonMobil shall maintain the operating temperature of the wetting/mixing tank below the smoking point of asphalt. ExxonMobil shall not cause or authorize emissions to be discharged into the outdoor atmosphere, from the wetting/mixing tank (PMAU) exhaust vent, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304 and ARM 17.8.752).

H.2. ExxonMobil shall comply with all applicable requirements of 40 CFR, Part 60, Subpart Kb - Volatile Organic Liquid Storage Vessels. These regulations shall apply to Tank #11 and Tank #101 and any other affected tank for which construction, reconstruction, or modification commenced after July 23, 1984 (ARM 17.8.340 and 40 CFR 60, Subpart Kb).

H.3. ExxonMobil shall comply with all applicable requirements of 40 CFR, Part 60, Subpart UU—Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture. These regulations shall apply to any asphalt storage tank constructed after May 23, 1981 (ARM 17.8.340 and 40 CFR 60, Subpart UU).

H.4. ExxonMobil shall prevent fugitive emissions from the PMA Unit by ensuring the following (ARM 17.8.752):

- All valves used shall be high-quality valves containing high-quality packing;
- All open-ended valves shall be of the same quality as the valves described above and they will have plugs or caps installed on the open end;
- All pumps and mills shall be equipped with standard high-quality single seals; and
- Flanges shall be equipped with process compatible gasket material.

H.5. ExxonMobil shall comply with the Group 1 Storage Vessels provisions of 40 CFR 63.646, as appropriate (ARM 17.8.342 and 40 CFR 63, Subpart CC).

H.6. The PMA Unit may process either non-polymerized or polymer modified asphalt (ARM 17.8.749).

H.7. VOC emissions from Tank #26 shall not exceed 515 tons per rolling 12-month period. The VOC fugitive emissions shall be determined using the following equation (ARM 17.8.749):

$$W_{VOC} = 0.166677 \text{ lbs/ft}^3 * V_{inst} * [TVP / (12.9 \text{ psia} - TVP)]$$

Where:

V_{inst} = Air volume flowrate in standard cubic feet per day (scfd)
TVP = True vapor pressure of hydrocarbons in lb/in^2 absolute (psia)
W_{VOC} = Mass of hydrocarbon emissions in pounds per day (lbs/day)

H.8. Once the PMA unit is modified, the PMA tanks (Tanks #72, #73, #76 & #77) combined shall not exceed 28.3 tons of VOC emissions per 12-month rolling period (ARM 17.8.749).

H.9. Once the PMA unit is modified, the PMA loading operations shall not exceed 22.7 tons of VOC emissions per 12-month rolling period (ARM 17.8.749).

H.10. Once the PMA unit is modified, the PMA tanks and the PMA loading operations shall be limited to a combined total of 46.6 tons of VOC emissions per 12-month rolling period (ARM 17.8.749).

H.11. Once Tank #55 is modified for asphalt service, Tank #55 shall be controlled by a VOC coalescer (ARM 17.8.749, ARM 17.8.340 and 40 CFR 60, Subpart UU).

H.12. Once Tank #55 is modified for asphalt service, Tank #55 shall be limited to 0% opacity except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown (ARM 17.8.340 and 40 CFR 60, Subpart UU).

Compliance Demonstration

H.13. As required by the Department and Section III.A.1, ExxonMobil shall perform a Method 9 test in accordance with Section III.A.2 (ARM 17.8.105, ARM 17.8.106, and ARM 17.8.1213).

H.14. ExxonMobil shall monitor compliance with 40 CFR 60, Subpart Kb by complying with §§60.113b through 60.114b (ARM 17.8.340 and 40 CFR 60, Subpart Kb).

H.15. ExxonMobil shall evaluate the valves, pumps, mills, and flanges in the PMA Unit to monitor the requirements in Section III.H.4 (ARM 17.8.1213).

H.16. ExxonMobil shall comply with the applicable Group 1 Storage Vessels provisions of §§63.119 through 63.121, as specified by 40 CFR 63, Subpart CC (ARM 17.8.342 and 40 CFR 63, Subpart CC).

H.17. ExxonMobil shall log if any non-polymerized or polymer modified asphalt was processed in the PMA unit (ARM 17.8.1213).

H.18. ExxonMobil shall calculate and document, by month, the total fugitive VOC emissions from Tank #26. By the 25th day of each month, ExxonMobil shall total the fugitive VOC emissions from Tank 26 for the previous 12 months to monitor compliance with the limitation in Section III.H.7 (ARM 17.8.749).

H.19. ExxonMobil shall document, by month, the total VOC emissions from the PMA tanks (#72, #73, #76 & #77). By the 25th day of each month ExxonMobil shall calculate the total VOC emissions from these tanks during the previous month. ExxonMobil shall measure actual tank data (throughput and temperature) and use this data to calculate VOC emissions using EPA TANKS Version 4.0 software program. The monthly information shall be used to verify compliance with the rolling 12-month limitations in Section III.H.8. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

H.20. ExxonMobil shall document, by month, the total VOC emissions from the PMA loading operation. By the 25th day of each month ExxonMobil shall calculate the total VOC emissions from this operation during the previous month. ExxonMobil shall measure the actual monthly PMA throughput and monthly average temperature, and use this data in the petroleum liquid loading equation:

$LL = 12.46\ SPM/T$ (AP-42 Chapter 5.2)

LL = loading loss (lbs/1000 gallons of PMA loaded)
S = saturation factor (1.45)
P = true vapor pressure
M = molecular weight of vapors (105 lbs/lb-mole)
T = temperature of bulk liquids loading (deg R)

The monthly information shall be used to verify compliance with the rolling 12-month limitations in Section III.H.9. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

H.21. ExxonMobil shall sum the monthly VOC emissions from the PMA tanks and the PMA loading. The monthly information shall be used to verify compliance with the rolling 12-month limitation in Section II.H.10. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

H.22. ExxonMobil shall document, monthly, the daily Tank #55 coalescer pressure drop readings and compare against the manufacturer's recommended range (ARM 17.8.340 and 40 CFR 60, Subpart UU).

