



Montana Department of  
**ENVIRONMENTAL QUALITY**

Steve Bullock, Governor  
Tracy Stone-Manning, Director

P. O. Box 200901

Helena, MT 59620-0901

(406) 444-2544

Website: [www.deq.mt.gov](http://www.deq.mt.gov)

December 27, 2013

Steve Wright  
Columbia Falls Aluminum Company, LLC  
2000 Aluminum Drive  
Columbia Falls, MT 59912

RE: Final Title V Operating Permit #OP2655-05

Dear Mr. Wright:

The Department of Environmental Quality has prepared the enclosed Final Operating Permit #OP2655-05, for Columbia Falls Aluminum Company, LLC. Please review the cover page of the attached permit for information pertaining to the action taking place on Permit #OP2655-05.

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

Sincerely,

Julie Merkel  
Air Permitting Supervisor  
Air Resources Management Bureau  
(406) 444-3626

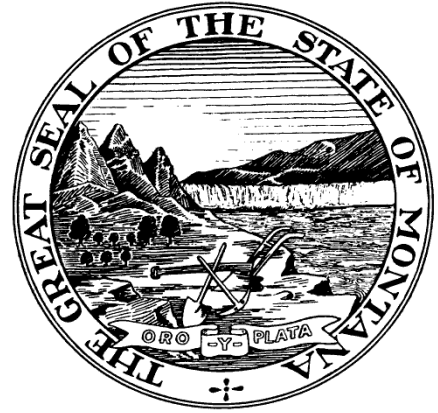
Shawn Juers  
Environmental Engineer  
Air Resources Management Bureau  
(406) 444-2049

JM: SJ

Enclosure

cc: Robert Duraski, US EPA Region VIII 8P-AR  
Carson Coate, USA EPA Region 8 – Montana Operations

STATE OF MONTANA  
Department of Environmental Quality  
Helena, Montana 59620



**AIR QUALITY OPERATING PERMIT OP2655-05**

Issued to: Columbia Falls Aluminum Company, LLC  
2000 Aluminum Drive  
Columbia Falls, MT 59912  
Section 3, Township 30 North, Range 20 West, in Flathead County, Montana

Final Date: **December 27, 2013**  
Expiration Date: **December 27, 2018**  
Renewal Application Due: **June 27, 2018**

Effective Date: December 27, 2013  
Date of Decision: November 25, 2013

Renewal Application Received: July 6, 2012  
Application Deemed Administratively Complete: September 17, 2012  
Application Deemed Technically Complete: August 26, 2013  
AFS Number: 030-029-0012A

Draft Issue Date: August 29, 2013 and September 4, 2013  
Proposed Issue Date: October 8, 2013  
End of EPA 45-day Review: November 22, 2013  
AFS Number: 030-013-0016A

**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 December 26, 2013. This permit must be kept on-site at the above named facility.

Montana Air Quality Operating Permit  
Department of Environmental Quality

<b>SECTION I. GENERAL INFORMATION .....</b>	<b>1</b>
<b>SECTION II. SUMMARY OF EMISSION UNITS.....</b>	<b>2</b>
<b>SECTION III. PERMIT CONDITIONS.....</b>	<b>5</b>
A. FACILITY-WIDE .....	5
B. EU001 – EU007: MATERIAL HANDLING EMITTING UNITS WITH BAGHOUSES REGULATED BY OPACITY AND PROCESS WEIGHT RATE.....	10
C. EU008 – EU014 EU’S WITH BAGHOUSES & GRAIN LOADING RESTRICTIONS .....	13
D. EU015 – PASTE PLANT EXTRUDER – PP01 .....	15
E. EU016 - PASTE PLANT MIXER – PP02.....	17
F. EU017 - PINHOLE PASTE DRYING - PP03 .....	19
G. EU018 – PITCH STORAGE TANKS - PP04 .....	20
H. EU019 – PASTE PLANT OIL HEATING SYSTEM – PP05 .....	21
I. EU020 – EU023 – PRIMARY SCRUBBER SYSTEM ALUMINA TRANSFER EU’S..	22
J. EU024 – EU033 – PRIMARY GAS COLLECTION SYSTEM EMITTING UNITS .....	24
K. EU034 – EU038 – POTLINE ROOF VENT EMITTING UNITS .....	27
L. EU039 – EU043 – CASTING PIT FURNACES.....	30
M. EU044 – EU047 – CASTING PIT EMITTING UNITS.....	31
N. EU048 - DROSS HANDLING SYSTEM.....	32
O. EU049 – EU050 – ALUMINUM SAW EMITTING UNITS.....	34
P. EU051 – SANDBLASTING ACTIVITIES – CR01 .....	35
Q. EU052 – LECTROMELT FURNACE EMITTING UNIT – CR03.....	37
R. EU053 – ROD MILL/MATERIAL STORAGE/BATH CRUSHING EMITTING UNIT-CR04.....	38
S. EU054 – EU062 NATURAL GAS BOILER EMITTING UNITS .....	40
T. EU063 – TRUCK, EQUIPMENT, AND HAUL ROAD EMISSIONS – MP05.....	42
U. EU064 – GASOLINE STORAGE TANK EMITTING UNIT – MP04.....	43
V. EU065 – SOW CASTING LINE.....	44
<b>SECTION IV. NON-APPLICABLE REQUIREMENTS .....</b>	<b>46</b>
<b>SECTION V. GENERAL PERMIT CONDITIONS .....</b>	<b>47</b>
A. COMPLIANCE REQUIREMENTS .....	47
B. CERTIFICATION REQUIREMENTS .....	47
C. PERMIT SHIELD.....	48
D. MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS .....	49
E. PROMPT DEVIATION REPORTING.....	50
F. EMERGENCY PROVISIONS.....	50
G. INSPECTION AND ENTRY .....	51
H. FEE PAYMENT.....	51
I. MINOR PERMIT MODIFICATIONS .....	52
J. CHANGES NOT REQUIRING PERMIT REVISION .....	52
K. SIGNIFICANT PERMIT MODIFICATIONS.....	53
L. REOPENING FOR CAUSE.....	53
M. PERMIT EXPIRATION AND RENEWAL.....	54
N. SEVERABILITY CLAUSE .....	54
O. TRANSFER OR ASSIGNMENT OF OWNERSHIP.....	55
P. EMISSIONS TRADING, MARKETABLE PERMITS, ECONOMIC INCENTIVES.....	55

Q. NO PROPERTY RIGHTS CONVEYED.....	55
R. TESTING REQUIREMENTS .....	55
S. SOURCE TEST PROTOCOL .....	55
T. MALFUNCTIONS.....	55
U. CIRCUMVENTION .....	55
V. MOTOR VEHICLES .....	55
W. ANNUAL EMISSIONS INVENTORY .....	56
X. OPEN BURNING.....	56
Y. MONTANA AIR QUALITY PERMITS .....	56
Z. NATIONAL EMISSION STANDARD FOR ASBESTOS .....	57
AA. ASBESTOS .....	57
BB. STRATOSPHERIC OZONE PROTECTION – SERVICING OF MOTOR VEHICLE AIR CONDITIONERS .....	57
CC. STRATOSPHERIC OZONE PROTECTION – RECYCLING AND EMISSION REDUCTIONS .....	57
DD. EMERGENCY EPISODE PLAN.....	58
EE. DEFINITIONS .....	58
<b>APPENDIX A INSIGNIFICANT EMISSION UNITS (IEUS).....</b>	<b>A-1</b>
<b>APPENDIX B DEFINITIONS AND ABBREVIATIONS .....</b>	<b>B-1</b>
<b>APPENDIX C NOTIFICATION ADDRESSES.....</b>	<b>C-1</b>
<b>APPENDIX D AIR QUALITY INSPECTOR INFORMATION.....</b>	<b>D-1</b>
<b>APPENDIX E CFAC MACT IMPLEMENTATION PLAN .....</b>	<b>E-1</b>
<b>APPENDIX F CFAC MACT QUICK REFERENCE GUIDE .....</b>	<b>F-1</b>
<b>APPENDIX G STARTUP, SHUTDOWN AND MALFUNCTION PLAN (SSM) .....</b>	<b>G-1</b>
<b>APPENDIX H POTLINE ROOF VENT OPACITY COMPLIANCE DEMONSTRATION...H-1</b>	
<b>APPENDIX I POLLUTION CONTROL DEVICE INSPECTION &amp; MAINTENANCE PLAN.....</b>	<b>I-1</b>
<b>APPENDIX J 62 FR 52383.....</b>	<b>J-1</b>
<b>APPENDIX K CAM PLAN .....</b>	<b>K-1</b>

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

## SECTION I. GENERAL INFORMATION

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

**Company Name:** Columbia Falls Aluminum Company, LLC

**Mailing Address:** 2000 Aluminum Drive

**City:** Columbia Falls

**State:** MT

**Zip:** 59912

**Plant Location:** Section 3, Township 30 North, Range 20 West, Flathead County, MT

**Responsible Official:** Steve Wright

**Phone:** 406-892-8211

**Facility Contact Person:** Steve Wright

**Phone:** 406-892-8211

**Primary SIC Code:** 3334

**Nature of Business:** Primary Aluminum Production

### Description of Process:

CFAC operates five Vertical Stud Soderberg potlines at the Columbia Falls plant. Each potline has 120 individual cells that produce aluminum by the Hall-Heroult process. Annual operating capacity is approximately 185,000 tons of Aluminum, based on an average efficiency of 90.5%.

The Hall-Heroult process consists of passing an electric current through aluminum oxide ore, or alumina ( $Al_2O_3$ ), dissolved in molten cryolite. The reduction process is accomplished in a Vertical Stud Soderberg style pot. Soderberg technology describes the type of consumable carbon anode used in the process.

The cells or “pots” are housed in buildings called potrooms; two potrooms are connected electrically in series to form one potline. CFAC currently has 10 potrooms that comprise the five potlines. Emissions from each pot are divided into two categories: primary emissions and secondary emissions. Primary emissions are captured at the pots and routed to the primary air pollution control system, the A398 dry alumina scrubbers. Secondary emissions are fugitive emissions from the pots that are vented out the roofline of the potrooms.

Alumina is fed into a molten bath of cryolite, and heated to about 950°C (1740°F). Through the electrochemical process, electricity passes from the anode to the cathode, causing the aluminum to be reduced. The aluminum metal sinks below the cryolite bath to form a molten aluminum “pad.” The evolved oxygen atoms bond with the carbon in the anode of the cell to form carbon monoxide and carbon dioxide. Other emissions from the process include both particulate fluoride and gaseous hydrogen fluoride as well as hydrocarbon emissions containing polycyclic organic matter. The aluminum metal is siphoned from the pot every 48 hours and transported to the Casting Department, where it is cast into ingots of various sizes, shapes, and alloys. Typically each pot produces approximately 1700 pounds of aluminum per day.

## SECTION II. SUMMARY OF EMISSION UNITS

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

<b>Emission Unit ID</b>	<b>Emission Unit Description</b>	<b>Pollution Control Device or Practice</b>	<b>Operating Permit Section</b>
Facility Wide	Facility Wide		<a href="#">Section III.A</a>
EU001	Ball Mill North - MH01	Baghouse	<a href="#">Section III.B</a>
EU002	Ball Mill South - MH02	Baghouse	
EU003	Coke Silo - MH04	Baghouse	
EU004	East Alumina Elevator - MH06	Baghouse	
EU005	East Alumina Unloading - MH07	Baghouse	
EU006	East Conveyor Storage - MH08	Baghouse	
EU007	West Alumina Unloading - MH09	Baghouse	
EU008	Anode Dust Control System MH03(1) & MH03(2)	Baghouse	<a href="#">Section III.C</a>
EU009	Coke Unloading - MH05	Baghouse	
EU010	West Conveyor Storage - MH10	Baghouse	
EU011	Potline Sweeping - AR04	Baghouse	
EU012	Treatment of Aluminum Crucibles (TAC) Operations - CO10	Baghouse	
EU013	Pin Cleaning - West Plant - CR07	Baghouse	
EU014	Pin Cleaning - East Plant - CR07a	Baghouse	
EU015	Paste Plant Extruder - PP01	Procedair Dry Coke Scrubber (Baghouse)	<a href="#">Section III.D</a>
EU016	Paste Plant Mixer - PP02	Procedair Dry Coke Scrubber (Baghouse)	<a href="#">Section III.E</a>
EU017	Pinhole Paste Drying - PP03	Baghouse	<a href="#">Section III.F</a>
EU018	Pitch Storage Tank Vents - PP04	Condensation Tower/Vent	<a href="#">Section III.G</a>
EU019	Paste Plant Oil Heating System - PP05	None	<a href="#">Section III.H</a>
EU020	East Plant Dry Scrubber Alumina Transfer (North) - AR01	Baghouse	<a href="#">Section III.I</a>
EU021	East Plant Dry Scrubber Alumina Transfer (South) - AR02	Baghouse	
EU022	West Plant Dry Scrubber Alumina Transfer (North) - AR06	Baghouse	
EU023	West Plant Dry Scrubber Alumina Transfer (South) - AR07	Baghouse	

<b>Emission Unit ID</b>	<b>Emission Unit Description</b>	<b>Pollution Control Device or Practice</b>	<b>Operating Permit Section</b>
EU024	Primary Gas Collection System - West Plant (Potlines 1 & 2) - AR05	Alcoa A398 Dry Alumina Scrubber #1 (Reactor #1 & Baghouse)	<a href="#">Section III.J</a>
EU025	Primary Gas Collection System - West Plant (Potlines 1 & 2) - AR05	Alcoa A398 Dry Alumina Scrubber #2 (Reactor #2 & Baghouse)	
EU026	Primary Gas Collection System - West Plant (Potlines 1 & 2) - AR05	Alcoa A398 Dry Alumina Scrubber #3 (Reactor #3 & Baghouse)	
EU027	Primary Gas Collection System - West Plant (Potlines 1 & 2) - AR05	Alcoa A398 Dry Alumina Scrubber #4 (Reactor #4 & Baghouse)	
EU028	Primary Gas Collection System - East Plant (Potlines 3, 4, & 5) - AR05	Alcoa A398 Dry Alumina Scrubber #5 (Reactor #5 & Baghouse)	
EU029	Primary Gas Collection System - East Plant (Potlines 3, 4, & 5) - AR05	Alcoa A398 Dry Alumina Scrubber #6 (Reactor #6 & Baghouse)	
EU030	Primary Gas Collection System - East Plant (Potlines 3, 4, & 5) - AR05	Alcoa A398 Dry Alumina Scrubber #7 (Reactor #7 & Baghouse)	
EU031	Primary Gas Collection System - East Plant (Potlines 3, 4, & 5) - AR05	Alcoa A398 Dry Alumina Scrubber #8 (Reactor #8 & Baghouse)	
EU032	Primary Gas Collection System - East Plant (Potlines 3, 4, & 5) - AR05	Alcoa A398 Dry Alumina Scrubber #9 (Reactor #9 & Baghouse)	
EU033	Primary Gas Collection System - East Plant (Potlines 3, 4, & 5) - AR05	Alcoa A398 Dry Alumina Scrubber #10 (Reactor #10 & Baghouse)	
EU034	Potline #1 Roof Vent, West Plant - AR03	None	<a href="#">Section III.K</a>
EU035	Potline #2 Roof Vent, West Plant - AR03	None	
EU036	Potline #3 Roof Vent, East Plant - AR03	None	
EU037	Potline #4 Roof Vent, East Plant - AR03	None	
EU038	Potline #5 Roof Vent, East Plant - AR03	None	
EU039	Casting Furnace #3 - CO01	None	<a href="#">Section III.L</a>
EU040	Casting Furnace #4 - CO02	None	
EU041	Casting Furnace #6 - CO03	None	
EU042	Casting Furnace #7 - CO04	None	
EU043	Casting Furnace #8 & #9 - CO05	None	
EU044	Casting Pit #3 - CO06	None	<a href="#">Section III.M</a>
EU045	Casting Pit #4 - CO06	None	
EU046	Casting Pit #6 & #7 - CO06	None	

