17.8.301 DEFINITIONS

For purposes of this subchapter, the following definitions apply:

(1) "112(g) exemption" means a document issued by the department on a case-by-case basis, finding that a major source of HAP meets the criteria contained in 40 CFR 63.41 (definition of "construct a major source", (2) (i) through (vi)), and is thus exempt from the requirements of 42 USC 7412(g).

(2) "Airborne particulate matter" means any particulate matter discharged into the outdoor atmosphere which is not discharged from the normal exit of a stack or chimney for which a source test can be performed in accordance with 40 CFR Part 60, Appendix A, method 5 (determination of particulate emissions from stationary sources).
(3) "Best available control technology (BACT) " means an emission limitation (including a visible emission standard), based on the maximum degree of reduction for each air pollutant which would be emitted from any source or alteration which the department, on a case-by-case basis, taking into account energy, environment, and economic impacts and other costs, determines is achievable for such sources or alterations through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such air contaminant. In no event shall application of BACT result in emission of any air contaminant which would exceed the emissions allowed by any applicable standard under this chapter. If the department determines that technological or economic limitations on the application of measurement methodology to a particular class of sources or alterations would make the imposition of an emission standard infeasible, it may instead prescribe a design, equipment, work practice or operational standard or combination thereof, to require the application of BACT. Such standard shall, to the degree possible, set forth the emission reduction achievable by

implementation of such design, equipment, work practice or operation and shall provide for compliance by means which achieve equivalent results.

(4) "Beginning actual construction" means, in general, initiation of physical on-site construction activities of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures.

(5) "Building, structure, facility, or installation" means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same major group (i.e., which have the same two-digit code) as described in the standard industrial classification manual, 1987.

(6) "Construct a major source of HAP" means:

(a) to fabricate, erect, or install a major source of HAP; or

(b) to reconstruct a major source of HAP, by replacing components at an existing process or production unit that in and of itself emits or has the potential to emit ten tons per year of any HAP, or 25 tons per year of any combination of HAP, whenever:

(i) the fixed capital cost of the new components exceeds 50% of the fixed capital cost that would be required to construct a comparable process or production unit; and

(ii) it is technically and economically feasible for the reconstructed major source to meet the applicable maximum achievable control technology emission limitation for new sources established under 40 CFR 63 Subpart B.
 (7) "Existing fuel burning equipment" means fuel burning equipment constructed or installed prior to November 23, 1968.

(8) "Greenfield site" means a contiguous area under common control that is an undeveloped site.

(9) "Hazardous air pollutant" ("HAP") means any air pollutant listed in or pursuant to 42 USC 7412(b).

(10) "Lowest achievable emission rate" ("LAER") means, for any source, that rate of emissions which reflects:
 (a) the most stringent emission limitation which is contained in the implementation plan of any state for such class or category of source, unless the owner or operator of the proposed source demonstrates that such limitations are not achievable: or

(b) the most stringent emission limitation which is achieved in practice by such class or category of source, whichever is more stringent. In no event shall the application of this term permit a proposed new or modified source to emit any pollutant in excess of the amount allowable under applicable new source standards of performance under 40 CFR Parts 60 and 61.

(11) "Major source of HAP" means:

(a) at any greenfield site, a stationary source or group of stationary sources which is located within a contiguous area and under common control and which emits or has the potential to emit ten tons per year of any HAP or 25 tons per year of any combination of HAP; or

(b) at any developed site, a new process or production unit which in and of itself emits or has the potential to emit ten tons per year of any HAP or 25 tons per year of any combination of HAP.

(12) "Maximum achievable control technology" ("MACT") means the emission limitation which is not less stringent than the emission limitation achieved in practice by the best controlled similar source, and which reflects the maximum degree of reduction in emissions that the department, taking into consideration the cost of achieving such emission reduction, and any nonair quality health and environmental impacts and energy requirements, determines is achievable by the constructed or reconstructed major source of HAP.

(13) "New fuel burning equipment" means fuel burning equipment constructed, installed or altered after November 23, 1968.

(14) "Notice of MACT approval" means a document issued by the department containing all federally enforceable conditions necessary to enforce MACT or other control technologies such that the MACT emission limitation is met. (15) "Process or production unit" means any collection of structures and/or equipment, that processes, assembles, applies, or otherwise uses material inputs to produce or store an intermediate or final product. A single facility may contain more than one process or production unit.

(16) "Process weight" means the total weight of all materials introduced into any specific process which may cause emissions. Solid fuels charged will be considered as part of the process weight, but liquid and gaseous fuels and combustion air will not.