Recordkeeping

H.23. Method 9 test reports shall be maintained under ExxonMobil's control and must be submitted to the Department in accordance with Section III.A.2 (ARM 17.8.106).

H.24. ExxonMobil shall maintain on-site records for the monitoring of Tank #11 and Tank #101, and any other affected tank subject to 40 CFR 60, Subpart Kb, as required by 40 CFR 60.115b and 60.116b (ARM 17.8.340 and 40 CFR 63, Subpart Kb).

H.25. ExxonMobil shall maintain a log of any valves, pumps, mills, or flanges in the PMA Unit that fail to meet the requirements in Section III.H.4 (ARM 17.8.1213).

H.26. ExxonMobil shall comply with the recordkeeping requirements of storage vessel provisions in accordance with 40 CFR 63.123 and 63.654 (ARM 17.8.342 and 40 CFR 63, Subpart CC).

H.27. ExxonMobil shall perform recordkeeping as required by Section III.H.17 (ARM 17.8.1213).

Reporting

H.28. Any required compliance source test report(s) shall be submitted in accordance with Section III.A.2 (ARM 17.8.106).

H.29. The annual compliance certification report required by Section V.B must contain a certification stating whether ExxonMobil is in compliance with the above applicable requirements (ARM 17.8.1212).

H.30. The semiannual compliance monitoring reports must provide (ARM 17.8.1212):

a. A summary of the results of any required reference method tests performed during the reporting period; and

b. Reports of any required monitoring performed during the reporting period, with all instances of deviations from any permit requirements identified.

I. EU17 – Refinery-Wide Fugitive Emissions

Facility-wide, including, but not limited to, pumps, valves, flanges, and other equipment in HAP service, or in VOC service since January 1983, within the following emitting units:

EU00 – RFG Devices (RFG supply lines)
EU01 – Crude Unit
EU02 – Hydrofining Units #2 & #3
EU03 – Fluid Coker Unit
EU04 – Powerforming Unit
EU05 – Alky/Splitter/Rerun/Diene Unit
EU06 – Merox Unit
EU07 – Hydrofining Unit #1
EU08 – Deethanizer Unit
EU09 - FCCU
EU10 – Unsaturated Light Ends Unit
EU11 – Hydrocracking Unit
EU12 – H_2 Plant
EU14 – Oil Movement & Activities
EU15 – Oil Movement & Shipping and PMA Unit
EU16 – CHUB Unit

Condition(s)	Pollutant/Parameters	Permit Limits	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
I.1, I.2, I.3, I.4, I.5, I.6	VOC, HAP, and Benzene Equipment Leaks	40 CFR 63, Subpart CC	40 CFR 60, Subpart VV	40 CFR 60, Subpart VV	Semiannually

Conditions

I.1. ExxonMobil is an existing facility that is subject to leak standards for equipment in HAP service applicable under 40 CFR 63.648(a) (Subpart CC) and standards for equipment leaks set out under 40 CFR Parts 60 and 61. Except for sample connections, ExxonMobil shall comply with the relevant standards under 40 CFR 60.482-1 to 60.482-10 (Subpart VV) for all regulated equipment leaks. Where there is overlap of specific unit equipment leak requirements, such that the provisions of 40 CFR Parts 60 and 61 apply, ExxonMobil is only required to comply with the equipment leak provisions of 40 CFR 63, Subpart CC (ARM 17.8.342 and 40 CFR 63, Subpart CC).

Compliance Determination

I.2. ExxonMobil shall comply with applicable monitoring and inspection, test methods and procedures, and repair provisions required under 40 CFR 63.648. Compliance with this condition is considered to monitor compliance with 40 CFR 60, Subpart GGG and 40 CFR 61, Subparts J and V (ARM 17.8.340 and 40 CFR 60, Subpart GGG, ARM 17.8.341 and 40 CFR 61, Subparts J and V, and ARM 17.8.342 and 40 CFR 63, Subpart CC).

Recordkeeping

I.3. ExxonMobil shall comply with the recordkeeping requirements for equipment leak standards in accordance with 40 CFR 63.654. Compliance with this condition is considered to meet compliance obligations under 40 CFR 60, Subpart GGG and 40 CFR 61, Subparts J and V (ARM 17.8.342 and 40 CFR 63, Subpart CC; ARM 17.8.341 and 40 CFR 61, Subparts J and V).

Reporting

I.4. ExxonMobil shall comply with all applicable reporting requirements set forth in 40 CFR 63, Subpart CC (ARM 17.8.342 and 40 CFR 63, Subpart CC).

I.5. The annual compliance certification report required by Section V.B must contain a certification stating whether ExxonMobil is in compliance with the above applicable requirements (ARM 17.8.1212).

I.6. The semiannual compliance monitoring reports must provide (ARM 17.8.1212):

a. A summary of the results of any required reference method tests performed during the reporting period; and

b. Reports of any required monitoring performed during the reporting period, with all instances of deviations from any permit requirements identified.

J. EU18 – Emergency Stationary Engines
EU18a: SE1-SE6, IEU06a & IEU06b

Condition(s)	Pollutant/Parameters	Permit Limits	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirements
J.1, J.4, J.6 – J.8	Operating Limits	Hours of Operation (see Table 1)	Recordkeeping	Monthly	Semiannually
J.2, J.5 – J.8	SO_2- Fuel Sulfur Limits in Diesel Fuel	Low-sulfur diesel fuel (0.05% wt)	Recordkeeping	Monthly	Semiannually
J.3, J.5 – J.8	SO_2 – Fuel Sulfur Limits in Gasoline	Gasoline sulfur content (0.1%w)	Recordkeeping	Monthly	Semiannually

Conditions

J.1. The emergency engines are limited to the hours of operation listed below (Table 1), on a rolling 12-month time period (ARM 17.8.752):

Table 1: Hours of Operations Restriction

ID No.	Emitting Unit ID	Description	Limited Hours
SE1	HC/M601	Hydrocracker Backup Power Generator -Diesel	1,800 hr/yr
SE2	UT/P917B	Cooling Water Return to Alkylation Unit Water Screen (Fire Water) – Diesel	1,000 hr/yr
SE3	UT/P917A	Cooling Water Return to Alkylation Unit Water Screen (Fire Water) – Diesel	1,000 hr/yr
SE4	UT/P916	Pond 6 Water to Fire Mains - Diesel	1,000 hr/yr
SE5	CR/M201	Crude/Coker Backup Power Generator - Diesel	2,000 hr/yr
SE6	UT/C4	Boiler House Air Compressor -Diesel	2,000 hr/yr
IEU06a	UT/P1A	Fire Water Pump at River Water Pump House - Gasoline	2,000 hr/yr
IEU06b	UT/P1B	Fire Water Pump at River Water Pump House - Gasoline	2,000 hr/yr

J.2. ExxonMobil shall use only low-sulfur diesel fuel with a sulfur content less than or equal to 0.05% in the diesel-fired emergency engines (ARM 17.8.752).