<b>Emission Unit ID</b>	<b>Emission Unit Description</b>	<b>Pollution Control Device or Practice</b>	<b>Operating Permit Section</b>
EU047	Casting Pit #8 & #9 - CO06	None	
EU048	Dross Handling - CO07	None	<a href="#">Section III.N</a>
EU049	Sheet Ingot Saw – CO08	Target Box and Cyclone	<a href="#">Section III.O</a>
EU050	T-Ingot Saw – CO09	Target Box and Filter or Cyclone	
EU051	Sandblasting Activities - CR01	None	<a href="#">Section III.P</a>
EU052	Lectromelt Furnace - CR03	Baghouse	<a href="#">Section III.Q</a>
EU053	Rod Mill/Material Storage/Bath Crushing - CR04	Baghouse	<a href="#">Section III.R</a>
EU054	Change House Boiler #1 - MP01	None	<a href="#">Section III.S</a>
EU055	Change House Boiler #2 - MP02	None	
EU056	Lab Boiler #1 - MP07	None	
EU057	Machine Shop Boiler #1 - MP08	None	
EU058	Machine Shop Boiler #2 - MP09	None	
EU059	Paste Plant Boiler #1 - MP11	None	
EU060	Paste Plant Boiler #2 - MP12	None	
EU061	Warehouse Boiler #1 - MP16	None	
EU062	Warehouse Boiler #2 - MP17	None	
EU063	Haul Road Emissions - MP05	None	
EU064	Gasoline Storage Tank - MP04	None	<a href="#">Section III.U</a>
EU065	Sow Casting Line	None	<a href="#">Section III.V</a>



### SECTION III. PERMIT CONDITIONS

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

#### A. Facility-Wide

Conditions	Rule Citation	Rule Description	Pollutant/Parameter	Limit
A.1	ARM 17.8.105	Testing Requirements	Testing Requirements	-----
A.2	ARM 17.8.230	Fluoride in Forage	Ambient Air Quality Standard	
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 17.8.308(1)	Particulate Matter, Airborne	Fugitive Opacity	20%
A.6	ARM 17.8.308(2)	Particulate Matter, Airborne	Reasonable Precautions	-----
A.7	ARM 17.8.308	Particulate Matter, Airborne	Reasonable Precaution, Construction	20%
A.8	ARM 17.8.309	Particulate Matter, Fuel Burning Equipment	Particulate Matter	$E = 0.882 * H^{-0.1664}$ Or $E = 1.026 * H^{-0.233}$
A.9	ARM 17.8.310	Particulate Matter, Industrial Processes	Particulate Matter	$E = 4.10 * P^{0.67}$ or $E = 55 * P^{0.11} - 40$
A.10	ARM 17.8.322(4)	Sulfur Oxide Emissions, Sulfur in Fuel	Sulfur in Fuel (liquid or solid fuels)	1 lb/MMBtu fired
A.11	ARM 17.8.322(5)	Sulfur Oxide Emissions, Sulfur in Fuel	Sulfur in Fuel (gaseous)	50 gr/100 cubic feet
A.12	ARM 17.8.324(3)	Hydrocarbon Emissions, Petroleum Products	Gasoline Storage Tanks	-----
A.13	ARM 17.8.324	Hydrocarbon Emissions, Petroleum Products	65,000 Gallon Capacity	-----
A.14	ARM 17.8.324	Hydrocarbon Emissions, Petroleum Products	Oil-effluent Water Separator	-----
A.15	ARM 17.8.342	NESHAPs General Provisions	SSM Plans	Submittal
A.16	ARM 17.8.1211(1)(c) and 40 CFR Part 98	Greenhouse Gas Reporting	Reporting	-----
A.17	ARM 17.74 Subchapter 3	Asbestos	Asbestos	-----
A.18	ARM 17.8.342 and 40 CFR Part 63, Subpart LL	Aluminum MACT	Fluoride, Polycyclic Organic Matter	See Appendix F
A.19	ARM 17.8.331	Emission Standards for Existing Aluminum Plants	Total Fluoride	2.6 pound per ton produced

Conditions	Rule Citation	Rule Description	Pollutant/Parameter	Limit
A.20	ARM 17.8.332	Emission Standards for Existing Aluminum Plants	Visible Emissions	10% Opacity
A.21	ARM 17.8.1212	Reporting Requirements	Prompt Deviation Reporting	-----
A.22	ARM 17.8.335	Air Pollution Control Equipment Maintenance	Emissions Standards	-----
A.23	ARM 17.8.1212	Reporting Requirements	Compliance Monitoring	-----
A.24	ARM 17.8.1207	Reporting Requirements	Annual Certification	-----
A.25	Regional Haze	77 FR 57864; September 18, 2012	Notification Requirement / Installation of required controls	60 days prior to startup / as soon as practicable, but in no case later than five years following the effective date of the rule

### Conditions

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

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

A.2. Pursuant to ARM 17.8.230, CFAC shall not cause or contribute to concentrations of fluoride in or on forage which exceeds 50 micrograms of fluoride per gram of forage (ug/g) on a monthly average basis, or 35 ug/g as a grazing season average. CFAC shall conduct ambient monitoring as required by the Department.

A.3. Pursuant to ARM 17.8.304(1), CFAC 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. This does not apply to the transfer of molten metals or emissions from transfer ladles (ARM 17.8.304 and ARM 17.8.1211)

A.4. Pursuant to ARM 17.8.304(2), CFAC 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.

- A.5. Pursuant to ARM 17.8.308(1), CFAC 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, except for emissions of airborne particulate matter originating from any transfer of molten metal which was installed or in operation prior to November 23, 1968 (ARM 17.8.308 and ARM 17.8.1211)
- A.6. Pursuant to ARM 17.8.308(2), CFAC 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.
- A.7. Pursuant to ARM 17.8.308, CFAC 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.8. Pursuant to ARM 17.8.309, unless otherwise specified by rule or in this permit, CFAC 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 British thermal units (MMBtu) per hour and E is the maximum allowable particulate emissions rate in pounds per MMBtu.

- A.9. Pursuant to ARM 17.8.310, unless otherwise specified by rule or in this permit, CFAC 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 = rate of emissions in pounds per hour and P = process weight rate in tons per hour.

- A.10. Pursuant to ARM 17.8.322(4), CFAC shall not burn liquid or solid fuels containing sulfur in excess of 1 pound per MMBtu fired, unless otherwise specified by rule or in this permit.
- A.11. Pursuant to ARM 17.8.322(5), CFAC shall not burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions, unless otherwise specified by rule or in this permit.
- A.12. Pursuant to ARM 17.8.324(3), CFAC 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), unless otherwise specified by rule or in this permit.

- A.13. Pursuant to ARM 17.8.324, unless otherwise specified by rule or in this permit, CFAC shall not place, store or hold in any stationary tank, reservoir or other container of more than 65,000 gallon capacity any crude oil, gasoline or petroleum distillate having a vapor pressure of 2.5 pounds per square inch absolute or greater under actual storage conditions, unless such tank, reservoir or other container is a pressure tank maintaining working pressure sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere, or is designed and equipped with a vapor loss control device, properly installed, in good working order and in operation.
- A.14. Pursuant to ARM 17.8.324, unless otherwise specified by rule or in this permit, CFAC shall not use any compartment of any single or multiple-compartment oil-effluent water separator, which compartment receives effluent water containing 200 gallons a day or more of any petroleum product from any equipment processing, refining, treating, storing or handling kerosene or other petroleum product of equal or greater volatility than kerosene, unless such compartment is equipped with a vapor loss control device, constructed so as to prevent emission of hydrocarbon vapors to the atmosphere, properly installed, in good working order and in operation.
- A.15. Pursuant to ARM 17.8.342 and 40 CFR 63.6, CFAC 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 National Emission Standard for Hazardous Air Pollutants (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.16. Pursuant to ARM 17.8.1211(1)(c) and 40 CFR Part 98, CFAC shall comply with requirements of 40 CFR Part 98 – Mandatory Greenhouse Gas Reporting, as applicable (ARM 17.8.1211(1)(c), NOT an applicable requirement under Title V).
- A.17. Pursuant to ARM 17.74 Subchapter 3 - Asbestos Control, CFAC shall comply with all of the applicable requirements of this Subchapter.
- A.18. Pursuant to ARM 17.8.342, CFAC shall satisfy all of the applicable requirements, including emission limitations, testing, monitoring, recordkeeping, and reporting, of 40 CFR 63, Subpart LL – National Emission Standards for Hazardous Air Pollutants for Primary Aluminum Reduction Plants (Aluminum MACT). CFAC shall also satisfy the requirements of Appendix H of this permit.
- A.19. Pursuant to ARM 17.8.331, CFAC shall not cause the emission into the atmosphere from any existing primary aluminum reduction plant of any gasses which contain total fluorides in excess of 1.3 kg/Mg (2.6 lb/ton) of aluminum produced at Soderberg plants averaged over any calendar month.
- A.20. Pursuant to ARM 17.8.332, CFAC shall not cause the emission into the atmosphere from any potroom group of any gasses or particles which exhibit 10% opacity or greater, as determined by EPA Reference Method 9 in Appendix A of 40 CFR Part 60, incorporated by reference in ARM 17.8.302.
- A.21. CFAC shall promptly report deviations from permit requirements including those attributable to upset conditions, as upset is defined in the permit. To be considered prompt, deviations shall be reported to the Department using the schedule and content as described in Section V.E (unless otherwise specified in an applicable requirement) (ARM 17.8.1212).

- A.22. CFAC shall comply with the maintenance of air pollution control equipment requirements of ARM 17.8.335 (ARM 17.8.335, ARM 17.8.1211).
- A.23. On or before February 15 and August 15 of each year, CFAC 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 emissions unit. For the reports due by February 15 of each year, CFAC may submit a single report, provided that it contains all the information required by Section V.B & V.D. Per ARM 17.8.1207,

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

- A.24. By February 15 of each year, CFAC shall submit to the Department the compliance certification required by Section V.B. The annual certification required by Section V.B must include a statement of compliance based on the information available which identifies any observed, documented or otherwise known instance of noncompliance for each applicable requirement. Per ARM 17.8.1207,

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

- A.25. CFAC shall notify EPA 60 days in advance of resuming operation. CFAC shall submit such notice to the Director, Air Program, U.S. Environmental Protection Agency, Region 8, Mail Code 8P-AR, 1595 Wynkoop Street, Denver, Colorado 80202-1129. Once CFAC notifies EPA that it intends to resume operation, EPA will initiate and complete a BART determination after notification and revise the FIP as necessary in accordance with regional haze requirements, including the BART provisions in 40 CFR 51.308(e). CFAC will be required to install any controls that are required as soon as practicable, but in no case later than five years following the effective date of this rule.

**B. EU001 – EU007: Material Handling Emitting Units with Baghouses Regulated by Opacity and Process Weight Rate**

**EU001 - Ball Mill North - MH01**

**EU002 - Ball Mill South - MH02**

**EU003 - Coke Silo - MH04**

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
B.1, B.5, B.7, B.9, B.11, B.12, B.14, B.15	Opacity	20%	Method 9	As Required by the Department and Section III.A.1	Semi-annual
			Operate and Maintain Baghouse (Appendix I)	Ongoing	Semi-annual
B.3, B.5, B.6, B.7, B.9, B.10, B.11, B.12, B.13, B.14, B.15	Particulate Matter	$E = 55 * P^{0.11} - 40$	CAM Plan (Appendix K)	Ongoing	Semi-annual

**EU004 - East Alumina Elevator - MH06**

**EU006 - East Conveyor Storage - MH08**

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
B.2, B.5, B.7, B.8, B.9, B.11, B.12, B.14, B.15	Opacity	40%	Method 9	As Required by the Department and Section III.A.1	Semi-annual
			Operate and Maintain Baghouse (Appendix I)	Ongoing	Semi-annual
B.3, B.5, B.6, B.7, B.9, B.11, B.12, B.13, B.14, B.15	Particulate Matter	$E = 55 * P^{0.11} - 40$	CAM Plan (Appendix K)	Ongoing	Semi-annual

**EU005 - East Alumina Unloading - MH07**  
**EU007 - West Alumina Unloading - MH09**

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
B.2, B.5, B.7, B.8, B.9, B.11, B.12, B.14, B.15	Opacity	40%	Method 9	As Required by the Department and Section III.A.1	Semi-annual
			Operate and Maintain Baghouse (Appendix I)	Ongoing	Semi-annual
B.3, B.5, B.6, B.7, B.9, B.10, B.11, B.12, B.13, B.14, B.15	Particulate Matter	$E = 55 * P^{0.11} - 40$	CAM Plan (Appendix K)	Ongoing	Semi-annual
B.4, B.5, B.7, B.9, B.11, B.12, B.14, B.15	Particulate control technology	Alumina unloading hopper and air slide controlled via baghouse	Operate and Maintain Baghouse (Appendix I)	Ongoing	Semi-annual

**Conditions**

- B.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from the Ball Mill North-MH01, Ball Mill South-MH02, and Coke Silo-MH04, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- B.2. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from the East Alumina Elevator-MH06, East Alumina Unloading-MH07, East Conveyor Storage-MH08, and West Alumina Unloading-MH09, that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes (ARM 17.8.304(1)).
- B.3. The particulate emissions from process weight shall not exceed the value calculated by  $E = 55.0 * P^{0.11} - 40$ , 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).
- B.4. Particulate emissions from the East (EU005) and West (EU007) alumina unloading hopper and air slide shall be controlled with baghouses (ARM 17.8.749).

**Compliance Demonstration**

- B.5. CFAC shall operate and maintain the baghouse for EU001 through EU007 in accordance with the Pollution Control Device Inspection & Maintenance Plan (Appendix I) to monitor compliance with Section III.B.1, III.B.2, III.B.3, and III.B.4 (ARM 17.8.1213).
- B.6. CFAC shall comply with the Compliance Assurance Monitoring requirements of ARM 17.8 Subchapter 15 to monitor compliance with Section III.B.3, as approved by the Department and outlined in Appendix K – CAM Plan (ARM 17.8.1503).