(17) "Process weight rate" means the rate established as follows:

(a) for continuous or long-run steady-state operations, the total process weight for the entire period of continuous operation or for a typical portion thereof, divided by the number of hours of such period or portion thereof;
(b) for cyclical or batch operations, the total process weight for a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period. Where the nature of any process or operation or the design of any equipment is such as to permit more than one interpretation of this definition, the interpretation that results in the minimum value for allowable emissions shall apply.

(18) "Reasonable precautions" mean any reasonable measures to control emissions of airborne particulate matter. Determination of what is reasonable will be accomplished on a case-by-case basis taking into account energy, environmental, economic, and other costs.

(19) "Reasonably available control technology" means devices, systems, process modifications, or other apparatus or techniques that are determined on a case-by-case basis to be reasonably available, taking into account the necessity of imposing such controls in order to attain and maintain a national or Montana ambient air quality standard, the social, environmental, and economic impact of such controls, and alternative means of providing for attainment and maintenance of such standard.

History: <u>75-2-111</u>, <u>75-2-203</u>, <u>75-2-204</u>, MCA; <u>IMP</u>, <u>75-2-203</u>, MCA; <u>NEW</u>, 1993 MAR p. 2530, Eff. 10/29/93; <u>TRANS</u>, from DHES, 1996 MAR p. 2285; <u>AMD</u>, 1999 MAR p. 1658, Eff. 7/23/99; <u>AMD</u>, 2001 MAR p. 976, Eff. 6/8/01; <u>AMD</u>, 2008 MAR p. 2267, Eff. 10/24/08.

17.8.302 INCORPORATION BY REFERENCE

(1) For the purposes of this subchapter, the board adopts and incorporates by reference the following:

(a) 40 CFR Part 60, pertaining to standards of performance for new stationary sources and modifications, with the following exceptions:

(i) 40 CFR 60.1500 through 1940 and tables 1 through 8 (subpart BBBB), emission guidelines for existing small municipal waste combustion units, are not incorporated by reference;

- (b) 40 CFR Part 61, pertaining to emission standards for hazardous air pollutants;
- (c) 40 CFR Part 63, pertaining to emission standards for hazardous air pollutant source categories;

(d) 40 CFR 81.327, pertaining to the air quality attainment status designations for Montana;

(e) ARM Title 17, chapter 53, subchapter 5, pertaining to the identification and listing of hazardous waste; and

(f) the Standard Industrial Classification Manual (1987), Office of Management and Budget (PB 87-100012), pertaining to a system of industrial classification and definition based upon the composition and structure of the economy.

(2) A copy of materials incorporated by reference in this subchapter is available for public inspection and copying at the Department of Environmental Quality, 1520 E. 6th Ave., P.O. Box 200901, Helena, MT 59620-0901.

(3) Copies of federal materials also may be obtained from:

(a) National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161; phone: (800) 553-6847 or (703) 605-6000; fax: (703) 605-6900; e-mail: <u>orders@ntis.gov;</u> web: <u>http://www.ntis.gov;</u>

(b) National Service Center for Environmental Publications (NSCEP), P.O. Box 42419, Cincinnati, OH 45242-0419; phone: (800) 490-9198 or (513) 489-8190; fax: (513) 489-8695; e-mail: <u>ncepimal@one.net;</u> web: http://www.epa.gov/ncepihom;

(c) U.S. Government Printing Office, Information Dissemination (Superintendent of Documents), P.O. Box 371954, Pittsburgh, PA 15250-7954; phone: (866) 512-1800 or (202) 512-1800; fax: (202) 512-2104; e-mail: orders@gpo.gov; web: http://www.gpoaccess.gov; and

(d) the EPA regional office libraries listed at

http://www.epa.gov/natlibra/libraries.htm.