J.3. ExxonMobil shall use gasoline with a sulfur content less than or equal to 0.1% in the gasoline-fired engines (ARM 17.8.752).

Compliance Determination

J.4. ExxonMobil shall document, within the first 7 days of the month, the number of operational hours since the previous month's documentation event for each of the emergency engines. The monthly information shall be used to monitor compliance with the rolling 12-month limitations in Section III.J.1. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

J.5. ExxonMobil shall document, annually, the maximum sulfur content of the diesel and gasoline fuel used by the emergency engines for the previous calendar year. Vendor specifications or certification that the fuels met the maximum sulfur content allowed by the current motor fuel regulations (40 CFR Part 80) will satisfy this requirement. The annual information shall be used to monitor compliance with the limitations in Section III.J.2 and 3. The information shall be submitted along with the annual emission inventory (ARM 17.8.749 and ARM 17.8.752).

Recordkeeping

J.6. ExxonMobil shall maintain records as described in Sections III.J.4 and 5 (ARM 17.8.1212).

Reporting

J.7. The annual compliance certification report required by Section V.B must contain a certification stating whether ExxonMobil is in compliance with the above applicable requirements (ARM 17.8.1212).

J.8. The semiannual compliance monitoring reports must provide (ARM 17.8.1212):

a. A summary of the results of any required reference method tests performed during the reporting period; and

b. Reports of any required monitoring performed during the reporting period, with all instances of deviations from any permit requirements identified.

SECTION IV. NON-APPLICABLE REQUIREMENTS

Air Quality Administrative Rules of Montana (ARM) and Federal Regulations, identified as not applicable to the facility or to a specific emission unit at the time of the permit issuance, are listed below (ARM 17.8.1214). The following list does not preclude the need to comply with any new requirements that may become applicable during the permit term.

A. Facility-Wide

The following table contains non-applicable requirements, which are administrated by the Air Resources Management Bureau of the Department of Environmental Quality.

Rule Citations	Reasons
ARM 17.8.309(4), ARM 17.8.320, ARM 17.8.321, ARM 17.8.322(2), ARM 17.8.322(3), ARM 17.8.326, ARM 17.8.330 - ARM 17.8.335, ARM 17.8.610, ARM 17.8.613, and ARM 17.8.614.	These rules are not applicable because the facility does not operate sources affected by the cited rules.
40 CFR 60, Subparts B, C, Ca - Ce 40 CFR 60, Subparts D, Da, Db, Dc 40 CFR 60, Subparts E-I 40 CFR 60, Suparts K and Ka 40 CFR 60, Subparts L-Z 40 CFR 60, Subparts AA-EE 40 CFR 60, Subparts GG-HH 40 CFR 60, Subparts KK-NN 40 CFR 60, Subparts PP-TT 40 CFR 60, Subparts WW 40 CFR 60, Subparts AAA- DDD 40 CFR 60, Subparts FFF 40 CFR 60, Subparts HHH-LLL 40 CFR 60, Subparts NNN-PPP 40 CFR 60, Subparts RRR- WWW 40 CFR 60, Subparts AAAA- HHHH 40 CFR 60, Subparts JJJJ- KKKK	These requirements are not applicable because the facility is not an affected source as defined in these regulations.
40 CFR 60, Subpart J: • Fuel Gas Combustion Devices – 60.105(a)(3), 60.105(e)(3)(i), 60.106(e)(2) • Sulfur Recovery Unit – 60.104(a)(2), 60.105(a)(5) – (a)(7), 60.105(e)(4), 60.106(f)	ExxonMobil has installed a RFG H_2S CEMS in place of the fuel gas combustion device stack SO_2 CEMS required by 60.105(a)(3). ExxonMobil does not operate a sulfur recovery unit.
40 CFR 60, Subpart UU: 60.472(a), (b), and (d), 60.473(a) and (b), 60.474(a), (c)(1) – (c)(4), and (d) – (g).	ExxonMobil does not operate a saturator, blowing still, or mineral handling and storage facility affected by Subpart UU. PM standards and related provisions do not apply. ExxonMobil operates a VOC coalescer to control opacity.
40 CFR 60, Subpart QQQ	Refinery wastewater system, including individual drain systems, oil-water separators and aggregate facilities commenced construction prior to May 4, 1987 and have not undergone modification or reconstruction.
40 CFR 60, Subpart XX, and 40 CFR 63, Subpart R	ExxonMobil-Billings Refinery does not contain any sources regulated by these rules. The ExxonMobil Billings Terminal is permitted separately for the purpose of the Title V operating permit program.