- B.7. As required by the Department and Section III.A.1, CFAC shall perform a Method 5 and/or a Method 9 test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.1213). For EU01-EU03, CFAC shall perform weekly visual surveys:

Once, during any calendar week in which EU01, EU02, or EU03 operates, CFAC shall visually survey for any visible emissions. Visual Surveys shall occur during daylight hours while the unit is in operation.

If visible emissions are observed during the visual survey, CFAC must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 15% opacity based on the Method 9 source test, CFAC shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then CFAC shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The person conducting the visual survey shall record the results of the survey (including the results of any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve CFAC of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

- B.8. CFAC shall conduct an initial performance test for opacity and demonstrate compliance with the limitation contained in Section III.B.2 on the East and West Alumina Unloading baghouses within 180 days of startup of the new pulse-jet baghouse. The testing and compliance demonstration shall continue on an every-two-year basis (ARM 17.8.105 and ARM 17.8.1213)

### **Recordkeeping**

- B.9. CFAC shall maintain on-site records of all inspection and maintenance activities performed on the baghouses in accordance with the Pollution Control Device Inspection & Maintenance Plan (Appendix I) (ARM 17.8.1212).
- B.10. CFAC shall maintain records as required by the CAM plan approved by the Department, and outlined in Appendix K (ARM 17.8.1503).
- B.11. Method 5 and Method 9 test reports shall be maintained on-site and in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106). For EU01, EU02, and EU03 with visual surveys, CFAC shall maintain a log to verify that the visual surveys were performed. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer's initials. If any corrective action is required, the time, date, observer's initials, and any preventive or corrective action taken must be recorded in the log (ARM 17.8.1212). CFAC shall maintain on-site all records for a minimum of 5 years from the date of creation (ARM 17.8.1212).

### **Reporting**

- B.12. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- B.13. CFAC shall comply with the reporting requirements of ARM 17.8 subchapter 15, and in accord to the plan approved by the Department (ARM17.8.1503).
- B.14. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).



- B.15. The semi-annual compliance monitoring reports shall include (ARM 17.8.1212):
- A summary of visual surveys and the results of any source test conducted during the reporting period;
  - A summary of records kept as required by Section III.B.8, with any corrective actions taken as a result of the inspections and maintenance as required by the Pollution Control Device Inspection & Maintenance Plan (Appendix I) noted.
  - A summary of the results of any source test conducted during the reporting period;

**C. EU008 – EU014 EU’s with Baghouses & Grain Loading Restrictions**

**EU008 - Anode Dust Control System - MH03(1) and MH03(2)**  
**EU009 - Coke Unloading - MH05**  
**EU010 - West Conveyor Storage - MH10**  
**EU011 - Potline Sweeping AR04**

**EU012 - Treatment of Aluminum Crucibles - CO10**  
**EU013 - Pin Cleaning - West Plant - CR07**  
**EU014 - Pin Cleaning - East Plant - CR07a**

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
C.1, C.4, C.8, C.11, C.12, C.14, C.15	Opacity	20%	Visual Survey	Weekly	Semi-annual
			Operate and Maintain Baghouse (Appendix I)	Ongoing	Semi-annual
C.2, C.6, C.10, C.13, C.14, C.15	Particulate Matter	$E = 55 * P^{0.11} - 40$	CAM Plan (Appendix K)	Ongoing	Semi-annual
C.3, C.5, C.7, C.9, C.11, C.12, C.14, C.15	Particulate Matter	0.02 gr/dscf	Operate and Maintain Baghouse (Appendix I)	Ongoing	Semi-annual

**Conditions**

- CFAC shall not cause or authorize emissions to be discharged to the atmosphere from the Anode Dust Control System-MH03(1), Anode Dust Control System-MH03(2), Coke Unloading-MH05, West Conveyor Storage-MH10, Potline Sweeping-AR04, Treatment of Aluminum Crucibles-CO10, Pin Cleaning West Plant-CR07, and Pin Cleaning East Plant-CR07a, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)). As a result of venting indoors, EU013 and EU014 are not currently subject to this (C.1) requirement.
- The particulate emissions from process weight shall not exceed the value calculated by  $E = 55.0 * P^{0.11} - 40$ , 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).
- Particulate emissions from the west conveyor storage silo baghouse, the coke and coal distribution baghouse, and the paste plant Draco dust control system shall be limited to a maximum of 0.02 grains per dry standard cubic foot (gr/dscf) (ARM 17.8.752).

## **Compliance Demonstration**

- C.4. Once, during any calendar week in which a unit with applicable opacity requirements operates, CFAC shall visually survey for any visible emissions. Visual Surveys shall occur during daylight hours while the unit is in operation.

If visible emissions are observed during the visual survey, CFAC must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 15% opacity based on the Method 9 source test, CFAC shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then CFAC shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The person conducting the visual survey shall record the results of the survey (including the results of any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve CFAC of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

- C.5. CFAC shall operate and maintain the baghouse for EU008 through EU014 in accordance with the Pollution Control Device Inspection & Maintenance Plan (Appendix I) of this permit (ARM 17.8.1213).
- C.6. CFAC shall comply with the Compliance Assurance Monitoring requirements of ARM 17.8 Subchapter 15 to monitor compliance with Section III.C.2 and Section III.C.3, as approved by the Department and outlined in Appendix K – CAM Plan (ARM 17.8.1503). For EU012 which is exempt from CAM, CFAC shall demonstrate compliance as provided in Section III.C.7
- C.7. As required by the Department and Section III.A.1, CFAC shall perform a Method 5 test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.1213). Further, until such time that a revised CAM plan is proposed, CFAC shall perform an annual Method 5 test to demonstrate compliance with units subject to the 0.02 gr/dscf limitation (ARM 17.8.1213).

## **Recordkeeping**

- C.8. CFAC shall maintain a log to verify that the visual surveys were performed. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer's initials. If any corrective action is required, the time, date, observer's initials, and any preventive or corrective action taken must be recorded in the log (ARM 17.8.1212). CFAC shall maintain on-site all records for a minimum of 5 years from the date of creation (ARM 17.8.1212).
- C.9. CFAC shall maintain records of all inspection and maintenance activities performed on the baghouses in accordance with Appendix I (ARM 17.8.1212).
- C.10. CFAC shall maintain records as required by the CAM plan approved by the Department, and outlined in Appendix K (ARM 17.8.1503).
- C.11. Method 5 and Method 9 test reports must be maintained on-site and in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).

## **Reporting**

- C.12. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).

- C.13. CFAC shall comply with the reporting requirements of ARM 17.8 Subchapter 15, and in accord to the CAM Plan approved by the Department (ARM17.8.1503).
- C.14. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- C.15. The semi-annual compliance monitoring reports shall include (ARM 17.8.1212):
- A summary of visual surveys and the results of any source test conducted during the reporting period;
  - A summary of any corrective actions taken as a result of the inspections and maintenance as required by the Pollution Control Device Inspection & Maintenance Plan (Appendix I).

**D. EU015 – Paste Plant Extruder – PP01**

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
D.1, D.4, D.8, D.11, D.13, D.14	Opacity	40%	Visual Survey	Weekly	Semi-annual
D.2, D.5, D.9, D.12, D.13, D.14	Particulate Matter	$E = 55 * P^{0.11} - 40$	CAM Plan (Appendix K)	Ongoing	Semi-annual
D.3, D.6, D.7, D.10, D.13, D.14	Polycyclic Organic Matter (POM)	None	Operation of Dry Coke Scrubber: CFAC MACT Implementation Plan (Appendix E)	Ongoing	Annual Certification

**Conditions**

- D.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from the Paste Plant Extruder-PP01 and the Paste Plant Mixer-PP02, that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes (ARM 17.8.304(1)).
- D.2. The particulate emissions from process weight shall not exceed the value calculated by  $E = 55.0 * P^{0.11} - 40$ , 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.3. Polycyclic Organic Matter (POM) emissions from the paste plant shall be controlled by the operation of a Dry Coke Scrubber (ARM 17.8.302(i), ARM 17.8.342, ARM 17.8.749, and 40 CFR Part 63, Subpart LL).

**Compliance Demonstration**

- D.4. Once, during any calendar week in which a unit with applicable opacity requirements operates, CFAC shall visually survey for any visible emissions. Visual Surveys shall occur during daylight hours while the unit is in operation.

If visible emissions are observed during the visual survey, CFAC must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 30% opacity based on the Method 9 source test,

CFAC shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then CFAC shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The person conducting the visual survey shall record the results of the survey (including the results of any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve CFAC of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

- D.5. CFAC shall comply with the Compliance Assurance Monitoring requirements of ARM 17.8 Subchapter 15, as approved by the Department and outlined in Appendix K – CAM Plan (ARM 17.8.1503).
- D.6. The Dry Coke Scrubber shall be operated when either EU015 or EU016 are operating, in accordance with the CFAC's MACT Implementation Plan (Appendix E) of this permit, to control Polycyclic Organic Matter (POM) emissions from the Paste Plant. The parameter monitoring system must be operated, calibrated, and maintained for the Paste Plant Dry Coke Scrubber (40 CFR 63.848(f)).
- D.7. Daily, CFAC must inspect the Paste Plant Dry Coke Scrubber to ensure that the control device is operating properly. If a monitoring device measures an operating parameter outside of the limits established in CFAC's MACT Implementation Plan (Appendix E), then CFAC shall initiate corrective action procedures identified in the Startup, Shutdown, and Malfunction Plan (Appendix G of this permit) within one hour (ARM 17.8.1213).

### **Recordkeeping**

- D.8. CFAC shall maintain a log to verify that the visual surveys were performed. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer's initials. If any corrective action is required, the time, date, observer's initials, and any preventive or corrective action taken must be recorded in the log (ARM 17.8.1212). CFAC shall maintain on-site all records for a minimum of 5 years from the date of creation (ARM 17.8.1212).
- D.9. CFAC shall maintain records as required by the CAM plan approved by the Department, and outlined in Appendix K (ARM 17.8.1503).
- D.10. CFAC shall maintain on-site records of all inspection and maintenance activities performed on the baghouses in accordance with the Pollution Control Device Inspection & Maintenance Plan (Appendix I) and submit such records to the Department upon request (ARM 17.8.1212).

### **Reporting**

- D.11. All compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- D.12. CFAC shall comply with the reporting requirements of ARM 17.8 Subchapter 15, and in accord to the CAM Plan approved by the Department (ARM 17.8.1503).
- D.13. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- D.14. The semi-annual compliance monitoring reports shall include a summary of (ARM 17.8.1212):
  - a. The results of any source test conducted during the last reporting period;

- b. Summary of visual surveys and any corrective actions taken as a result of visual surveys;
- c. The number of operating parameter exceedances, including visible emissions, occurring during the semi-annual reporting period (one exceedance per 24-hr period – 40 CFR 63.848(i));
- d. Any corrective actions taken as a result of the daily visual surveys of visible emissions and operating parameters (Startup, Shutdown and Malfunction Plan (Appendix G))

**E. EU016-Paste Plant Mixer – PP02**

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
E.1, E.4, E.8, E.11, E.12, E.13	Opacity	40%	Visual Survey	Weekly	Semi-annual
E.2, E.5, E.9, E.11, E.12, E.13	Particulate Matter	$E = 55 * P^{0.11} - 40$	Method 5	As Required by the Department	Semi-annual
E.3, E.6, E.7, E.10, E.11, E.12, E.13	Polycyclic Organic Matter (POM)	None	Operation of Dry Coke Scrubber: CFAC MACT Implementation Plan (Appendix E)	Ongoing	Annual Certification

**Conditions**

- E.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from the Paste Plant Extruder-PP01 and the Paste Plant Mixer-PP02, that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes (ARM 17.8.304(1)).
- E.2. The particulate emissions from process weight shall not exceed the value calculated by  $E = 55.0 * P^{0.11} - 40$ , 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).
- E.3. Polycyclic Organic Matter (POM) emissions from the paste plant shall be controlled by the operation of a Dry Coke Scrubber (ARM 17.8.302(i), ARM 17.8.342, ARM 17.8.749, and 40 CFR Part 63, Subpart LL).

**Compliance Demonstration**

- E.4. Once, during any calendar week in which a unit with applicable opacity requirements operates, CFAC shall visually survey for any visible emissions. Visual Surveys shall occur during daylight hours while the unit is in operation.

If visible emissions are observed during the visual survey, CFAC must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 30% opacity based on the Method 9 source test, CFAC shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then CFAC shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The person conducting the visual survey shall record the results of the survey (including the results of

any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve CFAC of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

- E.5. As required by the Department and Section III.A.1, CFAC shall perform a Method 5 test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.1213).
- E.6. The Dry Coke Scrubber shall be operated when either EU015 or EU016 are operating, in accordance with the CFAC's MACT Implementation Plan (Appendix E) of this permit, to control Polycyclic Organic Matter (POM) emissions from the Paste Plant. The parameter monitoring system must be operated, calibrated, and maintained for the Paste Plant Dry Coke Scrubber (40 CFR 63.848(f)).
- E.7. Daily, CFAC must inspect the Paste Plant Dry Coke Scrubber to ensure that the control device is operating properly. If a monitoring device measures an operating parameter outside of the limits established in CFAC's MACT Implementation Plan (Appendix E), then CFAC shall initiate corrective action procedures identified in the Startup, Shutdown, and Malfunction Plan (Appendix G of this permit) within one hour (ARM 17.8.1213).

### **Recordkeeping**

- E.8. CFAC shall maintain a log to verify that the visual surveys were performed. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer's initials. If any corrective action is required, the time, date, observer's initials, and any preventive or corrective action taken must be recorded in the log (ARM 17.8.1212). CFAC shall maintain on-site all records for a minimum of 5 years from the date of creation (ARM 17.8.1212).
- E.9. Method 5 test reports must be maintained in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- E.10. CFAC shall maintain on-site records of all inspection and maintenance activities performed on the baghouses in accordance with the Pollution Control Device Inspection & Maintenance Plan (Appendix I) and submit such records to the Department upon request (ARM 17.8.1212).

### **Reporting**

- E.11. All compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- E.12. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- E.13. The semi-annual compliance monitoring reports shall include a summary of (ARM 17.8.1212):
  - a. The results of any source test conducted during the last reporting period;
  - b. Summary of visual surveys including any corrective actions taken as a result of the visual surveys of visible emissions and operating parameters (Startup, Shutdown and Malfunction Plan (Appendix G))
  - c. The number of operating parameter exceedances, including visible emissions, occurring during the semi-annual reporting period (one exceedance per 24-hr period – 40 CFR 63.848(i));

## F. EU017 - Pinhole Paste Drying - PP03

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
F.1, F.3, F.4, F.6, F.7, F.9, F.11, F.12	Opacity	20%	Visual Survey	Weekly	Semi-annual
			Operate and Maintain Baghouse (Appendix I)	Ongoing	Semi-annual
F.2, F.5, F.8, F.10, F.11, F.12	Particulate Matter	$E = 55 * P^{0.11} - 40$	CAM Plan (Appendix K)	Ongoing	Semi-annual

### Conditions

- F.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from Pinhole Paste Drying-PP03 that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- F.2. The particulate emissions from process weight shall not exceed the value calculated by  $E = 55 * P^{0.11} - 40$ , 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).