(4) Copies of the CFR may be obtained from the U.S. Government Printing Office, as described in (3)(c). History: <u>75-2-111, 75-2-203,</u> MCA; IMP, <u>75-2-203,</u> MCA; <u>NEW,</u> 1993 MAR p. 2530, Eff. 10/29/93; <u>AMD,</u> 1994 MAR p. 2828, Eff. 10/28/94; <u>AMD,</u> 1995 MAR p. 1572, Eff. 8/11/95; <u>TRANS,</u> from DHES, 1996 MAR p. 2285; <u>AMD,</u> 1996 MAR p. 2298, Eff. 8/23/96; <u>AMD,</u> 1997 MAR p. 1191, Eff. 7/8/97; <u>AMD,</u> 1997 MAR p. 1581, Eff. 9/9/97; <u>AMD,</u> 1998 MAR p. 1725, Eff. 6/26/98; <u>AMD,</u> 1998 MAR p. 3106, Eff. 11/20/98; <u>AMD,</u> 1999 MAR p. 2250, Eff. 10/8/99; <u>AMD,</u> 2000 MAR p. 1316, Eff. 5/26/00; <u>AMD,</u> 2001 MAR p. 1468, Eff. 8/10/01; <u>AMD,</u> 2001 MAR p. 2022, Eff. 10/12/01; <u>AMD,</u> 2002 MAR p. 1747, Eff. 6/28/02; <u>AMD,</u> 2003 MAR p. 9, Eff. 12/27/02; <u>AMD,</u> 2003 MAR p. 645, Eff. 4/11/03; <u>AMD,</u> 2005 MAR p. 959, Eff. 6/17/05; <u>AMD,</u> 2006 MAR p. 1956, Eff. 8/11/06; <u>AMD,</u> 2007 MAR p. 1663, Eff. 10/26/07.

17.8.304 VISIBLE AIR CONTAMINANTS

(1) No person may 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. The provisions of this section do not apply to transfer of molten metals or emissions from transfer ladles.

(2) No person may 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.

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

- (4) This rule does not apply to emissions from:
- (a) wood-waste burners;
- (b) incinerators;
- (c) motor vehicles;
- (d) those new stationary sources listed in ARM 17.8.340 for which a visible emission standard has been promulgated;

(e) residential solid-fuel combustion devices such as fireplaces and wood or coal stoves. (History: 75-2-111,

(f) recovery furnaces at kraft pulp mills.

75-2-203, MCA; <u>IMP</u>, 75-2-203, MCA; Eff. 12/31/72; <u>AMD</u>, 1978 MAR p. 1727, Eff. 12/29/78; <u>AMD</u>, 1986 MAR p. 1021, Eff. 6/13/86; <u>AMD</u>, 1995 MAR p. 1572, Eff. 8/11/95; <u>TRANS</u>, from DHES, 1996 MAR p. 2285.)

17.8.308 PARTICULATE MATTER, AIRBORNE

(1) No person shall cause or authorize the production, handling, transportation, or storage of any material unless reasonable precautions to control emissions of airborne 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 six consecutive minutes, except for emission of airborne particulate matter originating from any transfer ladle or operation engaged in the transfer of molten metal which was installed or operating prior to November 23, 1968.
(2) No person shall cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.

(3) No person shall 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 six consecutive minutes.

(4) Within any area designated nonattainment in 40 CFR 81.327 for PM, any person who owns or operates:

(a) any existing source of airborne particulate matter shall apply reasonably available control technology (RACT);
(b) any new source of airborne particulate matter that has a potential to emit less than 100 tons per year of particulate matter shall apply best available control technology (BACT);

(c) any new source of airborne particulate matter that has a potential to emit more than 100 tons per year of particulate matter shall apply lowest achievable emission rate (LAER).

(5) The provisions of this rule shall not apply to emissions of airborne particulate matter originating from: (a) any agricultural activity or equipment that is associated with the use of agricultural land or the planting, production, processing, harvesting, or storage of agricultural crops by an agricultural producer and that is not subject to the requirements of 42 USC 7475, 7503, or 7661, as set forth in <u>75-2-111(1)(a)</u>, MCA; or

(b) a business relating to the activities or equipment referred to in (5)(a) that remains in a single location for less than 12 months and is not subject to the requirements of 42 USC 7475, 7503, or 7661, as set forth in <u>75-2-111(1)(b)</u>, MCA.

History: <u>75-2-111</u>, <u>75-2-203</u>, MCA; <u>IMP</u>, <u>75-2-203</u>, MCA; Eff. 12/31/72; <u>AMD</u>, 1979 MAR p. 145, Eff. 2/16/79; <u>AMD</u>, 1993 MAR p. 2530, Eff. 10/29/93; <u>TRANS</u>, from DHES, 1996 MAR p. 2285; <u>AMD</u>, 2000 MAR p. 836, Eff. 3/31/00; <u>AMD</u>, 2009 MAR p. 142, Eff. 2/13/09.