40 CFR 60, Subpart VV, and 40 CFR 63, Subpart F, G, H & I (SOCMI HON)	ExxonMobil-Billings Refinery does not operate sources within the source category (SOCMI). Compliance with certain provisions of the cited rules is required only to the extent referenced by other relevant standards.
40 CFR 61, Subparts B-I 40 CFR 61, Subparts K-L 40 CFR 61, Subparts N-U 40 CFR 61, Subparts W -EE	ExxonMobil-Billings Refinery does not contain any sources regulated by these rules.
49 CFR 61, Subpart A: • 61.05(a), 61.07, 61.09, 61.10 • 61.13, 61.14	Demolition & renovation operations exempt from these requirements.
40 CFR 61, Subpart M: 61.142 -61.144, 61.146- 61.149, 61.151, 61.154- 61.155	Only provisions of Subpart M pertaining to demolition and renovation are relevant to ExxonMobil.
40 CFR 63, Subparts B - Q 40 CFR 63, Subparts S-BB 40 CFR 63, Subparts DD-TTT 40 CFR 63, Subpart VVV – DDDD 40 CFR 63, Subpart FFFF – CCCCC 40 CFR 63, Subpart EEEEE – FFFFF 40 CFR 63, Subpart HHHHH – KKKKK 40 CFR 63, Subpart MMMMM – TTTTT 40 CFR 63, Subpart DDDDDD, 40 CFR 63, Subpart EEEEEE-GGGGGG	These requirements are not applicable because the facility is not an affected source as defined in these regulations.
40 CFR 63, Subpart CC: • 63.651 and 63.654(c); • 63.642(h) and (j), 63.648(d) and (i); • 63.648(c); • 63.650 and 63.654(b); and • 63.652 and 63.653.	• ExxonMobil does not operate a marine terminal • ExxonMobil is an existing source (provisions apply to new sources) • ExxonMobil has opted for 40 CFR 60, Subpart VV • ExxonMobil's Billings terminal is permitted separately for purposes of Title V program. • ExxonMobil does not opt for emissions averaging.
40 CFR 63, Subpart UUU: • 63.1566(a)(1) and (a)(2) • 63.1568 (Tables 29 – 35)	Subpart UUU does not apply to gaseous stream routed to a fuel gas system. Gases streams from the POFO catalytic reforming unit process vents are routed to the RFG System. ExxonMobil does not operate a sulfur recovery unit.
40 CFR 63, Subpart EEEE does not apply except for initial one-time notification under 40 CFR 63.2343.	ExxonMobil operates an emission sources identified in 40 CFR 63, Subpart EEEE (63.2338, toluene transfer rack) that does not require control. Therefore, except as provided in 40 CFR 63.2343, the transfer rack is not subject to any other notification, recordkeeping, or reporting.
40 CFR 63, Subpart GGGGG	Site remediation is not subject to this subpart since the remediation will be performed under a Resource Conservation and Recovery Act (RCRA) corrective action conducted at a treatment, storage and disposal facility (TSDF) that is either required by permit issued by either the U.S. Environmental Protection Agency (EPA) or a State program authorized by the EPA under RCRA section 3006; required by orders authorized under RCRA; or required by orders authorized under RCRA section 7003.
40 CFR 82, Subparts A & C-E 40 CFR 82, Subparts G-H	These requirements are not applicable because the facility is not an affected source as defined in these regulations.
40 CFR 72 through 40 CFR 78.	These requirements are not applicable because the facility is not an affected source as defined by the acid rain regulations.

B. Emission Units

The following table contains non-applicable requirements, which are relevant to specific emitting units:

Emission Unit ID	Rule Citation	Reason
For Tanks other than Tanks #11 and #101	40 CFR 60, Subparts K, Ka, Kb	These storage vessels were either built or modified prior to the effective dates and do not store materials that would trigger these regulations.
For all units other than PMAU and Low Sulfur Mogas.	40 CFR 60, Subpart GGG	These standards are not applicable to the remainder of the refinery because it was not modified after January 8, 1983.
EU03 – Coker/KCOB	Billings/Laurel SO_2 Control Plan, approved into the SIP by EPA on May 2, 2002, & May 22, 2003, Exhibit A: §4(D)(2) and §(6)(B)(4)(b)	ExxonMobil installed an SO_2 CEMS on the KCOB stack. Provisions for a CEMS-Equivalent Monitoring Plan are no longer applicable.
EU03 – Coker/KCOB – Misc Process Vents	Monitoring provisions for miscellaneous process vents (40 CFR 63.644)	The Coker Process Gas Group 1 Misc. Process vent is vented to boiler or process heater with a design input capacity greater than 44 megawatt (>150 MMBtu/hr). The process is vented to YELP or the KCOB.
EU15 – Tank #55, once modified	ARM 17.8.304(1) Visible Air Contaminants	Once modified, Tank #55 will be subject to visible emission standards under 40 CFR 60, Subpart UU and not ARM 17.8.340(1).
EU15 – Tank #55, once modified	40 CFR 63, Subpart LLLLL (40 CFR 63.8681(c))	Subpart LLLLL does not apply to any equipment that is subject to 40 CFR 63, Subpart CC or 40 CFR 60, Subparts K, Ka, or Kb.
EU18 - Emergency Reciprocating Internal Combustion Engines (RICE)	40 CFR 63, Subpart ZZZZ	All stationary RICE at ExxonMobil have a site rating < 500 brake horsepower.
EU18 - Emergency Reciprocating Internal Combustion Engines (RICE)	40 CFR 60, Subpart IIII	Spark-ignited fire water pump engines commenced construction prior to June 12, 2006.
EU00 - Process Heaters Other: F-1 and F-401	40 CFR 60, Subparts Db and Dc	"Process Heaters" as defined by 40 CFR 60.41, are not "steam generating units" and are therefore not subject to Subparts Db or Dc.
EU00 - Process Heaters	40 CFR 63, Subpart DDDDD (except initial notification under 63.9(b)). *Note: Subpart DDDDD is "State only"	*Existing* process heaters and boilers in the *large* gaseous fuel subcategory are subject to only the initial notification requirements of DDDDD.
Refinery-wide Benzene-containing Wastewater	40 CFR 61.342(c) & (d) (40 CFR 61.342(e))	ExxonMobil has opted for, and is required to meet, the "6BQ" alternative for managing and treating waste.
Refinery-wide Benzene-containing Wastewater	40 CFR 61.344 Standards: Surface Impoundments	ExxonMobil does not operate surface impoundment waste management units affected by 40 CFR 61, Subpart FF
Refinery-wide Benzene-containing Wastewater	40 CFR 61.347 Standard: Oil-water separators	ExxonMobil does not operate oil-water separator waste management units affected by 40 CFR 61, Subpart FF.

C. Cause Orders

The permit application requested that the following Judgments be identified as non-applicable, as there are no continuous or future requirements associated with them.