### Compliance Demonstration

- F.3. Once, during any calendar week in which a unit with applicable opacity requirements operates, CFAC shall visually survey for any visible emissions. Visual Surveys shall occur during daylight hours while the unit is in operation.

If visible emissions are observed during the visual survey, CFAC must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 15% opacity based on the Method 9 source test, CFAC shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then CFAC shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The person conducting the visual survey shall record the results of the survey (including the results of any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve CFAC of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

- F.4. CFAC shall operate and maintain the baghouse (EU017) in accordance with the Pollution Control Device Inspection & Maintenance Plan (Appendix I) of this permit (ARM 17.8.1213).
- F.5. CFAC shall comply with the Compliance Assurance Monitoring requirements of ARM 17.8 Subchapter 15, as approved by the Department and outlined in Appendix K – CAM Plan, for EU015- Paste Plant Extruder (ARM 17.8.1503).

### Recordkeeping

- F.6. CFAC shall maintain a log to verify that the visual surveys were performed. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer's initials. If any corrective action is required, the time, date, observer's initials, and any preventive or corrective action taken must be recorded in the log (ARM 17.8.1212). CFAC shall maintain on-site all records for a minimum of 5 years from the date of creation (ARM 17.8.1212).

- F.7. CFAC shall maintain on-site records of all inspection and maintenance activities performed on the baghouses in accordance with the Pollution control Device Inspection & Maintenance Plan (Appendix I) and submit such records to the Department upon request (ARM 17.8.1212).
- F.8. CFAC shall maintain records as required by the CAM plan approved by the Department, and outlined in Appendix K (ARM 17.8.1503).

**Reporting**

- F.9. All compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- F.10. CFAC shall comply with the reporting requirements of ARM 17.8 Subchapter 15, and in accord to the CAM Plan approved by the Department (ARM 17.8.1503).
- F.11. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- F.12. The semi-annual compliance monitoring reports shall include a summary of (ARM 17.8.1212):
  - a. The results of any source test conducted during the last reporting period;
  - b. Summary of visual surveys and corrective actions taken as a result of visual surveys;
  - c. A summary of any corrective actions taken as a result of the inspections and maintenance as required by the Pollution Control Device Inspection & Maintenance Plan (Appendix I).

**G. EU018 – Pitch Storage Tanks - PP04**

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
G.1, G.2, G.3, G.4, G.5, G.6	Opacity	20%	Visual Survey	Weekly	Semi-annual

**Conditions**

- G.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from the Pitch Storage Tanks-PP04 that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).

**Compliance Demonstration**

- G.2. Once, during any calendar week in which a unit with applicable opacity requirements operates, CFAC shall visually survey for any visible emissions. Visual Surveys shall occur during daylight hours while the unit is in operation.

If visible emissions are observed during the visual survey, CFAC must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 15% opacity based on the Method 9 source test, CFAC shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then CFAC shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The



person conducting the visual survey shall record the results of the survey (including the results of any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve CFAC of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

**Recordkeeping**

G.3. CFAC shall maintain a log to verify that the visual surveys were performed. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer’s initials. If any corrective action is required, the time, date, observer’s initials, and any preventive or corrective action taken must be recorded in the log (ARM 17.8.1212). CFAC shall maintain on-site all records for a minimum of 5 years from the date of creation (ARM 17.8.1212).

**Reporting**

- G.4. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- G.5. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirement(s) (ARM 17.8.1212).
- G.6. The semi-annual reporting shall provide a summary of visual surveys and corrective actions taken as a result of visual surveys, and the results of any source tests conducted (ARM 17.8.1212).

**H. EU019 – PASTE PLANT OIL HEATING SYSTEM – PP05**

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
H.1, H.2, H.3, H.4, H.5, H.6	Opacity	40%	Visual Survey	Weekly	Semi-annual

**Conditions**

H.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from the Paste Plant Oil Heating System-PP05 that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes (ARM 17.8.304(1)).

**Compliance Demonstration**

H.2. Once, during any calendar week in which a unit with applicable opacity requirements operates, CFAC shall visually survey for any visible emissions. Visual Surveys shall occur during daylight hours while the unit is in operation.

If visible emissions are observed during the visual survey, CFAC must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 30% opacity based on the Method 9 source test, CFAC shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then CFAC shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The person conducting the visual survey shall record the results of the survey (including the results of any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve CFAC of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

**Recordkeeping**

H.3. CFAC shall maintain a log to verify that the visual surveys were performed. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer’s initials. If any corrective action is required, the time, date, observer’s initials, and any preventive or corrective action taken must be recorded in the log (ARM 17.8.1212). CFAC shall maintain on-site all records for a minimum of 5 years from the date of creation (ARM 17.8.1212).

**Reporting**

H.4. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).

H.5. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

H.6. The semi-annual reporting shall provide a summary of visual surveys and corrective actions taken as a result of visual surveys, and the results of any source tests conducted (ARM 17.8.1212)

**I. EU020 – EU023 – PRIMARY SCRUBBER SYSTEM ALUMINA TRANSFER EU’S**

**EU020 - East Plant Dry Scrubber Alumina Transfer (North) - AR01**  
**EU021 - East Plant Dry Scrubber Alumina Transfer (South) - AR02**

**EU022 - West Plant Dry Scrubber Alumina Transfer (North) - AR06**  
**EU023 - West Plant Dry Scrubber Alumina Transfer (South) - AR07**

Conditions	Pollutant/ Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
I.1, I.3, I.4, I.6, I.8, I.9, I.11, I.12	Opacity	20%	Visual Survey	Weekly	Semi-annual
			Operate and Maintain Baghouse (Appendix I)	Ongoing	Semi-annual
I.2, I.5, I.7, I.10, I.11, I.12	Particulate Matter	$E = 55 \cdot P^{0.11} - 40$	CAM Plan (Appendix K)	Ongoing	Semi-annual

**Conditions**

I.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from the East Plant Dry Scrubber Alumina Transfer (North)-AR01, the East Plant Dry Scrubber Alumina Transfer (South)-AR02, the West Plant Dry Scrubber Alumina Transfer (North)-AR06, and the West Plant Dry Scrubber Alumina Transfer (South)-AR07, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).

I.2. The particulate emissions from process weight shall not exceed the value calculated by  $E = 55.0 \cdot P^{0.11} - 40$ , 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).

## **Compliance Demonstration**

I.3. CFAC shall operate and maintain the baghouse for EU020 through EU023 in accordance with the Pollution Control Device Inspection & Maintenance Plan (Appendix I) (ARM 17.8.1213).

I.4. Once, during any calendar week in which a unit with applicable opacity requirements operates, CFAC shall visually survey for any visible emissions. Visual Surveys shall occur during daylight hours while the unit is in operation.

If visible emissions are observed during the visual survey, CFAC must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 15% opacity based on the Method 9 source test, CFAC shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then CFAC shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The person conducting the visual survey shall record the results of the survey (including the results of any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve CFAC of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

I.5. CFAC shall comply with the Compliance Assurance Monitoring requirements of ARM 17.8 Subchapter 15, as approved by the Department and outlined in Appendix K – CAM Plan (ARM 17.8.1503).

## **Recordkeeping**

I.6. CFAC shall maintain on-site records of all inspection and maintenance activities performed on the baghouses in accordance with the Pollution Control Device Inspection & Maintenance Plan (Appendix I) and submit the records to the Department upon request (ARM 17.8.1212).

I.7. CFAC shall maintain records as required by the CAM plan approved by the Department, and outlined in Appendix K (ARM 17.8.1503).

I.8. CFAC shall maintain a log to verify that the visual surveys were performed. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer's initials. If any corrective action is required, the time, date, observer's initials, and any preventive or corrective action taken must be recorded in the log (ARM 17.8.1212). CFAC shall maintain on-site all records for a minimum of 5 years from the date of creation (ARM 17.8.1212).

## **Reporting**

I.9. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).

I.10. CFAC shall comply with the reporting requirements of ARM 17.8 Subchapter 15, and in accord to the CAM Plan approved by the Department (ARM 17.8.1503).

I.11. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

I.12. The semi-annual compliance monitoring reports shall include (ARM 17.8.1212):

a. The results of any source test conducted during the last reporting period;

- b. Any corrective actions taken as a result of the inspections and maintenance as required by the Pollution Control Device Inspection & Maintenance Plan (Appendix I);
- c. A summary of visual surveys and corrective actions taken as a result of visual surveys, and the results of any source tests conducted (ARM 17.8.1212)

**J. EU024 – EU033 – PRIMARY GAS COLLECTION SYSTEM EMITTING UNITS**

- |  |   |
|--|---|
| <b>EU024 - Primary Gas Collection System - West Plant - Scrubber #1 - AR05</b> | <b>EU029 - Primary Gas Collection System - East Plant - Scrubber #6 - AR05</b>  |
| <b>EU025 - Primary Gas Collection System - West Plant - Scrubber #2- AR05</b>  | <b>EU030 - Primary Gas Collection System - East Plant - Scrubber #7 - AR05</b>  |
| <b>EU026 - Primary Gas Collection System - West Plant - Scrubber #3 - AR05</b> | <b>EU031 - Primary Gas Collection System - East Plant - Scrubber #8 - AR05</b>  |
| <b>EU027 - Primary Gas Collection System - West Plant - Scrubber #4 - AR05</b> | <b>EU032 - Primary Gas Collection System - East Plant - Scrubber #9 - AR05</b>  |
| <b>EU028 - Primary Gas Collection System - East Plant - Scrubber #5 - AR05</b> | <b>EU033 - Primary Gas Collection System - East Plant - Scrubber #10 - AR05</b> |

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
J.1, J.4, J.5, J.9, J.12, J.13, J.14, J.15, J.16	Opacity	20%	Visual Survey	Weekly	Semi-annual
J.2, J.4, J.6, J.8, J.10, J.13, J.14, J.15, J.16	Total Fluoride (TF)	1.3 kg / Mg (per Month), Table C of Appendix F, or 40 CFR 63, Subpart LL	Method 13B or CFAC MACT Implementation Plan (Appendix E)	Annual	Quarterly
J.3, J.4, J.7, J.11, J.13, J.14, J.15, J.16	Polycyclic Organic Matter (POM)	2.85 kg / Mg (per Quarter), Table C of Appendix F, or 40 CFR 63, Subpart LL	Method 315 or CFAC MACT Implementation Plan (Appendix E)	Annual	Quarterly

**Conditions**

- J.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from West Plant Primary Gas Collection System, Scrubbers 1 through 4 (AR05), and the East Plant Primary Gas Collection System, Scrubbers 5 through 10 (AR05), that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- J.2. CFAC shall not cause or authorize Total Fluoride (TF) emissions that exceed 1.3 kg of TF per megagram (Mg) of aluminum produced (2.6 lb TF per ton of aluminum produced) from any single potline; or if CFAC is averaging the TF emissions from two or more potlines, the emission limit for the averaging scheme is prescribed in Appendix F, Table C, of this permit (ARM 17.8.331 and ARM 17.8.342). If 40 CFR 63, Subpart LL requires more stringent standards, then CFAC shall comply with the more stringent standards (40 CFR 63, Subpart LL).
- J.3. CFAC shall not cause or authorize POM emissions that exceed the limitations stated in 40 CFR 63, Subpart LL (40 CFR 63, Subpart LL).

## Compliance Demonstration

- J.4. Unless otherwise specified by rule, CFAC shall operate the Scrubbers on the Primary Gas Collection System at all times to demonstrate compliance with Conditions III.J.1, III.J.2, and III.J.3 (ARM 17.8.749).
- J.5. Once, during any calendar week in which a unit with applicable opacity requirements operates, CFAC shall visually survey for any visible emissions. Visual Surveys shall occur during daylight hours while the unit is in operation.

If visible emissions are observed during the visual survey, CFAC must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 15% opacity based on the Method 9 source test, CFAC shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then CFAC shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The person conducting the visual survey shall record the results of the survey (including the results of any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve CFAC of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

- J.6. CFAC shall annually perform at least one emission measurement test (three runs) for TF on each Primary Control System (West Plant and East Plant). That is, annually, CFAC will perform one emission measurement test run for TF on three of the four dry alumina scrubbers that comprise the Primary Control System of the West Plant; and annually CFAC will perform one emission measurement test run for TF on three of the six dry alumina scrubbers that comprise the Primary Control System of the East Plant. Also, CFAC will develop a testing schedule such that all dry aluminum scrubbers shall be tested for TF at least once (one test run) every 2 years. CFAC shall maintain a 12-month rolling average of TF emissions from the Primary Control Systems using the testing results of this requirement. All valid test runs must be used. TF Emissions determined by this requirement are combined with (measured) TF secondary emissions, and divided by the total aluminum production, to monitor compliance with TF emission limits (40 CFR Part 63, Subpart LL and ARM 17.8.1213). During any calendar year in which only one potline operates, only two scrubbers will be required to be tested (ARM 17.8.1213).
- J.7. CFAC shall annually perform at least one emission measurement test (three runs) for POM on each Primary Control System (West Plant and East Plant). That is, annually, CFAC will perform one emission measurement test run for POM on three of the four dry alumina scrubbers that comprise the Primary Control System of the West Plant; and annually, CFAC will perform one emission measurement test run for POM on three of the six dry alumina scrubbers that comprise the Primary Control System of the East Plant. Also, CFAC will develop a testing schedule such that all dry aluminum scrubbers shall be tested for POM at least once (one test run) every 2 years. CFAC shall maintain a 12-month rolling average of POM emissions from the Primary Control Systems using the testing results of this requirement. All valid test runs must be used. POM Emissions determined by this requirement are combined with measured POM secondary emissions, and divided by the total aluminum production, to demonstrate compliance with POM emission limits (as prescribed in 40 CFR Part 63, Subpart LL and ARM 17.8.1213). During any calendar year in which only one potline operates, only two scrubbers will be required to be tested (ARM 17.8.1213).
- J.8. Daily, CFAC must inspect the dry alumina scrubbers of the Primary Control Systems to ensure that the control devices are operating properly. If a monitoring device measures an operating parameter outside of the limits established in CFAC's Implementation Plan (Appendix E), then CFAC shall initiate corrective action procedures as identified in the Startup, Shutdown, and Malfunction Plan

within one hour. If an operating parameter is exceeded six times in any (semi-annual) reporting period, then any subsequent exceedance in that reporting period is a violation. For the purpose of determining the number of exceedances, no more than one exceedance shall be attributed in any given 24-hour period (ARM 17.8.1213).

### **Recordkeeping**

- J.9. Method 9 test reports shall be maintained on-site and in accordance with the Montana Source Test Protocol and Procedures Manual. (ARM 17.8.106).
- J.10. CFAC shall maintain a record of the results from all valid TF emission measurement runs performed on the dry alumina scrubbers of the West and East Primary Control Systems. CFAC must calculate the rolling monthly average of TF emissions exhausted from the dry alumina scrubbers. The TF emissions from the Primary Control Systems will be calculated based upon the testing required in III.J.6 (ARM 17.8.1212).
- J.11. CFAC shall maintain a record of the results from all valid POM emission measurement runs performed on the dry alumina scrubbers of the West and East Primary Control Systems. CFAC must calculate the rolling monthly average of POM emissions exhausted from the dry alumina scrubbers. The POM emissions from the Primary Control Systems will be calculated based upon the testing required in III.J.7 (ARM 17.8.1212).
- J.12. CFAC shall maintain a log to verify that the visual surveys were performed as specified in Section III.J.5. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer's initials. If any corrective action is required, the time, date, observer's initials, and any preventive or corrective action taken must be recorded in the log (ARM 17.8.1212).