17.8.309 PARTICULATE MATTER, FUEL BURNING EQUIPMENT

(1) No person shall 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 rates in the following table:

	Maximum Allowable Emissions of Particulate Matter in Ibs. Per Million British Thermal Units	
Heat Input in Million British Thermal Units per Hour	Existing Fuel Burning Equipment	New Fuel Burning Equipment
10 and below	0.60	0.60
100	0.40	0.35
1,000	0.28	0.20
10,000 and above	0.19	0.12

(2) When the heat input falls between any 2 consecutive heat input values in the preceding table, maximum allowable emissions of particulate matter for existing fuel burning equipment and new fuel burning equipment must be calculated using the following equations:

For existing fuel burning equipment: $E = 0.882 * H^{-0.1664}$ For new fuel burning equipment: $E = 1.026 * H^{-0.233}$

Where H is the heat input capacity in MMBtu per hour and E is the maximum allowable particulate emissions rate in lbs. per MMBtu.

For the purposes of this rule, heat input will be calculated as the aggregate heat content of all fuels (using the upper limit of their range of heating value) whose products of combustion pass through the stack or chimney.

(3) When 2 or more fuel burning units are connected to a single stack, the combined heat input of all units connected to the stack shall not exceed that allowable for the same unit connected to a single stack.

(4) This rule does not apply to emissions from residential solid fuel combustion devices such as fireplaces and wood and coal stoves.

(5) This rule does not apply to particulate matter emitted from:

(a) those new stationary sources listed in ARM 17.8.340 for which a particulate emission standard has been promulgated. (History: 75-2-111, 75-2-203, MCA; IMP, 75-2-203, MCA; Eff. 12/31/72; AMD, 1988 MAR p. 500, Eff. 3/11/88; AMD, 1995 MAR p. 2413, Eff. 11/10/95; TRANS, from DHES, 1996 MAR p. 2285.)

17.8.310 PARTICULATE MATTER, INDUSTRIAL PROCESSES

(1) No person shall cause or authorize particulate matter to be discharged, from any operation, process or activity, into the outdoor atmosphere in excess of the amount shown in the following table:

Emissions of Particulate Matter		
Process Weight Rate	lb/hr	
Tons/hr		
0.05	0.551	
0.10	0.877	
0.20	1.40	
0.30	1.83	
0.40	2.22	
0.50	2.58	
0.75	3.38	
1.00	4.10	
1.25	4.76	
1.50	5.38	
1.75	5.96	
2.00	6.52	
2.50	7.58	

Maximum Hourly Allowable

3.00	8.56
3.50	9.49
4.00	10.40
4.50	11.20
5.00	12.00
6.00	13.60
8.00	16.50
9.00	17.90
10.00	19.20
15.00	25.20
20.00	30.50
25.00	35.40
30.00	40.00
35.00	41.30
40.00	42.50
45.00	43.60
50.00	44.60
60.00	46.30
70.00	47.80
80.00	49.00
100.00	51.20
500.00	69.00
1,000.00	77.60
3,000.00	92.70

(2) When the process weight rate falls between 2 process weight rate values in the table, or exceeds 3,000 tons per hour, the maximum hourly allowable emissions of particulate matter must be calculated using the following equations:

(a) Maximum hourly allowable emissions of particulate matter, for process weight rates up to 30 tons per hour, must be calculated using the following equation:

$E = 4.10P^{0.67}$

b) Maximum hourly allowable emissions of particulate matter, for process weight rates in excess of 30 tons per hour, must be calculated using the following equation:

$E = 55.0P^{0.11} - 40$

Where E = rate of emission in pounds per hour and P = process weight rate in tons per hour.

(3) This rule does not apply to particulate matter emitted from:

(a) the reduction cells of a primary aluminum reduction plant;

(b) those new stationary sources listed in ARM 17.8.340 for which a particulate emission standard has been promulgated;

(c) fuel burning equipment;

(d) incinerators.(History: 75-2-111, 75-2-203, MCA; IMP, 75-2-203, MCA; Eff. 12/31/72; AMD, Eff. 7/5/74; AMD, Eff. 9/5/75; AMD, 1995 MAR p. 2413, Eff. 11/10/95; TRANS, from DHES, 1996 MAR p. 2285.)

17.8.316 INCINERATORS

(1) An incinerator may not be used to burn solid or hazardous waste unless the incinerator is a multiple chamber incinerator or has a design of equal effectiveness approved by the department prior to installation or use.

(2) A person may not cause or authorize to be discharged into the outdoor atmosphere from any incinerator, particulate matter in excess of 0.10 grains per standard cubic foot of dry flue gas, adjusted to 12% carbon dioxide and calculated as if no auxiliary fuel had been used.