Judgment	Description	Reason
Order and Final Judgment Cause No. DV 90-0068	FCC/CO Unit Operational Compliance Strategy	Per Section 12B of the order #DV90-0068, this requirement expired 2 years after the effective date as defined in section 12B. There are no continuous or future requirements.
Consent Decree, Judgment and Order Cause No. DV91-719	Coker CO Boiler Stack Opacity Monitoring	There are no on-going requirements.

D. Streamlined Requirements

Pursuant to ARM 17.8.1212, as of the date this permit is issued, the federally-enforceable standards, monitoring, recordkeeping, reporting and other applicable requirements cited in the following table for the listed source or group of sources are subsumed by the more stringent requirement or by a "hybrid" compliance demonstration scheme. The Department has determined that compliance with the streamlined requirements listed below and elsewhere in this permit will assure compliance with the substantive provisions of the subsumed requirements.

Emission Unit ID	Subsumed Rule Citation	Streamlined Rule Citation	Reason
Fuel Gas Combustion Devices – • EU00 • EU03a (KCOB) • EU09a (CCOB) • EU14a (Flare and T/A Flare)	ARM 17.8.322(4) Sulfur in Fuel - Liquid and Solid Fuel limited to 1 lb sulfur per million Btu fired.	ARM 17.8.749, Consent Decree paragraph 60: ExxonMobil not capable of combusting solid fuel, and is not allowed to fire fuel oil, except during periods of natural gas curtailment, and except for (i) the use of torch oil in an FCC Unit Regenerator to assist in starting, restarting, maintaining hot standby, or maintaining regenerator heat balance; or (ii) combustion of acid-soluble oil in a combustion device.	Compliance with 40 CFR 60, Subpart J and not firing fuel oil will ensure compliance with the more generous subsumed rule.
Fuel Gas Combustion Devices – • EU00 • EU03a (KCOB) • EU09a (CCOB) • EU14a (Flare and T/A Flare)	ARM 17.8.322(5) Sulfur in Gaseous Fuel – 50 grains/100 cubic feet (1,144 milligrams H_2S/dry standard cubic meter fuel (mg H_2S/dscm fuel))	40 CFR 60, Subpart J: 230 mg H_2S/dscm fuel (equivalent to 0.10 grains/dscf or ~160 ppm_{vd} H_2S @ STP)	The NSPS Subpart J fuel sulfur (as H_2S) limit is much more stringent. Compliance with the NSPS limit assures compliance with the subsumed limits.

	Refinery-wide block hourly fuel sulfur limit of 0.96 lb/MMBtu fired (13,234 mg H_2S/dscm fuel at a minimum RFG HHV of 810 Btu/scf)		
Fuel Gas Combustion Devices – • EU00 • EU03a (KCOB) • EU09a (CCOB)	Billings/Laurel SO_2 Control Plan (Exhibit A), Section 6(B)(3)	Hybrid Statement: NSPS Subpart J continuous monitoring (Fuel gas H_2S CEMS – §60.105(a)(4) and §60.13; and flow rate monitoring CEMS – Billings/Laurel SO_2 Control Plan (Exhibit A), Section 6(B)(8).	The RFG H_2S CEMS required by NSPS Subpart J meets or exceeds the performance specifications for the Fuel gas H_2S CEMS required by continuous monitoring provisions of the Billings/Laurel SO_2 Control Plan (Exhibit A, Section 6(B)(3). The redundant RFG H_2S CEMS is eliminated.
	Billings/Laurel SO_2 Control Plan (Exhibit A), Section 5 Emissions Testing: §5(B) Annual Source Testing Method 11 or equivalent.	Annual RATA (Method 11)	The annual source testing requirement is not necessary, as the annual RATA (Method 11) meets this requirement.
EU17 – Equipment Leaks Refinery-Wide	40 CFR 60, Subpart GGG; 40 CFR 61, Subpart J and Subpart V	40 CFR 63, Subpart CC (Petroleum Refinery MACT Rule)	Process units refinery-wide are subject to equipment and work practice standards, test methods and procedures, monitoring, recordkeeping and reporting requirements for equipment leaks set out in the Petroleum Refinery MACT Rule, which are at least equivalent or more stringent than the equipment leak standards and provisions of NSPS and NESHAPS.
EU15 – Group 1 Storage Vessels (Crude oil, gasoline, and petroleum distillate tanks > 65,000 gallons capacity)	ARM 17.8.324(1) – Hydrocarbon emissions – Petroleum products		All tanks with a storage capacity > 65,000 gallons and storing crude oil, gasoline, or distillates with a vapor pressure of 2.5 psia (17.2kPa) or greater are classified as Group I storage vessels, which are subject to the more stringent Petroleum Refinery MACT Rule.

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)

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. 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.

4. 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.

5. 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.

6. 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.

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 October 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 year (i.e., September 1 – August 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 Environmental Protection Agency, 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. 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.

6. The permit shield will not extend to minor permit modifications or changes not requiring a permit revision (see Sections I & J).

7. The permit shield will extend to significant permit modifications and transfer or assignment of ownership (see Sections K & N).

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 April 15 and October 15 of each year, or more frequently if otherwise specified in an applicable requirement or elsewhere in the permit. The monitoring report submitted on October 15 of each year must

include the required monitoring information for the period of March 1 through August 31 of the previous year. The monitoring report submitted on April 15 of each year must include the required monitoring information for the period of September 1 through February 29 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)(c)

The permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. To be considered prompt, deviations shall be reported as part of the routine reporting requirements under ARM 17.8.1212(3)(b) and, if applicable, in accordance with the malfunction reporting requirements under ARM 17.8.110, unless otherwise specified in an applicable requirement.

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)(c). 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 an air quality preconstruction permit 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)

1. This permit may be reopened and revised under the following circumstances:

   a. 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);

   b. 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;

   c. 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

   d. 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 ARM17.8.1214 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 (ARM 17.8.745(1) and 764(1)(b) are STATE ENFORCEABLE ONLY until approval by the EPA as part of the SIP)

1. Except as specified, no person shall construct, install, alter 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 an air quality preconstruction permit issued under Chapter 8 that does not increase the facility's potential to emit by more than 15 tons per year of any pollutant, except (STATE ENFORCEABLE ONLY until approved by the EPA as part of the SIP):

   a. Any construction or changed condition that would violate any condition in the facility's existing air quality preconstruction permit 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 potential to emit more than 15 tons per year may not be artificially split into smaller projects to avoid air quality preconstruction 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) (STATE ENFORCEABLE ONLY until approval by the EPA as part of the SIP).