### **Reporting**

- J.13. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- J.14. The annual compliance certification report required by Section V.B shall contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- J.15. The semi-annual compliance monitoring reports shall include a summary of the number of operating parameter exceedances, including visible emissions, occurring during the reporting period (ARM 17.8.1212):
- J.16. The quarterly compliance monitoring reports shall include a summary of (ARM 17.8.1212):
  - a. The results of all source testing that was performed during the quarter;
  - b. The calculated TF and POM emissions from the Primary Control Systems (TF-Monthly and POM-Quarterly);
  - c. The combined TF emissions from the Primary Control System and the secondary emissions from the potline roof monitors;
  - d. The combined POM emissions from the Primary Control System and the secondary emissions from the potline roof monitors;

- e. The tons of aluminum produced (TAP) for each potline per month and quarter;
- f. The pound (lb) of TF emitted per TAP for each potline, and each emission averaging group, per month;
- g. The lb of POM emitted per TAP for each potline, and each emission averaging group, per quarter; and
- h. A summary of visual surveys and corrective actions taken as a result of visual surveys, and the results of any source tests conducted (ARM 17.8.1212)

Requirements III.J.16(c)-(h) above are the same as those specified in III.K.13(c)-(h). When CFAC complies with the requirements of c through h above, it is also satisfying the reporting requirements of III.K.13(c)-(h).

**K. EU034 – EU038 – POTLINE ROOF VENT EMITTING UNITS**

**EU034 - Potline #1 Roof Vent-West Plant - AR03**  
**EU035 - Potline #2 Roof Vent-West Plant - AR03**  
**EU036 - Potline #3 Roof Vent- East Plant - AR03**

**EU037 - Potline #4 Roof Vent- East Plant - AR03**  
**EU038 - Potline #5 Roof Vent- East Plant - AR03**

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
K.1, K.4, K.7, K.8, K.11, K.12, K.13	Opacity	10%	Method 9 (Appendix H)	Quarterly	Quarterly
			Visual Survey (Appendix H)	Weekly	
K.2, K.5, K.9, K.11, K.12, K.13	Total Fluoride (TF)	1.3 kg / Mg (per Month), Table C of Appendix F, or 40 CFR 63, Subpart LL	Method 13B & Method 14 (Appendix E)	Three Test Runs per Month	Quarterly
K.3, K.6, K.10, K.11, K.12, K.13	Polycyclic Organic Matter (POM)	2.85 kg / Mg (per Quarter), Table C of Appendix F, or 40 CFR 63, Subpart LL	Method 315 & Method 14 (Appendix E)	One Test Run per Month	Quarterly

**Conditions**

- K.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from the Roof Vents of Potlines 1 through 5 (AR03) that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.332).
- K.2. CFAC shall not cause or authorize TF emissions that exceed 1.3 kg of TF per Mg of aluminum produced (2.6-lb TF per ton of aluminum produced) from any single potline; or if CFAC is averaging the TF emissions from two or more potlines, the emission limit for the averaging scheme is prescribed in Appendix F, Table C (ARM 17.8.331 and ARM 17.8.342). If 40 CFR 63, Subpart LL contains more stringent standards, CFAC shall comply with those standards (40 CFR 63, Subpart LL).
- K.3. CFAC shall not cause or authorize POM emissions that exceed the applicable standards of 40 CFR 63, Subpart LL. (40 CFR 63, Subpart LL).

## Compliance Demonstration

- K.4. Once, during any calendar week in which a unit with applicable opacity requirements operates, CFAC shall visually survey for any visible emissions. Visual Surveys shall occur during daylight hours while the unit is in operation.

If visible emissions are observed during the visual survey, CFAC must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 5% opacity based on the Method 9 source test, CFAC shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then CFAC shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The person conducting the visual survey shall record the results of the survey (including the results of any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve CFAC of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

- K.5. Monthly, CFAC shall perform at least three emission measurement test runs for TF on each operating potline (each Method 14 manifold system). Test runs must be the same duration as a pot cycle, or 48 hours. The minimum TF secondary emission testing schedule (three times per month) must adhere to the schedule defined in 40 CFR 63.847(b)(8); that is, at least one test run must be performed before the 15<sup>th</sup> of each month, one test run must be performed after the 15<sup>th</sup> of each month, and the remaining test run can occur at any time during the month, except that there must be at least 6 days between two of the runs. All valid test runs must be used when determining the secondary TF emissions. TF Emissions determined by this requirement are combined with the TF Primary Control System emissions (rolling monthly average), and divided by the total aluminum production, to monitor compliance with potline TF emission limits (as prescribed in 40 CFR 63, Subpart LL and ARM 17.8.1213).
- K.6. CFAC shall perform at least one emission measurement test run for POM each month on each potline (each Method 14 manifold system). Test runs must be the same duration as a pot cycle, or 48 hours. All valid test runs must be used when determining the secondary POM emissions. POM emissions determined by this requirement are combined with measured POM emissions from the Primary Control Systems, and divided by the total aluminum production, to monitor compliance with POM emission limits (as prescribed in 40 CFR Part 63, Subpart LL and ARM 17.8.1213).

## Recordkeeping

- K.7. Method 9 test reports shall be maintained on-site and in accordance with the Montana Source Test Protocol and Procedures Manual. (ARM 17.8.106).
- K.8. CFAC shall maintain a log to verify that the visual surveys were performed. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer's initials. If any corrective action is required, the time, date, observer's initials, and any preventive or corrective action taken must be recorded in the log (ARM 17.8.1212). CFAC shall maintain on-site all records for a minimum of 5 years from the date of creation (ARM 17.8.1212).
- K.9. CFAC shall maintain a record of the results from all valid TF emission measurement runs performed on the Method 14 Manifolds for all potlines. The potline secondary TF emissions will be calculated based upon the testing required in III.K.5 (ARM 17.8.1212).



K.10. CFAC shall maintain a record of the results from all valid POM emission measurement runs performed on the Method 14 Manifolds for all potlines. The potline secondary POM emissions will be calculated based upon the testing required in III.K.6 (ARM 17.8.1212).

### **Reporting**

K.11. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).

K.12. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

K.13. The quarterly reporting shall provide (ARM 17.8.1212):

- a. The results of all source testing that was performed during the quarter;
- b. The calculated secondary TF and POM emissions from the potline roofs (TF-Monthly and POM-Quarterly);
- c. The combined TF emissions from the Primary Control System and the secondary emissions from the potline roof monitors;
- d. The combined POM emissions from the Primary Control System and the secondary emissions from the potline roof monitors;
- e. The TAP for each potline per month and quarter;
- f. The lb of TF emitted per TAP for each potline, and each emission averaging group, per month;
- g. The lb of POM emitted per TAP for each potline, and each emission averaging group, per quarter;
- h. The number of visible emission exceedances occurring during the quarter; and
- i. A summary of visual surveys and corrective actions taken as a result of visual surveys, and the results of any source tests conducted (ARM 17.8.1212)

Requirements III.K.13(c)-(h) above are the same as those specified in III.J.16(c)-(h). When CFAC complies with the requirements of c through h above, it is also satisfying the reporting requirements of III.J.16(c)-(h).

**L. EU039 – EU043 – CASTING PIT FURNACES**

**EU039 - Casting Furnace #3 - CO01**  
**EU040 - Casting Furnace #4 - CO02**  
**EU041 - Casting Furnace #6 - CO03**

**EU042 - Casting Furnace #7 - CO04**  
**EU043 - Casting Furnace #8 & #9 - CO05**

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
L.1, L.3, L.5, L.7, L.8, L.9	Opacity	40%	Visual Survey	Weekly	Semi-annual
L.2, L.4, L.6, L.7, L.8, L.9	Particulate Matter	$E=0.882 \times H^{-0.1664}$	Method 5 as required	As required by the Department and Section III.A.1	Semi-annual

**Conditions**

- L.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from Casting Pits #3, #4, #6, #7, #8, #9, that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes (ARM 17.8.304(1)).
- L.2. CFAC shall not cause or authorize particulate matter caused by combustion, from fuel burning equipment installed before November 23, 1968, to be discharged from any outdoor stack or chimney in excess of the value calculated by  $E = 0.882 \times H^{-0.1664}$ , where H is the heat input capacity in MMBtu per hour and E is the maximum allowable particulate emissions rate in lb/MMBtu (ARM 17.8.309).

**Compliance Demonstration**

- L.3. Once, during any calendar week in which a unit with applicable opacity requirements operates, CFAC shall visually survey for any visible emissions. Visual Surveys shall occur during daylight hours while the unit is in operation.

If visible emissions are observed during the visual survey, CFAC must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 30% opacity based on the Method 9 source test, CFAC shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then CFAC shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The person conducting the visual survey shall record the results of the survey (including the results of any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve CFAC of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

- L.4. As required by the Department and Section III.A.1, CFAC shall perform a Method 5 test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.1213).

**Recordkeeping**

- L.5. CFAC shall maintain a log to verify that the visual surveys were performed. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer’s initials. If any corrective action is required, the time, date, observer’s initials, and any preventive or corrective action taken must be recorded in the log (ARM 17.8.1212). CFAC shall maintain on-site all records for a minimum of 5 years from the date of creation (ARM 17.8.1212).

L.6. CFAC shall maintain records in accord with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.1503).

**Reporting**

L.7. Any compliance source test reports must be submitted upon request and in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).

L.8. The annual compliance certification report required by Section V.B shall contain a certification statement for the above applicable requirements (ARM 17.8.1212).

L.9. The semi-annual compliance monitoring reports shall contain a summary of (ARM 17.8.1212)

- a. Any source tests conducted during the period
- b. Visual surveys and corrective actions taken as a result of visual surveys, including the results of any source tests conducted

**M. EU044 – EU047 – CASTING PIT EMITTING UNITS**

**EU044 - Casting Pit #3 - CO06**

**EU047 - Casting Pit #8 & #9 - CO06**

**EU045 - Casting Pit #4 - CO06**

**EU046 - Casting Pit #6 & #7 - CO06**

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
M.1, M.3, M.5, M.6, M.7, M.8, M.9	Opacity	40%	Visual Survey	Weekly	Semi-annual
M.2, M.4, M.5, M.7, M.8, M.9	Particulate Matter	$E = 4.10 \times P^{0.67}$	Normal Operations	Ongoing	Semi-annual

**Conditions**

M.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from Casting Pits #3, #4, #6, #7, #8, #9, (CO06), and Dross Handling-CO07, that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes (ARM 17.8.304(1)).

M.2. The particulate emissions from process weight shall not exceed the value calculated by  $E = 4.10 \times P^{0.67}$ , 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).

**Compliance Demonstration**

M.3. Once, during any calendar week in which a unit with applicable opacity requirements operates, CFAC shall visually survey for any visible emissions. Visual Surveys shall occur during daylight hours while the unit is in operation.

- M.4. If visible emissions are observed during the visual survey, CFAC must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 30% opacity based on the Method 9 source test, CFAC shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then CFAC shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The person conducting the visual survey shall record the results of the survey (including the results of any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve CFAC of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).
- M.5. As required by the Department, CFAC shall perform a Method 5 test (ARM 17.8.1213).

**Recordkeeping**

- M.6. All test reports shall be maintained on-site and in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- M.7. CFAC shall maintain a log to verify that the visual surveys were performed as specified in Section III.M.3. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer’s initials. If any corrective action is required, the time, date, observer’s initials, and any preventive or corrective action taken must be recorded in the log (ARM 17.8.1212).

**Reporting**

- M.8. Any compliance source test reports must be submitted upon request and in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- M.9. The annual compliance certification report required by Section V.B shall contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- M.10. The semi-annual compliance monitoring reports shall contain a summary of (ARM 17.8.1212)
- a. Any source tests conducted during the period
  - b. Visual surveys and corrective actions taken as a result of visual surveys, including the results of any source tests conducted

**N. EU048- Dross Handling System**

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
N.1, N.3, N.5, N.6, N.7, N.8, N.9,	Opacity	40%	Visual Survey	Weekly	Semi-annual
N.2, N.4, N.5, N.7, N.8, N.9	Particulate Matter	$E = 4.10 \times P^{0.67}$	Method 5	As required by the Department and Section III.A.1	Semi-annual

## Conditions

- N.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from the Dross Handling System (EU048) that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes (ARM 17.8.304(1)).
- N.2. The particulate emissions from process weight shall not exceed the value calculated by  $E = 4.10 \times P^{0.67}$ , 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).

## Compliance Demonstration

- N.3. Once, during any calendar week in which a unit with applicable opacity requirements operates, CFAC shall visually survey for any visible emissions. Visual Surveys shall occur during daylight hours while the unit is in operation.

If visible emissions are observed during the visual survey, CFAC must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 30% opacity based on the Method 9 source test, CFAC shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then CFAC shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The person conducting the visual survey shall record the results of the survey (including the results of any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve CFAC of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

- N.4. As required by the Department and Section III.A.1, CFAC shall perform a Method 5 Source Test to demonstrate compliance with Section III.N.2

## Recordkeeping

- N.5. All test reports shall be maintained on-site and in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- N.6. CFAC shall maintain a log to verify that the visual surveys were performed. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer's initials. If any corrective action is required, the time, date, observer's initials, and any preventive or corrective action taken must be recorded in the log (ARM 17.8.1212). CFAC shall maintain on-site all records for a minimum of 5 years from the date of creation (ARM 17.8.1212).

## Reporting

- N.7. Any compliance source test reports must be submitted upon request and in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- N.8. The annual compliance certification report required by Section V.B shall contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- N.9. The semi-annual compliance monitoring reports shall contain a summary of (ARM 17.8.1212)
- Any source tests conducted during the period
  - Visual surveys and corrective actions taken as a result of visual surveys, including the results of any source tests conducted

**O. EU049 – EU050 – ALUMINUM SAW EMITTING UNITS**

**EU049 – Sheet Ingot Saw - CO08**

**EU050 – T- Ingot Saw - CO09**

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
O.1, O.3, O.5, O.6, O.7, O.8, O.9	Opacity	20%	Visual Survey	Weekly	Semi-annual
O.2, O.4, O.5, O.7, O.8, O.9	Particulate Matter	$E = 4.10 * P^{0.67}$	Method 5	As Required by the Department and Section III.A.1	Semi-annual

**Conditions**

- O.1. CFAC shall not cause or authorize emissions from the Sheet Ingot Saw-CO08 that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)). As a result of venting indoors, EU050 (the T-Ingot Saw) is not currently subject to this requirement.
- O.2. The particulate emissions from process weight shall not exceed the value calculated by  $E = 4.10 \times P^{0.67}$ , 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).