(3) A person may not cause or authorize to be discharged into the outdoor atmosphere from any incinerator emissions which exhibit an opacity of 10% or greater averaged over six consecutive minutes.

(4) To determine compliance with this rule, the department may direct that an incinerator not be operated at any time other than between the hours of 8:00 a.m. and 5:00 p.m. When operation of an incinerator is prohibited by the department, the owner or operator of the incinerator shall store any solid or hazardous waste in a manner that will not

create a fire hazard or arrange for removal and disposal of the solid or hazardous waste in a manner consistent with ARM Title 17, chapter 50, subchapter 5.

(5) This rule applies to performance tests for determining emissions of particulate matter from incinerators. All performance tests shall be conducted while the affected facility is burning solid or hazardous waste representative of normal operation. Testing shall be conducted in accordance with ARM 17.8.106 and the Montana Source Test Protocol and Procedures Manual.

(6) This rule does not apply to incinerators for which a Montana air quality permit has been issued under 75-2-215, MCA, and ARM 17.8.770. (History: 75-2-111, 75-2-203, MCA; IMP, 75-2-203, MCA; Eff. 12/31/72; AMD, Eff. 9/5/75; AMD, 1978 MAR p. 1731, Eff. 12/29/78; TRANS, from DHES, 1996 MAR p. 2285, 1997 MAR P. 1193, Eff. 7/8/97; AMD, 1999 MAR p. 2250, Eff. 10/8/99; AMD, 2002 MAR p. 3567, Eff. 12/27/02; AMD, 2004 MAR p. 724, Eff. 4/9/04.)

17.8.320 WOOD-WASTE BURNERS

(1) It is hereby declared to be the policy of the department to encourage the complete utilization of wood-waste residues and to restrict, wherever reasonably practical, the disposal of wood-waste residues by combustion in wood-waste burners. Recent technological and economic developments have enhanced the degree to which wood-waste residues currently being disposed of in wood-waste burners may be utilized or otherwise disposed of in ways not damaging the environment. While recognizing that complete utilization of wood-waste is not presently possible in all instances, this policy applies to the extent practical and consistent with economic and geographical conditions in Montana.

(2) Construction, reconstruction, or substantial alteration of wood-waste burners is prohibited unless the requirements of subchapter 7 of this chapter have been met.

(3) No person shall cause or authorize to be discharged into the outdoor atmosphere from any wood-waste burner any emissions which exhibit an opacity of 20% or greater averaged over 6 consecutive minutes. The provisions of this section may be exceeded for not more than 60 minutes in 8 consecutive hours for building of fires in wood-waste burners.

(4) A thermocouple and a recording pyrometer or other temperature measurement and recording device approved by the department shall be installed and maintained on each wood-waste burner. The thermocouple shall be installed at a location near the center of the opening for the exit gases, or at another location approved by the department.

(5) Except as provided in (6) of this rule, a minimum temperature of 700°F shall be maintained during normal operation of all wood-waste burners. A normal start-up period of 1 hour is allowed during which the 700°F minimum temperature does not apply. The burner shall maintain 700°F operating temperature until the fuel feed is stopped for the day.

(6) Wood-waste burners in existence on February 10, 1989, do not have to comply with the requirements of (5) of this rule if they are located outside of PM nonattainment areas.

(7) The owner or operator of a wood-waste burner must maintain a daily written log of the wood-waste burner's operation to determine optimum patterns of operations for various fuel and atmospheric conditions. The log shall include, but not be limited to, the time of day, draft settings, exit gas temperature, type of fuel, and atmospheric conditions. The log or a copy of it must be submitted to the department within 10 days after it is requested.

(8) No person shall use a wood-waste burner for the burning of other than production process wood-waste transported to the burner by continuous flow conveying methods.

(9) Rubber products, asphaltic materials, or other prohibited materials specified in ARM 17.8.604(1)(b) through (d), (f) through (r), (t), (u), (w) and (y) may not be burned or disposed of in wood-waste burners. (History: 75-2-111, 75-2-203, MCA; IMP, 75-2-203, MCA; Eff. 12/31/72; AMD, 1978 MAR p. 1732, Eff. 12/29/79; AMD, 1989 MAR p. 270, Eff. 2/10/89; AMD, 1993 MAR p. 2530, Eff. 10/29/93; TRANS, from DHES, 1996 MAR p. 2285; AMD, 2000 MAR P. 836, Eff. 3/31/00; AMD, 2004 MAR p. 724, Eff. 4/9/04.)