Z. National Emission Standard for Asbestos
40 CFR, Part 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, Part 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, Part 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.

1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156;

2. Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158;

3. Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technical certification program pursuant to §82.161;

4. Persons disposing of small appliances, MVACs and MVAC-like (as defined at §82.152) appliances must comply with recordkeeping requirements pursuant to §82.166;

5. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156; and

6. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

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, Stipulations, orders or consent decrees.

APPENDICES

APPENDIX A. Insignificant Emission Units

Disclaimer: The information in this appendix is not State or Federally enforceable, but is presented to assist ExxonMobil, the permitting authority, inspectors, and the public.

Pursuant to ARM 17.8.1201(22)(a), an insignificant emission unit means any activity or emissions unit located within a source that: (i) has a potential to emit less than 5 tons per year of any regulated pollutant; (ii) has a potential to emit less than 500 pounds per year of lead; (iii) has a potential to emit less than 500 pounds per year of hazardous air pollutants 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 were provided by ExxonMobil. Because there are no requirements to update such a list, the emissions units and/or activities may change from those specified in the table.

Emission Unit ID	Description
IEU01	Warehouse building heater
IEU02	Mechanical building heater
IEU03	Operations Control Center building heater
IEU04	FCCU/HCBL Shelter heater
IEU07	Laboratory building heater
IEU08	Laboratory equipment testing emissions
IEU09	Gasoline knock engines (3)
IEU10	Main office building heater
IEU11	Trailer heating units (8)
IEU17	Propane odorant facility

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 ExxonMobil;

(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 air quality preconstruction 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 52.21 or under regulations approved pursuant to 40 CFR Part 51, Subpart I, including operating permits issued under an EPA 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 that 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 air quality preconstruction permit 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:

Alky	Alkylation
ARM	Administrative Rules of Montana
ASTM	American Society of Testing Materials
BACT	Best Available Control Technology
Btu	British Thermal Unit
CEMS	Continuous Emission Monitor System
CFRM	Continuous Flow Rate Monitor
CFR	Code of Federal Regulations
CO	carbon monoxide
COMS	Continuous Opacity Monitor System
DAS	Data Acquisition System
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	emission unit
FCAA	Federal Clean Air Act
FCC	Fluid Catalytic Cracker
gr	grains
HAP	hazardous air pollutant
HCBL	Hydrocracker
HF	hydrogen fluoride
HF#1	Hydrofiner #1
HF #2/3	Hydrofiners #2 and #3
H_2S	hydrogen sulfide
IEU	insignificant emissions unit
KBD	thousands of barrels per day
MACT	Maximum Achievable Control Technology
Method 5	40 CFR 60, Appendix A, Method 5
Method 9	40 CFR 60, Appendix A, Method 9
MMBtu	million British Thermal Units
NH_3	ammonia
NOx	oxides of nitrogen
NO_2	nitrogen dioxide
NSPS	New Source Performance Standard
NESHAPS	National Emission Standards for Hazardous Air Pollutant Sources
O_2	oxygen
OM&S	Oil Movement and Storage
OM&U	Oil Movement & Utilities
Pb	lead
PM	particulate matter
PM_{10}	particulate matter less than 10 microns in size
PMAU	Polymer Modified Asphalt Unit
POFO	Powerformer
psi	pounds per square inch
scf	standard cubic feet
RATA	Relative Accuracy Test Audit
SIC	Source Industrial Classification
SLEB	Saturated Light Ends Unit

SO_2	sulfur dioxide
SOx	oxides of sulfur
SWSOH	sour water stripper overheads
TPY	tons per year
ULEB	Unsaturated Light Ends
U.S.C.	United States Code
VE	visible emissions
VOC	volatile organic compound

APPENDIX C. Notification Addresses

Compliance Notifications:

Montana Department of Environmental Quality
Permitting and Compliance Division
Air Resources Management Bureau
P.O. Box 200901
Helena, MT 59620-0901

Montana Department of Environmental Quality
Air Resources Management Bureau
Airport Industrial Park
1371 Rimtop Dr.
Billings, MT 59105-1978

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
Permitting and Compliance Division
Air Resources Management 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 ExxonMobil, permitting authority, inspectors, and the public.

1. **Direction to Plant:**

   The ExxonMobil Refining and Supply Company Billings Refinery is located at 700 ExxonMobil Road, Billings, Montana. The Yellowstone River forms the northern and northeastern boundaries and interstate Highway 90 lies along the southern border.

2. All inspectors are required to be accompanied by an ExxonMobil employee or authorized representative.

3. Prior to entering the refinery, all visitors will be required to view a refinery entry video.

4. **Safety Equipment Required:**

   The minimum personal protective equipment (PPE) requirements in the Refinery are:
   - Approved hard hat
   - Approved safety glasses with side shields
   - Body Protection (flame retardant clothing)
   - Foot protection (safety shoes or substantial leather shoes, no tennis shoes, vented footwear or sandals)

   Additional PPE requirements, as posted in certain areas:
   - Hearing protection in required areas (plot plans are posted in operating shelters).
   - Hand protection is highly recommended
   - Goggles
   - Faceshield as necessary to protect from a chemical splash hazard of airborne particles

   Other requirements:
   - Alkylation Unit entry requires special PPE requirements and procedures
   - Respirator protection as required (must be clean shaven if respirator is required to do the job and be fit tested.)
   - Vehicle seat belts are required in the plant
   - Several safety showers/eye washes located throughout the refinery. They are green and white striped buildings

5. **Facility Plot Plan:**

   A facility plot plan was submitted as part of the operating permit application on June 12, 1996. A copy is available in the Department's records.