**Compliance Demonstration**

- O.3. Once, during any calendar week in which a unit with applicable opacity requirements operates, CFAC shall visually survey for any visible emissions. Visual Surveys shall occur during daylight hours while the unit is in operation.

If visible emissions are observed during the visual survey, CFAC must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 15% opacity based on the Method 9 source test, CFAC shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then CFAC shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The person conducting the visual survey shall record the results of the survey (including the results of any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve CFAC of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

- O.4. As required by the Department and Section III.A.1, CFAC shall test the above sources for particulate matter in accordance with Reference Method 5 to monitor compliance with the limitation contained in Section III.O.2. The source test must be performed as specified in the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

**Recordkeeping**

- O.5. All test reports shall be maintained on-site and in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

O.6. CFAC shall maintain a log to verify that the visual surveys were performed. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer's initials. If any corrective action is required, the time, date, observer's initials, and any preventive or corrective action taken must be recorded in the log (ARM 17.8.1212). CFAC shall maintain on-site all records for a minimum of 5 years from the date of creation (ARM 17.8.1212).

**Reporting**

- O.7. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- O.8. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- O.9. The semi-annual reporting shall provide a summary of any source testing conducted during the period, and a summary of visual surveys and corrective actions taken as a result of visual surveys, including the results of any source tests conducted (ARM 17.8.1212).

**P. EU051 – SANDBLASTING ACTIVITIES – CR01**

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
P.1, P.4, P.6, P.7, P.9, P.10, P.11	Opacity	20%	Visual Surveys	Weekly	Semi-annual
P.2, P.4, P.6, P.7, P.9, P.10, P.11	Opacity	Reasonable Precautions	Visual Surveys	Weekly	Semi-annual
P.3, P.5, P.8, P.10, P.11	Particulate Matter	$E = 4.10 * P^{0.67}$	Normal Operations	Ongoing	Semi-annual

**Conditions**

- P.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from Sandblasting Activities-CR01 that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- P.2. CFAC 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 emission 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 (ARM 17.8.308(1)).
- P.3. CFAC shall not cause or authorize particulate matter to be discharged from any operation, process, or activity into the atmosphere in excess of the value calculated by  $E = 4.10 \times P^{0.67}$ , where E is the emission rate in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).

**Compliance Demonstration**

- P.4. Once, during any calendar week in which a unit with applicable opacity requirements operates, CFAC shall visually survey for any visible emissions. Visual Surveys shall occur during daylight hours while the unit is in operation.

If visible emissions are observed during the visual survey, CFAC must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 15% opacity based on the Method 9 source test, CFAC shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then CFAC shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The person conducting the visual survey shall record the results of the survey (including the results of any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve CFAC of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

- P.5. CFAC is required to maintain normal operations to monitor compliance with Section III.O.3 (ARM 17.8.1212)

### **Recordkeeping**

- P.6. All test reports shall be maintained on-site and submitted to the Department in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- P.7. CFAC shall maintain a log to verify that the visual surveys were performed. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer's initials. If any corrective action is required, the time, date, observer's initials, and any preventive or corrective action taken must be recorded in the log (ARM 17.8.1212). CFAC shall maintain on-site all records for a minimum of 5 years from the date of creation (ARM 17.8.1212).
- P.8. CFAC shall maintain on-site a sandblasting operations log documenting any sandblasting emissions which deviate from normal operations as specified in Section III.O.5. At a minimum, the sandblasting operations log shall include the required information, the date, and the initials of the documenting personnel (ARM 17.8.1212).

### **Reporting**

- P.9. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- P.10. The annual compliance certification report required by Section V.B shall contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- P.11. The semi-annual reporting shall provide (ARM 17.8.1212):
- a. A summary of the visual surveys and corrective actions taken as a result of visual surveys, including the results of any source tests conducted;
  - b. A summary of the sandblasting emissions log



**Q. EU052 – LECTROMELT FURNACE EMITTING UNIT – CR03**

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
Q.1, Q.3, Q.4, Q.6, Q.7, Q.8, Q.9, Q.10, Q.11	Opacity	20%	Visual Survey	Weekly	Semi-annual
			Operate and Maintain Baghouse (Appendix I)	Ongoing	Semi-annual
Q.2, Q.4, Q.5, Q.7, Q.9, Q.10, Q.11	Particulate Matter	$E = 4.10 * P^{0.67}$	Method 5	As Required by the Department and Section III.A.1	Semi-annual
			Operate and Maintain Baghouse (Appendix I)	Ongoing	Semi-annual

**Conditions**

- Q.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from the Lectromelt Furnace-CR03 that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- Q.2. The particulate emissions from process weight shall not exceed the value calculated by  $E = 4.10 * P^{0.67}$ , 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).

**Compliance Demonstration**

- Q.3. Once, during any calendar week in which a unit with applicable opacity requirements operates, CFAC shall visually survey for any visible emissions. Visual Surveys shall occur during daylight hours while the unit is in operation.
- If visible emissions are observed during the visual survey, CFAC must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 15% opacity based on the Method 9 source test, CFAC shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then CFAC shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The person conducting the visual survey shall record the results of the survey (including the results of any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve CFAC of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).
- Q.4. CFAC shall operate and maintain the baghouse in accordance with the Pollution Control Device Inspection & Maintenance Plan (Appendix I) (ARM 17.8.1213).
- Q.5. As required by the Department and Section III.A.1, CFAC shall perform a Method 5 test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.1213).

**Recordkeeping**

- Q.6. CFAC shall maintain on-site records of all inspection and maintenance activities performed on the baghouses in accordance with the Pollution Control Device Inspection and Maintenance Plan (Appendix I) and submit such records to the Department upon request (ARM 17.8.1212).
- Q.7. Method 5 test reports shall be maintained on-site and in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- Q.8. CFAC shall maintain a log to verify that the visual surveys were performed. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer’s initials. If any corrective action is required, the time, date, observer’s initials, and any preventive or corrective action taken must be recorded in the log (ARM 17.8.1212). CFAC shall maintain on-site all records for a minimum of 5 years from the date of creation (ARM 17.8.1212).

**Reporting**

- Q.9. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- Q.10. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- Q.11. The semi-annual compliance monitoring reports shall include a summary of (ARM 17.8.1212):
  - a. The results of any test conducted during the reporting period;
  - b. Any corrective actions taken as a result of the inspections and maintenance as required by the Pollution Control Device Inspection & Maintenance Plan (Appendix I);
  - c. Visual surveys and corrective actions taken as a result of visual surveys, including the results of any source tests conducted

**R. EU053 – ROD MILL/MATERIAL STORAGE/BATH CRUSHING EMITTING UNIT-CR04**

Condition(s)	Pollutant / Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
R.1, R.3, R.4, R.6, R.7, R.9, R.11, R.12	Opacity	20%	Visual Survey	Weekly	Semi-annual
			Operate and Maintain Baghouse (Appendix I)	Ongoing	Semi-annual
R.2, R.5, R.8, R.10, R.11, R.12	Particulate Matter	$E = 55 * P^{0.11} - 40$	CAM Plan (Appendix K)	Ongoing	Semi-annual

**Conditions**

- R.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from the Rod Mill/Material Storage/Bath Crushing Unit-CR04 that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).

- R.2. The particulate emissions from process weight shall not exceed the value calculated by  $E = 55.0 \times P^{0.11} - 40$ , 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).

### **Compliance Demonstration**

- R.3. CFAC shall operate and maintain the rod mill baghouse in accordance with the Pollution Control Device Inspection & Maintenance Plan (Appendix I) (ARM 17.8.1213).
- R.4. Once, during any calendar week in which a unit with applicable opacity requirements operates, CFAC shall visually survey for any visible emissions. Visual Surveys shall occur during daylight hours while the unit is in operation.

If visible emissions are observed during the visual survey, CFAC must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 15% opacity based on the Method 9 source test, CFAC shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then CFAC shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The person conducting the visual survey shall record the results of the survey (including the results of any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve CFAC of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

- R.5. CFAC shall comply with the Compliance Assurance Monitoring requirements of ARM 17.8 Subchapter 15, as approved by the Department and outlined in Appendix K – CAM Plan (ARM 17.8.1503).

### **Recordkeeping**

- R.6. CFAC shall maintain on-site records of all inspection and maintenance activities performed on the baghouses in accordance with the Pollution Control Device Inspection & Maintenance Plan (Appendix I) and submit such records to the Department upon request (ARM 17.8.1212).
- R.7. CFAC shall maintain a log to verify that the visual surveys were performed. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer's initials. If any corrective action is required, the time, date, observer's initials, and any preventive or corrective action taken must be recorded in the log (ARM 17.8.1212). CFAC shall maintain on-site all records for a minimum of 5 years from the date of creation (ARM 17.8.1212).
- R.8. CFAC shall maintain records as required by the CAM plan approved by the Department, and outlined in Appendix K (ARM 17.8.1503).

### **Reporting**

- R.9. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- R.10. CFAC shall comply with the reporting requirements of ARM 17.8 Subchapter 15, and in accord to the CAM Plan approved by the Department (ARM 17.8.1503).
- R.11. The annual compliance certification report required by Section V.B shall contain a certification statement for the above applicable requirements (ARM 17.8.1212).

R.12. The semi-annual compliance monitoring reports shall include (ARM 17.8.1212):

- a. A summary of any corrective actions taken as a result of the inspections and maintenance as required by the Pollution Control Device Inspection & Maintenance Plan (Appendix I).
- b. Visual surveys and corrective actions taken as a result of visual surveys, including the results of any source tests conducted

**S. EU054 – EU062 NATURAL GAS BOILER EMITTING UNITS**

**EU054 - Change House Boiler #1 - MP01**  
**EU055 - Change House Boiler #2 - MP02**  
**EU056 - Lab Boiler #1 - MP07**  
**EU057 - Machine Shop Boiler #1 - MP08**  
**EU058 - Machine Shop Boiler #2 - MP09**

**EU059 - Paste Plant Boiler #1 - MP11**  
**EU060 - Paste Plant Boiler #2 - MP12**  
**EU061 - Warehouse Boiler #1 - MP16**  
**EU062 - Warehouse Boiler #2 - MP17**

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
S.1, S.5, S.8, S.12, S.13	Opacity	20%	Visual Survey	Weekly	Semi-annual
S.2, S.6, S.9, S.12, S.13	Particulate Matter	$E = 1.026 \cdot H^{0.233}$	Natural Gas Combustion	Ongoing	Semi-annual
S.3, S.6, S.9, S.12, S.13	Sulfur in Fuel	50 gr/100 cu ft	Natural Gas Combustion	Ongoing	Semi-annual
S.4, S.7, S.10, S.11, S.12, S.13	40 CFR 63, Subpart DDDDD	40 CFR 63, Subpart DDDDD	40 CFR 63, Subpart DDDDD	Ongoing	40 CFR 63, Subpart DDDDD

**Conditions**

- S.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from the Change House Boilers #1-MP01, Change House Boiler #2-MP02, the Lab Boiler #1-MP07, Machine Shop Boiler #1-MP08, Machine Shop Boiler #2-MP09, Paste Plant Boiler #1-MP11, Paste Plant Boiler #2-MP12, Warehouse Boiler #1-MP16, and Warehouse Boiler #2-MP17, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- S.2. CFAC shall not cause or authorize particulate matter caused by combustion, from fuel burning equipment installed after November 23, 1968, to be discharged from any outdoor stack or chimney in excess of the value calculated by  $E = 1.026 \times H^{0.233}$ , where H is the heat input capacity in MMBtu per hour and E is the maximum allowable particulate emissions rate in lb/MMBtu (ARM 17.8.309).
- S.3. CFAC shall not burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions (ARM 17.8.322(5)).
- S.4. CFAC shall comply with the applicable requirements of 40 CFR 63, Subpart DDDDD, including applicable work practice standards (ARM 17.8.342).

## **Compliance Demonstration**

- S.5. Once, during any calendar week in which a unit with applicable opacity requirements operates, CFAC shall visually survey for any visible emissions. Visual Surveys shall occur during daylight hours while the unit is in operation.

If visible emissions are observed during the visual survey, CFAC must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 15% opacity based on the Method 9 source test, CFAC shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then CFAC shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The person conducting the visual survey shall record the results of the survey (including the results of any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve CFAC of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

- S.6. Monitoring compliance for III.S.2 and III.S.3 may be satisfied for their natural gas boilers by burning only natural gas. This does not preclude the Department from initiating an enforcement action if a Reference Method test indicates one of the limits is being violated (ARM 17.8.1213).
- S.7. CFAC shall comply with any applicable initial and continuous compliance requirements, testing, recordkeeping, and reporting requirements of 40 CFR 63, Subpart DDDDD (ARM 17.8.342, ARM 17.8.1213).

## **Recordkeeping**

- S.8. CFAC shall maintain a log to verify that the visual surveys were performed. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer's initials. If any corrective action is required, the time, date, observer's initials, and any preventive or corrective action taken must be recorded in the log (ARM 17.8.1212). CFAC shall maintain on-site all records for a minimum of 5 years from the date of creation (ARM 17.8.1212).
- S.9. CFAC shall maintain on-site a boiler operations log documenting any boiler stack specifications which deviate from normal operations as specified in Sections III.S.6. At a minimum, the boiler operations log shall include the required information, the date, and the initials of the documenting personnel (ARM 17.8.1212).
- S.10. CFAC shall comply with all applicable recordkeeping requirements of 40 CFR 63, Subpart DDDDD (ARM 17.8.342 and ARM 17.8.1212).

## **Reporting**

- S.11. CFAC shall comply with all applicable reporting requirements of 40 CFR 63, Subpart DDDDD (ARM 17.8.342 and ARM 17.8.1212).
- S.12. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements, including that only natural gas was combusted (ARM 17.8.1212).
- S.13. The semi-annual compliance certification report shall provide a summary of (ARM 17.8.1212):
- a. Any deviations from normal operations as indicated in Section III.S.9;

- b. Visual surveys and corrective actions taken as a result of visual surveys, including the results of any source tests conducted;
- c. A summary of compliance with 40 CFR 63, Subpart DDDDD

**T. EU063 – TRUCK, EQUIPMENT, AND HAUL ROAD EMISSIONS – MP05**

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
T.1, T.3, T.4, T.5, T.6, T.7, T.8	Opacity	20%	Visual Survey	Weekly	Semi-annual
T.2, T.3, T.4, T.5, T.6, T.7, T.8	Opacity	Reasonable Precautions	Visual Survey	Weekly	Semi-annual

**Conditions**

- T.1. CFAC 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 (ARM 17.8.308(1)).
- T.2. CFAC shall maintain all portions of the haul roads, access roads, parking lots, and general plant area as necessary to maintain compliance with the reasonable precautions limit in Section III.T.1. CFAC shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section III.T.1 (ARM 17.8.749).

**Compliance Demonstration**

- T.3. Once, during any calendar week in which a unit with applicable opacity requirements operates, CFAC shall visually survey for any visible emissions. Visual Surveys shall occur during daylight hours while the unit is in operation.

If visible emissions are observed during the visual survey, CFAC must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 15% opacity based on the Method 9 source test, CFAC shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then CFAC shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The person conducting the visual survey shall record the results of the survey (including the results of any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve CFAC of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

**Recordkeeping**

- T.4. CFAC shall maintain a log to verify that the visual surveys were performed. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer’s initials. If any corrective action is required, the time, date, observer’s initials, and any preventive or corrective action taken must be recorded in the log (ARM 17.8.1212). CFAC shall maintain on-site all records for a minimum of 5 years from the date of creation (ARM 17.8.1212).

T.5. All test reports shall be maintained on-site and in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

**Reporting**

T.6. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).

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

T.8. The semi-annual compliance reporting shall include a summary of visual surveys and corrective actions taken as a result of visual surveys, including the results of any source tests conducted (ARM 17.8.1212).

**U. EU064 – GASOLINE STORAGE TANK EMITTING UNIT – MP04**

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
U.1, U.3, U.5, U.6, U.7, U.8	Opacity	20%	Method 9	As Required by the Department and Section III.A.1	Semi-annual
U.2, U.4, U.6, U.8, U.9	Tanks	Submerged Fill	Log	Ongoing	Semi-annual

**Conditions**

U.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from any Gasoline Storage-MP04 that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).

U.2. CFAC shall load (fill) the gasoline storage tank only through a permanent submerged fill pipe, or shall equip the tank with a vapor loss control device (ARM 17.8.324(3)).

**Compliance Demonstration**

U.3. As required by the Department and Section III.A.1, CFAC shall perform a Method 9 test in accordance with the Montana Source Test Protocol and Procedures Manual. Each observation period shall be a minimum of 6 minutes, unless any one reading is 20% or greater, at which point the observation period shall be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is the shorter period of time (ARM 17.8.1213).

U.4. CFAC shall maintain of log of any instances in which the submerged fill pipe is altered or not used (ARM 17.8.1213).

**Recordkeeping**

U.5. All test reports shall be maintained on-site and in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

U.6. CFAC shall maintain a log as required in Section III.U.4. The log shall include the circumstance, date, and initials of documenting personnel (ARM 17.8.1213).

**Reporting**

U.7. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).

U.8. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

U.9. The semi-annual reporting shall provide (ARM 17.8.1212):

- a. A summary of the results from any source testing that was performed; and
- b. A summary of any instances when the submerged pipe was not used during loading operations.

**V. EU065 – SOW CASTING LINE**

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
V.1, V.3, V.5, V.6, V.7, V.8, V.9	Opacity	40%	Visual Survey	Weekly	Semi-annual
V.2, V.4, V.6, V.7, V.8, V.9	Particulate Matter	$E = 4.10 \times P^{0.67}$	CAM Plan (Appendix K)	Ongoing	Semi-annual

**Conditions**

V.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from the Sow Casting Line that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes (ARM 17.8.304(1)).

V.2. The particulate emissions from process weight shall not exceed the value calculated by  $E = 4.10 \times P^{0.67}$ , 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).

**Compliance Demonstration**

V.3. Once, during any calendar week in which a unit with applicable opacity requirements operates, CFAC shall visually survey for any visible emissions. Visual Surveys shall occur during daylight hours while the unit is in operation.

If visible emissions are observed during the visual survey, CFAC must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 15% opacity based on the Method 9 source test, CFAC shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then CFAC shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The person conducting the visual survey shall record the results of the survey (including the results of any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve CFAC of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).



- V.4. As required by the Department and Section III.A.1, CFAC shall perform a Method 5 test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.1213).

### **Recordkeeping**

- V.5. CFAC shall maintain a log to verify that the visual surveys were performed. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer's initials. If any corrective action is required, the time, date, observer's initials, and any preventive or corrective action taken must be recorded in the log (ARM 17.8.1212). CFAC shall maintain on-site all records for a minimum of 5 years from the date of creation (ARM 17.8.1212).
- V.6. CFAC shall maintain records in accord to the Montana Source Test Protocol and Procedures Manual (ARM 17.8.1212).

### **Reporting**

- V.7. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- V.8. The annual compliance certification report required by Section V.B shall contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- V.9. The semi-annual compliance monitoring reports shall contain (ARM 17.8.1212):
- a. A summary of visual surveys and corrective actions taken as a result of visual surveys, including the results of any source tests conducted
  - b. The results of any source tests conducted

#### **SECTION IV. NON-APPLICABLE REQUIREMENTS**

No Air Quality Administrative Rules of Montana (ARM) or Federal Regulations were identified by CFAC as not applicable to the facility or to a specific emissions unit at the time of the permit issuance (ARM 17.8.1214).

## 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 February 15 of each year, or more frequently if otherwise specified in an applicable requirement or elsewhere in the permit. Each certification must include the required information for the previous calendar year (i.e., January 1 – December 31).

3. Compliance certifications shall include the following:
  - a. The identification of each term or condition of the permit that is the basis of the certification;
  - b. The identification of the method(s) or other means used by the owner or operator for determining the status of compliance with each term and condition during the certification period, consistent with ARM 17.8.1212;
  - c. The status of compliance with each term and condition for the period covered by the certification, *including whether compliance during the period was continuous or intermittent* (based on the method or means identified in ARM 17.8.1213(7)(c)(ii), as described above); and
  - d. Such other facts as the Department may require to determine the compliance status of the source.
4. All compliance certifications must be submitted to the 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 Sec. 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 Sec. 7651g(a) of the FCAA;
  - d. The ability of the administrator to obtain information from a source pursuant to Sec. 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 Test 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 & O).

**D. Monitoring, Recordkeeping, and Reporting Requirements**

ARM 17.8, Subchapter 12, Operating Permit Program §1212(2)&(3)

1. Unless otherwise provided in this permit, the permittee shall maintain compliance monitoring records that include the following information:
  - a. The date, place as defined in the permit, and time of sampling or measurement;
  - b. The date(s) analyses were performed;
  - c. The company or entity that performed the analyses;
  - d. The analytical techniques or methods used;
  - e. The results of such analyses; and
  - f. The operating conditions at the time of sampling or measurement.
2. The permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. All monitoring data, support information, and required reports and summaries may be maintained in computerized form at the plant site if the information is made available to Department personnel upon request, which may be for either hard copies or computerized format. Strip-charts must be maintained in their original form at the plant site and shall be made available to Department personnel upon request.

3. The permittee shall submit to the Department, at the addresses located in the Notification Addresses Appendix of this permit, reports of any required monitoring by February 15 and August 15 of each year, or more frequently if otherwise specified in an applicable requirement or elsewhere in the permit. The monitoring report submitted on February 15 of each year must include the required monitoring information for the period of July 1 through December 31 of the previous year. The monitoring report submitted on August 15 of each year must include the required monitoring information for the period of January 1 through June 30 of the current year. All instances of deviations from the permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official, consistent with ARM 17.8.1207.

**E. Prompt Deviation Reporting**

ARM 17.8, Subchapter 12, Operating Permit Program §1212(3)(b)

The permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions 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 to the Department within the following timeframes (unless otherwise specified in an applicable requirement):

1. For deviations which may result in emissions potentially in violation of permit limitations:
  - a. An initial phone notification (or faxed or electronic notification) describing the incident within 24 hours (or the next business day) of discovery; and,
  - b. A follow-up written, faxed, or electronic report within 30 days of discovery of the deviation that describes the probable cause of the reported deviation and any corrective actions or preventative measures taken.
2. For deviations attributable to malfunctions, deviations shall be reported to the Department in accordance with the malfunction reporting requirements under ARM 17.8.110; and
3. For all other deviations, deviations shall be reported to the Department via a written, faxed, or electronic report within 90 days of discovery (as determined through routine internal review by the permittee).

Prompt deviation reports do not need to be resubmitted with regular semiannual (or other routine) reports, but may be referenced by the date of submittal.

**F. Emergency Provisions**

ARM 17.8, Subchapter 12, Operating Permit Program §1201(13) and §1214(5), (6)&(8)

1. An “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation and causes the source to exceed a technology-based emission limitation under this permit due to the unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of reasonable preventive maintenance, careless or improper operation, or operator error.

2. An emergency constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the permittee demonstrates through properly signed, contemporaneous logs, or other relevant evidence, that:
  - a. An emergency occurred and the permittee can identify the cause(s) of the emergency;
  - b. The permitted facility was at the time being properly operated;
  - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in the permit; and
  - d. The permittee submitted notice of the emergency to the Department within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirements of ARM 17.8.1212(3)(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 a Montana Air Quality 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)

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

1. Additional applicable requirements under the FCAA become applicable to the facility when the permit has a remaining term of 3 or more years. Reopening and revision of the permit shall be completed not later than 18 months after promulgation of the applicable requirement. No reopening is required under ARM 17.8.1228(1)(a) if the effective date of the applicable requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms or conditions have been extended pursuant to ARM 17.8.1220(12) or 17.8.1221(2);
2. Additional requirements (including excess emission requirements) become applicable to an affected source under the Acid Rain Program. Upon approval by the administrator, excess emission offset plans shall be deemed incorporated into the permit;
3. The Department or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit; or
4. The administrator or the Department determines that the permit must be revised or revoked and reissued to ensure compliance with the applicable requirements.

#### **M. Permit Expiration and Renewal**

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(g), §1220(11)&(12), and §1205(2)(d)

1. This permit is issued for a fixed term of 5 years.
2. Renewal of this permit is subject to the same procedural requirements that apply to permit issuance, including those for application, content, public participation, and affected state and administrator review.
3. Expiration of this permit terminates the permittee's right to operate unless a timely and administratively complete renewal application has been submitted consistent with ARM 17.8.1221 and 17.8.1205(2)(d). If a timely and administratively complete application has been submitted, all terms and conditions of the permit, including the application shield, remain in effect after the permit expires until the permit renewal has been issued or denied.
4. For renewal, the permittee shall submit a complete air quality operating permit application to the Department not later than 6 months prior to the expiration of this permit, unless otherwise specified. If necessary to ensure that the terms of the existing permit will not lapse before renewal, the Department may specify, in writing to the permittee, a longer time period for submission of the renewal application. Such written notification must be provided at least 1 year before the renewal application due date established in the existing permit.

#### **N. Severability Clause**

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(i)&(l)

1. The administrative appeal or subsequent judicial review of the issuance by the Department of an initial permit under this subchapter shall not impair in any manner the underlying applicability of all applicable requirements, and such requirements continue to apply as if a final permit decision had not been reached by the Department.
2. If any provision of a permit is found to be invalid, all valid parts that are severable from the invalid part remain in effect. If a provision of a permit is invalid in one or more of its applications, the provision remains in effect in all valid applications that are severable from the invalid applications.

**O. Transfer or Assignment of Ownership**

ARM 17.8, Subchapter 12, Operating Permit Program §1225(2)&(4)

1. If an administrative permit amendment involves a change in ownership or operational control, the applicant must include in its request to the Department a written agreement containing a specific date for the transfer of permit responsibility, coverage and liability between the current and new permittee.
2. The permit shield provided for in 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 Test Protocol**

ARM 17.8, Subchapter 1, General Provisions §106

The permittee shall comply with ARM 17.8.106.

**T. Malfunctions**

ARM 17.8, Subchapter 1, General Provisions §110

The permittee shall comply with ARM 17.8.110.

**U. Circumvention**

ARM 17.8, Subchapter 1, General Provisions §111

The permittee shall comply with ARM 17.8.111.

**V. Motor Vehicles**

ARM 17.8, Subchapter 3, Emission Standards §325

The permittee shall comply with ARM 17.8.325.

## **W. Annual Emissions Inventory**

### ARM 17.8, Subchapter 5, Air Quality Permit Application, Operation and Open Burning Fees §505 (STATE ONLY)

The permittee shall supply the Department with annual production and other information for all emission units necessary to calculate actual or estimated actual amount of air pollutants emitted during each calendar year. Information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request, unless otherwise specified in this permit. Information shall be in the units required by the Department.

## **X. Open Burning**

### ARM 17.8, Subchapter 6, Open Burning §604, 605 and 606

The permittee shall comply with ARM 17.8.604, 605 and 606.

## **Y. Montana Air Quality Permits**

### ARM 17.8, Subchapter 7, Permit, Construction and Operation of Air Contaminant Sources §745 and 764

1. Except as specified, no person shall construct, install, modify or use any air contaminant source or stack associated with any source without first obtaining a permit from the Department or Board. A permit is not required for those sources or stacks as specified by ARM 17.8.744(1)(a)-(k).
2. The permittee shall comply with ARM 17.8.743, 744, 745, 748, and 764.
3. ARM 17.8.745(1) specifies de minimis changes as construction or changed conditions of operation at a facility holding a Montana Air Quality Permit (MAQP) issued under Chapter 8 that does not increase the facility's potential to emit by more than 5 tons per year of any pollutant, except
  - a. Any construction or changed condition that would violate any condition in the facility's existing MAQP or any applicable rule contained in Chapter 8 is prohibited, except as provided in ARM 17.8.745(2);
  - b. Any construction or changed conditions of operation that would qualify as a major modification under Subchapters 8, 9 or 10 of Chapter 8;
  - c. Any construction or changed condition of operation that would affect the plume rise or dispersion characteristic of emissions that would cause or contribute to a violation of an ambient air quality standard or ambient air increment as defined in ARM 17.8.804;
  - d. Any construction or improvement project with a potential to emit more than 5 tons per year may not be artificially split into smaller projects to avoid Montana Air Quality Permitting; or
  - e. Emission reductions obtained through offsetting within a facility are not included when determining the potential emission increase from construction or changed conditions of operation, unless such reductions are made federally enforceable.
4. Any facility making a de minimis change pursuant to ARM 17.8.745(1) shall notify the Department if the change would include a change in control equipment, stack height, stack diameter, stack gas temperature, source location or fuel specifications, or would result in an

increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)

**Z. National Emission Standard for Asbestos**

40 CFR, 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.

## APPENDICES

## Appendix A INSIGNIFICANT EMISSION UNITS (IEUs)

**Disclaimer:** The information in this appendix is not State or Federally enforceable, but is presented to assist CFAC, 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 five 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 originally provided by CFAC.

<b>Emission Unit ID</b>	<b>Description</b>
IEU03	Collector Bar Shotblasting - CR02
IEU04	Anode Debris Storage - CR05
IEU05	Anode Abrader - CR06
IEU06	Shed 11 Pot Rebuild / Masonry Mixer - CR08
IEU07	Diesel Storage Tanks - MP03
IEU08	Natural Gas Space Heaters - MP06
IEU09	Open Burning - MP10
IEU10	Plant Site Sanitary Landfill - MP13
IEU11	Propane Storage - MP14
IEU12	Waste Oil Heat Recovery - MP18
IEU13	MSDS Chemicals / Plant-wide Usage - MP19
IEU14	Carpenter Shop Cyclone



## 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 CFAC;
- (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 which the Department has determined to be similar to those revisions set forth in (a)-(e), above.