APPENDIX E. June 12, 1998 and March 17, 2000 Board Orders Adopting an SO_2 Control Plan

Although the hard copy of Appendix E has been removed from the permit, the contents of Appendix E, June 12, 1998, and March 17, 2000, Board Orders Adopting and SO_2 Control Plan remain as applicable requirements as stated in the Title V Operating Permit OP1564-02. To receive a hard copy of this appendix, please contact one of the following:

Montana Department of Environmental Quality
Permitting and Compliance Division
Air Resources Management Bureau
1520 E. Sixth Ave.
P.O. Box 200901
Helena, Montana 59620-0901
Bureau Phone #: (406) 444-3490

OR

ExxonMobil Refining and Supply Company
Billings Refinery
700 Exxon Road
P.O. Box 1163
Billings, MT 59103-1163
Phone #: (406) 657-5361

APPENDIX F. CAM Plan for KCOB

APPENDIX G.. Consent Decree Acid Gas/Hydrocarbon Flaring, Benzene Waste NESHAP and LDAR

ExxonMobil has entered into a Consent Decree (United States et al v. Exxon Mobil Corp., CV-05-C-5809 (N.D. Ill. Dec. 13, 2005)). Certain consent decree emission limits, standards, and schedules have been incorporated as applicable requirements into the appropriate sections of this permit. Other consent decree requirements, *including program enhancements, are not required by the Consent Decree to be incorporated into this permit as permit coniditons and are thereby not included as applicable requirements in this permit.* These terms and conditions may only be enforced by the State of Montana and the United States Environmental Protection Agency pursuant to the provisions of the Consent Decree. This summary is intended for convenient reference only and the actual language of the Consent Decree governs the terms and conditions that are enforceable through the Consent Decree.

Control of Acid Gas Flaring Incidents

ExxonMobil Billings Refinery shall implement procedures for evaluating future Acid Gas Flaring Incidents (ExxonMobil Billings Refinery has no Sulfur Recovery Unit and therefore can have no Tail Gas Incidents). The procedures shall require a root cause analysis and may require corrective actions for some Acid Gas Flaring events.

<u>Acid Gas Flaring Incidents Investigation and Reporting (Paragraph 80)</u>
Following Acid Gas Flaring Incidents, ExxonMobil Billings Refinery shall submit a report that sets forth the information listed in Paragraph 80 of the Consent Decree.

<u>Corrective Action (Paragraphs 80 - 81)</u>
In response to any Acid Gas Flaring Incident, ExxonMobil Billings Refinery shall take corrective actions as practicable and as required in the referenced paragraphs to minimize the likelihood of a recurrence of the Root Cause and contributing causes of the Acid Gas Flaring Incident.

Control of Hydrocarbon Flaring Incidents

<u>HC Flaring Incidents (Paragraph 92)</u>
For Hydrocarbon Flaring Events, ExxonMobil Billings Refinery shall follow the same investigative and corrective action procedures as those outlined for Acid Gas Flaring Incidents. ExxonMobil Billings Refinery shall follow the same reporting procedures as those outlined for Acid Gas Flaring Incidents, except that ExxonMobil Billings Refinery shall only be required to submit such information in the Semiannual Reports.

Benzene Waste Operations NESHAP Program Enhancements

<u>Refinery Compliance Status (Paragraph 98)</u>
ExxonMobil Billings Refinery shall comply with the compliance option set forth at 40 CFR 61.342(e), the "6 BQ compliance option".

<u>Annual Program (Paragraph 103)</u>
ExxonMobil Billings Refinery shall provide for at least an annual review of process information for the Billings Refinery, including but not limited to construction projects, to ensure that all new benzene waste streams are included in the Refinery's TAB.

Laboratory Audits (Paragraph 104)
ExxonMobil Billings Refinery shall conduct audits of all laboratories that perform analyses of ExxonMobil's Benzene Waste NESHAP samples once every two (2) calendar years.

Benzene Spills (Paragraph 105)
For each spill generating a "benzene waste" at the Billings Refinery, ExxonMobil shall include the benzene waste generated by the spill in the TAB, and as appropriate, account for such benzene waste in accordance with the applicable compliance option.

Training (Paragraph 106)
ExxonMobil Billings Refinery shall conduct initial annual training for all employees and contractors who draw benzene waste samples for Benzene Waste NESHAP purposes. "Refresher" training shall be performed on a three-year cycle.

Waste/Slop/Off-Spec Oil Management (Paragraph 107)
All waste management units handling non-exempt, non-aqueous benzene wastes, as defined in Subpart FF, shall meet the applicable control standards of Subpart FF. Aqueous streams shall be managed in accordance with the 6 BQ compliance option.

Sampling Under the 6 BQ Compliance Option (Paragraph 108)
ExxonMobil shall submit a BWON Sampling Plan for EPA approval and conduct quarterly sampling consistent with the Plan for the purpose of calculating quarterly, uncontrolled benzene quantities. ExxonMobil shall revise the plan if changes result in an inaccurate measure of the Refinery's quarterly benzene quantity in uncontrolled benzene waste streams. ExxonMobil shall use the information gathered to determine a quarterly benzene quantity in uncontrolled waste streams and to estimate a calendar year value for the Refinery.

Quarterly and Annual Estimations of Uncontrolled Benzene Quantity (Paragraph 110)
At the end of each calendar quarter, ExxonMobil shall calculate a quarterly uncontrolled benzene quantity and shall estimate a projected calendar year uncontrolled benzene quantity. ExxonMobil shall submit the uncontrolled benzene quantity in the Semi-Annual Reports.

Recordkeeping and Reporting Requirements (Paragraphs 113 - 114)
In addition to the reports referenced above, ExxonMobil Billings Refinery shall submit, as required, the reports set forth in Paragraph 113 and 114 of the Consent Decree.

Leak Detection and Repair ("LDAR") Program Enhancements

The following requirements are enhancements to the existing refinery LDAR program.

Written Refinery-Wide LDAR Program (Paragraph 117)
ExxonMobil Billings Refinery shall maintain and update a written refinery-wide program for compliance with all applicable federal LDAR regulations.

Training (Paragraph 118)
ExxonMobil Billings Refinery shall maintain a training program for all employees/contractors with LDAR responsibilities and all employee/contractors who have duties relevant to LDAR as described in Paragraph 118 of the Consent Decree.