"Applicable requirement" means all of the following as they apply to emission units in a source requiring an air quality operating permit (including requirements that have been promulgated or approved by the Department or the administrator through rule making at the time of issuance of the air quality operating permit, but have future-effective compliance dates, provided that such requirements apply to sources covered under the operating permit):

- (a) any standard, rule, or other requirement, including any requirement contained in a consent decree or judicial or administrative order entered into or issued by the Department, that is contained in the Montana state implementation plan approved or promulgated by the administrator through rule making under Title I of the FCAA;
- (b) any federally enforceable term, condition or other requirement of any Montana Air Quality Permit issued by the Department under Subchapters 7, 8, 9 and 10 of this chapter, or pursuant to regulations approved or promulgated through rule making under Title I of the FCAA, including parts C and D;
- (c) any standard or other requirement under Section 7411 of the FCAA, including Section 7411(d);
- (d) any standard or other requirement under Section 7412 of the FCAA, including any requirement concerning accident prevention under Section 7412(r)(7), but excluding the contents of any risk management plan required under Section 7412(r);
- (e) any standard or other requirement of the acid rain program under Title IV of the FCAA or regulations promulgated thereunder;
- (f) any requirements established pursuant to Section 7661c(b) or Section 7414(a)(3) of the FCAA;

- (g) any standard or other requirement governing solid waste incineration, under Section 7429 of the FCAA;
- (h) any standard or other requirement for consumer and commercial products, under Section 7511b(e) of the FCAA;
- (i) any standard or other requirement for tank vessels, under Section 7511b(f) of the FCAA;
- (j) any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the FCAA, unless the administrator determines that such requirements need not be contained in an air quality operating permit;
- (k) any national ambient air quality standard or increment or visibility requirement under part C of Title I of the FCAA, but only as it would apply to temporary sources permitted pursuant to Section 7661c(e) of the FCAA; or
- (l) any federally enforceable term or condition of any air quality open burning permit issued by the Department under Subchapter 6.

**"Department"** means the Montana Department of Environmental Quality.

**"Emissions unit"** means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under Section 7412(b) of the FCAA. This term is not meant to alter or affect the definition of the term "unit" for purposes of Title IV of the FCAA.

**"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 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 which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

**"General air quality operating permit"** or **"general permit"** means an air quality operating permit that meets the requirements of ARM 17.8.1222, covers multiple sources in a source category, and is issued in lieu of individual permits being issued to each source.

**"Hazardous air pollutant"** means any air pollutant listed as a hazardous air pollutant pursuant to Section 112(b) of the FCAA.

**"Non-federally enforceable requirement"** means the following as they apply to emission units in a source requiring an air quality operating permit:

- (a) any standard, rule, or other requirement, including any requirement contained in a consent decree, or judicial or administrative order entered into or issued by the Department, that is not contained in the Montana state implementation plan approved or promulgated by the administrator through rule making under Title I of the FCAA;

- (b) any term, condition or other requirement contained in any Montana Air Quality 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:

ARM	Administrative Rules of Montana
ASTM	American Society of Testing Materials
BACT	Best Available Control Technology
BDT	bone dry tons
Btu	British thermal unit
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Department of Environmental Quality
dscf	dry standard cubic foot
dscfm	dry standard cubic foot per minute
EEAP	Emergency Episode Action Plan
EPA	U.S. Environmental Protection Agency
EPA Method	Test methods contained in 40 CFR 60, Appendix A
EU	emissions unit
FCAA	Federal Clean Air Act
gr	grains
HAP	hazardous air pollutant
IEU	insignificant emissions unit
Mbdft	thousand board feet
Method 5	40 CFR 60, Appendix A, Method 5
Method 9	40 CFR 60, Appendix A, Method 9
MMbdft	million board feet
MMBtu	million British thermal units
NO <sub>x</sub>	oxides of nitrogen
NO <sub>2</sub>	nitrogen dioxide
O <sub>2</sub>	oxygen
Pb	lead
PM	particulate matter
PM <sub>10</sub>	particulate matter less than 10 microns in size
psi	pounds per square inch
scf	standard cubic feet
SIC	Source Industrial Classification
SO <sub>2</sub>	sulfur dioxide
SO <sub>x</sub>	oxides of sulfur
tpy	tons per year
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

United States EPA  
Air Program Coordinator  
Region VIII, Montana Office  
10 W. 15<sup>th</sup> 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 CFAC, permitting authority, inspectors, and the public.

**Direction to Plant:** CFAC is adjacent to the community of Columbia Falls, Montana, with a physical address of 2000 Aluminum Drive.

**Safety Equipment Required:** Safety Equipment required to enter the facility are: hard hat, protective eyewear, and safety shoes or boots. Additional personal protective equipment may be necessary in certain areas, such as respiratory protection.

**Facility Plot Plan:** A copy of the facility plot plan was submitted with the operating permit application on June 12, 1996.

## **Appendix E CFAC MACT IMPLEMENTATION PLAN**

Although the hard copy of Appendix E has been removed from the permit, the contents of Appendix E, CFAC MACT Implementation Plan remain as applicable requirements as stated in the Title V Operating Permit #OP2655-05. To receive a hard copy of this appendix, please contact one of the following:

The 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

Columbia Falls Aluminum Company, LLC  
2000 Aluminum Drive  
Columbia Falls, Montana 59912  
Phone #: (406) 892-8211



## **Appendix F      CFAC MACT QUICK REFERENCE GUIDE**

Although the hard copy of Appendix F has been removed from the permit, the contents of Appendix F, CFAC MACT Quick Reference Guide remain as applicable requirements as stated in the Title V Operating Permit #OP2655-05. To receive a hard copy of this appendix, please contact one of the following:

The 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

Columbia Falls Aluminum Company, LLC  
2000 Aluminum Drive  
Columbia Falls, Montana 59912  
Phone #: (406) 892-8211

**Appendix G    STARTUP, SHUTDOWN AND MALFUNCTION PLAN (SSM)**

Although the hard copy of Appendix G has been removed from the permit, the contents of Appendix G, Startup, Shutdown and Malfunction Plan (SSM) remain as applicable requirements as stated in the Title V Operating Permit #OP2655-05. To receive a hard copy of this appendix, please contact one of the following:

The 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

Columbia Falls Aluminum Company, LLC  
2000 Aluminum Drive  
Columbia Falls, Montana 59912  
Phone #: (406) 892-8211

## Appendix H POTLINE ROOF VENT OPACITY COMPLIANCE DEMONSTRATION

### Method 9 Visual Observations on Potroom Roofs

Method 9 visual observations shall be performed on portions of each potline's roof in order to demonstrate compliance with ARM 17.8.332. Observations shall be made on operating potlines (the Department interprets this as any potline with any operation in any quarterly period). Outlined below is similar in concept to EPA Method 14 where a manifold extracts emissions from either a 35-meter (115 feet) length of a roofline, or from 8% length of the roofline to determine compliance with emission standards for the entire potline. CFAC proposes to perform Method 9 observations on the following roofs:

- Approximately 50% of Room 1 length (457 ft, representing potline 1)
- Approximately 35% of Room 3 length (321 ft, representing potline 2)
- Approximately 35% of Room 6 length (321 ft, representing potline 3)
- Approximately 35% of Room 7 length (321 ft, representing potline 4)
- Approximately 35% of Room 10 length (321 ft, representing potline 5)

Specifically, CFAC proposes to demonstrate compliance with ARM 17.8.332 by performing quarterly Method 9 visual observations on operating potlines as described below. Each Method 9 observation period will be a minimum of 6 minutes unless any one reading is greater than 10%; then the observation period will be a minimum of 20 minutes.

**Room 1 (potline 1):** Method 9 observations will be taken by an observer located on the Room 2 roof, looking westward. Method 9 observations will be taken at more than one location along the north 50% of Room 1. The Method 9 observation results will be averaged to produce a final result.

**Room 3 (potline 2):** Method 9 observations will be taken by an observer located on the staircase to the Room 4 roof. The west plant ore silos will serve as a backdrop for the Method 9 observations. The ore silos provide a backdrop, which is approximately 321 feet, or approximately 35% of the total length of the Room 3 roof. Method 9 observations will be taken at more than one location along the north 35% of Room 3. The Method 9 observation results will be averaged to produce a final result.

**Room 6 (potline 3):** Method 9 observations will be taken by an observer located on the staircase to the Room 5 roof. The east plant ore silos will serve as a backdrop for the Method 9 observations. The ore silos provide a backdrop, which is approximately 321 feet, or approximately 35% of the total length of the Room 6 roof. Method 9 observations will be taken at more than one location along the north 35% of Room 3. The Method 9 observation results will be averaged to produce a final result.

**Room 7 (potline 4):** Method 9 observations will be taken by an observer located on the staircase to the Room 8 roof. The east plant ore silos will serve as a backdrop for the Method 9 observations. The ore silos provide a backdrop, which is approximately 321 feet, or approximately 35% of the total length of the Room 7 roof. Method 9 observations will be taken at more than one location along the north 35% of Room 7. The Method 9 observation results will be averaged to produce a final result.

**Room 10 (potline 5):** Method 9 observations will be taken by an observer located on the staircase to the Room 9 roof, looking eastward. Method 9 observations will be taken at more than one location along the north 35% of Room 10. The Method 9 observation results will be averaged to produce a final result.

CFAC shall perform daily visual surveys in a manner similar to the Method 9 procedures outlined above and it is understood by all parties that these daily visual observations are not Method 9 observations.

## **Appendix I    Pollution Control Device Inspection & Maintenance Plan**

Although the hard copy of Appendix I has been removed from the permit, the contents of Appendix I Pollution Control Device Inspection and Maintenance Plan remain as applicable requirements as stated in the Title V Operating Permit #OP2655-05. To receive a hard copy of this appendix, please contact one of the following:

The 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

Columbia Falls Aluminum Company, LLC  
2000 Aluminum Drive  
Columbia Falls, Montana 59912  
Phone #: (406) 892-8211

**Appendix J 62 FR 52383**

<http://www.epa.gov/EPA-AIR/1997/October/Day-07/a25882.htm>

## Appendix K CAM Plan

**Emitting Units:** EU001-EU011, EU013-EU015, EU017, EU020-EU023, and EU053

**Pollutant:** Particulate Matter

**Control Device:** Baghouse

**Emission Limit:** ARM 17.8.310

**Monitoring Approach:** Key elements of the monitoring approach for these CAM applicable emitting units are contained in Table I. Complete copies of the original CAM plan submittal, and any subsequent CAM plan revision(s), is available from the Department upon request.

### Plan Status

Pursuant to ARM 17.8.1510, the Department may condition the approval on the owner or operator collecting additional data on the indicators to be monitored for a pollutant-specific emissions unit, including required compliance or performance testing, to confirm the ability of the monitoring to provide data that are sufficient to satisfy the requirements of this subchapter and to confirm the appropriateness of an indicator range(s) or designated condition(s) proposed to satisfy ARM 17.8.1504(1)(b) and (c) and consistent with the schedule in ARM 17.8.1508(4).

Pursuant to ARM 17.8.1508(4), if the monitoring submitted by the owner or operator requires installation, testing, or other necessary activities prior to use of the monitoring for purposes of this subchapter, the owner or operator shall include an implementation plan and schedule for completing these or any other appropriate activities prior to use of the monitoring.

The Department accepts daily visual opacity observations as an indicator of the baghouses meeting the process weight rule. Although correlation between opacity and rate of particulate emissions has not been developed for this source, the process weight rule allows for an emissions level which the Department would expect would create visible emissions. Therefore, because the excursion level is defined as any visible emissions, the Department approves of this portion of the CAM Plan for process weight rule demonstration.

However, the Department will require that the appropriate differential pressure ranges be determined after CFAC has collected additional data to confirm the appropriate pressure differential range for each baghouse. CFAC proposed to commence monitoring as expeditiously as practicable after Department approval but no later than 60 days after Department approval of the permit, or within 60 days of plant restart, whichever is later. Further, the Department will require testing and monitoring to confirm that a combination of visual emissions and pressure drop will be able to assure compliance with those units which have a 0.02 grain per dry standard cubic foot limit. An additional monitoring method may be required.

After CFAC has confirmed the differential pressure operating ranges, an amended CAM Plan shall be submitted with the differential pressure ranges specified, and additional monitoring methods as may be determined necessary. The Department expects this submittal no later than after 180 days of operation.

Table 1 is presented on the following page

<b>Table I</b>	
<b>A. General Criteria</b>	
<b>Indicator</b>	Opacity (approved for process weight rule)
<b>Measurement Approach</b>	Visible emissions from the affected baghouse will be observed daily during source operation.
<b>Indicator Range</b>	An excursion is initiated when an observation yields visible opacity or when the differential pressure is below or above the indicator operating range. An excursion triggers an inspection and possible corrective action.
<b>B. Performance Criteria</b>	
<b>Data Representativeness</b>	Visual observers will be educated in the general procedures for determining the presence and magnitude of visible emissions, but not necessarily required to be certified to perform Method 9 observations.
<b>Verification of Operational Status</b>	CAM monitoring is not required when the source is not in operation. When a source is not operating during a 24-hour period, it will be noted as such on the daily inspection sheet. Visible emissions will be monitored and recorded daily by trained staff during source operation.
<b>Quality Assurance/Quality Control</b>	Training and review of visual observation procedures will be done initially and as needed thereafter.
<b>Monitoring Frequency</b>	Daily visual observation, once per calendar day, during source operation.
<b>Data Collection Procedures</b>	Visual Observations will be classified as “no opacity observed” or “opacity observed”. All results will be recorded on a log sheet and kept on site.
<b>Averaging Period</b>	None (once daily readings)
<b>Monitoring Initiation</b>	The monitoring shall commence as expeditiously as practicable after Department approval but no later than 60 days after Department approval of the permit or within 60 days of plant restart, whichever is later.

<b>Table II</b>	
<b>A. General Criteria</b>	
<b>Indicator</b>	Pressure Drop across tube sheet (installation and additional data collection required)
<b>Measurement Approach</b>	The baghouse pressure gauges will be monitored and recorded daily during source operation.
<b>Indicator Range</b>	An excursion is initiated when an observation yields differential pressure is below or above the indicator operating range. An excursion triggers an inspection and possible corrective action.
<b>B. Performance Criteria</b>	
<b>Data Representativeness</b>	Pressure drop across the baghouse will be measured using the baghouse pressure gauges. The minimum accuracy of the device will be +/- 1.0 inch of water.
<b>Verification of Operational Status</b>	CAM monitoring is not required when the source is not in operation. When a source is not operating during a 24-hour period, it will be noted as such on the daily inspection sheet. Pressure drop will be monitored and recorded daily by trained staff during source operation.
<b>Quality Assurance/Quality Control</b>	Differential pressure observations will be conducted by staff trained to meet the CAM monitoring requirements.  The pressure gauges must be calibrated and checked according to manufacturer recommendations, or as otherwise approved in writing by the Department.
<b>Monitoring Frequency</b>	Daily differential pressure once per calendar day, during source operation.
<b>Data Collection Procedures</b>	Inlet and outlet of the baghouse shall be monitored using differential pressure gauges. The pressure differential shall be recorded daily (when in operation). All results will be recorded on a logsheet and kept on site.
<b>Averaging Period</b>	None (once daily readings)
<b>Monitoring Initiation</b>	The monitoring shall commence as expeditiously as practicable after Department approval but no later than 60 days after Department approval of the permit or within 60 days of plant restart, whichever is later.