Regular LDAR Audits (Paragraph 120)
ExxonMobil Billings Refinery shall complete regular (once every two (2) calendar years) Internal and Third-Party refinery-wide LDAR audits.

Implementation of Actions Necessary to Correct Non-Compliance (Paragraph 121)
If the results of any of the LDAR Audits identify any areas of non-compliance, ExxonMobil Billings Refinery shall implement, as soon as practicable, steps to correct the non-compliance and to prevent recurrences. After the completion of any LDAR Audit, ExxonMobil shall include in the next Consent Decree Semi-Annual Report a summary of the findings and schedule for implementing corrective actions.

Internal Leak Definition for Valves and Pumps (Paragraphs 122)
The permittee shall utilize an internal leak definition of 500 ppm for applicable valves and 2000 ppm for applicable pumps.

LDAR Monitoring Frequency (Paragraph 123)
ExxonMobil Billings Refinery shall monitor applicable pumps on a monthly basis. ExxonMobil Billings Refinery shall monitor applicable valves on a quarterly basis.

Reporting, Recording, Tracking, Repairing and Re-monitoring Leaks of Valves and Pumps Based on the Internal Leak Definitions (Paragraph 124)
ExxonMobil Billings Refinery may continue to report leak rates in valves and pumps against the applicable regulatory leak definition or use the lower internal leak definition. ExxonMobil Billings Refinery shall record, track, repair and re-monitor all leaks in excess of the internal leak definitions, shall make a first attempt at repair and remonitor the component within five (5) calendar days after a leak is detected and either complete repairs and re-monitor leaks or place such component on the delay of repair list within thirty (30) days after a leak is detected.

Monitoring After Turnaround or Maintenance. (Paragraph 125)
ExxonMobil shall have the option of monitoring affected components within process unit(s) after completing a maintenance, startup, or shutdown activity, and that monitoring activity shall not count as a scheduled monitoring activity for any components found to be leaking at a level between the internal leak definition and the applicable regulatory definition according to the provisions of Paragraph 125.

Initial Attempt at Repair on Certain Valves (Paragraph 126)
ExxonMobil Billings Refinery shall make a “initial attempt" at repair on those applicable valves for which monitoring indicates a reading greater than 200 ppm of VOCs. ExxonMobil Billings Refinery shall re-monitor all valves that LDAR personnel attempted to repair within 5 days.

Electronic Monitoring, Storing, and Reporting of LDAR Data (Paragraph 127)
ExxonMobil Billings Refinery shall maintain an electronic database for storing and reporting LDAR data. ExxonMobil Billings Refinery shall use electronic data collection devices during LDAR monitoring and transfer the data from electronic datalogging devices to the electronic database by the next business day. Collected monitoring data shall include a time and date stamp, and identification of the instrument and operator. ExxonMobil Billings Refinery may use paper logs as dictated in the Consent Decree and shall record the technician, the date, the monitoring starting and ending times, all monitoring readings, and the identification of the monitoring equipment. ExxonMobil Billings Refinery shall use its best efforts to transfer any manually recorded monitoring data to the electronic database within seven (7) days of monitoring event.

QA/QC of LDAR Data (Paragraph 128)
ExxonMobil Billings Refinery, or a third party contractor retained by ExxonMobil Billings Refinery, shall implement procedures for quality assurance/quality control ("QA/QC") reviews of all data generated by LDAR monitoring technicians.

Calibration/Calibration Drift Assessment (Paragraph 129)
ExxonMobil Billings Refinery shall calibrate LDAR monitoring equipment using methane as the calibration gas and in accordance with Method 21. ExxonMobil shall conduct twice daily calibration drift

assessments at the internal leak definition with one such re-check occurring at the end of the monitoring shift. If any calibration drift assessment shows a negative drift of more than 10%, ExxonMobil Billings Refinery shall re-monitor all valves/pumps with a readings greater than 100/500 ppm, that were monitored since the last calibration/calibration drift assessment.

Delay of Repair (Paragraph 130)
Before placing a component on the "delay of repair (DOR)" list, ExxonMobil Billings Refinery shall require sign-off by the unit supervisor that the component qualifies for delayed repair. ExxonMobil shall conduct regular LDAR monitoring on the DOR equipment and shall use best efforts to repair leaking pumps. For applicable valves leaking at 10,000 ppm or greater, ExxonMobil shall use the "drill and tap" repair method as required in Paragraph 130 prior to placing the valve on DOR.

Chronic Leakers (Paragraph 131)
A valve shall be classified as a "chronic leaker" if it leaks above 5,000 ppm twice in any consecutive four quarters. Following the identification of a "chronic leaker", ExxonMobil shall perform repairs on the chronic leaker during the next process unit turnaround.

Alternate Leak Detection Method (Paragraph 132)
With EPA's prior written approval, ExxonMobil may begin using an alternate leak detection method – such as "Smart LDAR" technology.

Recordkeeping and Reporting Requirements (Paragraph 133)
In the Semi-Annual Reports submitted pursuant to Section IX of the Consent Decree, ExxonMobil shall include as required: a copy of the LDAR Program Description; a certification that LDAR training was implemented; an identification of the position responsible for LDAR performance; a certification that the lower leak definitions and increased monitoring frequencies have been implemented; a certification of the implementation of the "initial attempt" to repair program; a certification of the implementation of QA/QC procedures for review of data generated by LDAR technicians as required by Paragraph 128 of the Consent Decree; a certification of the implementation of the calibration drift assessment procedures and a certification of the implementation of the "delay of repair" procedures.

In the first Semi-Annual Report submitted each year, ExxonMobil shall identify and supply specific information on any LDAR Audit conducted in the previous calendar year.

In the reports due under 40 C.F.R. § 63.654, ExxonMobil shall include: a list of the process units monitored; the number of valves and pumps in each process unit; the number of valves and pumps monitored; the number of valves and pumps found leaking; the number of "difficult to monitor" equipment monitored; the projected month of the next monitoring for a unit; a list of equipment and the date for each "delay of repair"; the number of repairs not attempted within the required times; the number of initial attempts at repair not completed within five days; the number of chronic leaker repairs not completed at the next process unit turnaround; and the number of extraordinary repairs not completed within 15 and 30 days.