16.8.1413 KRAFT PULP MILLS

(1) For the purposes of this rule, the following definitions apply:

(a) "Continual monitoring" means sampling and analysis, in a continuous or times sequence, using techniques which will adequately reflect actual emission levels or concentrations on a continuous basis.

(b) "Kraft mill" or "mill" means any pulping process which uses, for cooking liquor, an alkaline sulfate solution containing sodium sulfide.

(c) "Non-condensibles" means gases and vapors from the digestion and evaporation processes of a mill that are not condensed with the equipment used in those processes.

(d) "Parts per million" means parts of a contaminant per million parts of gas by volume.

(e) "Recovery furnace stack" means the stack from which the products of combustion from the recovery furnace are emitted to the ambient air.

(f) "Total reduced sulfur (TRS)" means hydrogen sulfide, mercaptans, dimethyl sulfide, dimethyl disulfide, and any other organic sulfides present.

(2) No person or persons shall cause, suffer, allow or permit to be discharged into the outdoor atmosphere from any kraft pulping mill total reduced sulfur in excess of 0.087 pounds per 1,000 pounds of black liquor from each recovery furnace stack or 17.5 parts per million, expressed as hydrogen sulfide on a dry gas basis, whichever is more restrictive or such other limit of TRS that proves to be reasonably attainable utilizing the latest in design of recovery furnace equipment, controls and procedures but not more than 0.087 pounds of TRS per 1,000 pounds of black liquor.

(3) Non-condensibles from digesters and multiple-effect evaporators shall be treated to reduce the emission of TRS equal to the reduction achieved by thermal oxidation in a lime kiln.

(4) Every kraft mill in the state shall install equipment for the continual monitoring of TRS.

(a) The monitoring equipment shall be capable of determining compliance with these standards and shall be capable of continual sampling and recording of the concentrations of TRS contaminants during a time interval not greater than 30 minutes.

(b) The sources monitored shall include, but are not limited to, the recovery furnace stacks and the lime kiln stacks.

(c) Each mill shall sample the recovery furnace, lime kiln, and smelt tank for particulate emissions on a regularly scheduled basis in accordance with its approved sampling program.

(d) Equipment shall be ordered within 30 days after a monitoring program has been approved in writing by the director. The equipment shall be placed in effective operation in accordance with the approved program within 60 days after delivery.

(5) Unless otherwise authorized by the director, data shall be reported by each mill at the end of each calendar month as follows:

(a) Daily average emission of TRS gases expressed in pounds of sulfur per 1,000 pounds of black liquor fired for each source included in the approved monitoring program.

(b) The number of hours each day that the emission of TRS gases from each recovery furnace stack exceeds 17.5 parts per million dry and the maximum concentration of TRS measured each day.

(c) Emission of TRS gases in pounds of sulfur per 1,000 pounds of black liquor fired in the kraft recovery furnace on a monthly basis and pounds of sulfur per hour for the other sources included in the approved monitoring program. Emission of particulates in pounds per hour based upon a sampling conducted in accordance with the approved monitoring program.

(d) Average daily kraft pulp production in air-dried tons and average daily black liquor burning rate.

(e) Other emission data as specified in the approved monitoring program.

(6) Each kraft mill shall furnish, upon request of the director, such other pertinent data as may be required to evaluate the mill's emission control program. Each mill shall immediately report abnormal mill operations which result in increased emissions of air contaminants, following procedures set forth in the approved monitoring program.

(7) All emission standards in this rule shall be based on average daily emissions. The limitations herein shall not preclude a requirement to install the highest and best practicable treatment and control available. New mills or mills expanding existing facilities may be required to meet more restrictive emission limits. (History: 75-2-111, 75-2-203, MCA; IMP, 75-2-203, MCA; Eff. 12/31/72.)

17.8.322 SULFUR OXIDE EMISSIONS--SULFUR IN FUEL

(1) "Btu" means British thermal unit which is the heat required to raise the temperature of 1 pound of water through 1 Fahrenheit degree.

(2) Commencing July 1, 1970, no person shall burn liquid or solid fuels containing sulfur in excess of 2 pounds of sulfur per million Btu fired.

(3) Commencing July 1, 1971, no person shall burn liquid or solid fuels containing sulfur in excess of 1.5 pounds of sulfur per million Btu fired.

(4) Commencing July 1, 1972, no person shall burn liquid or solid fuels containing sulfur in excess of 1 pound of sulfur per million Btu fired.

(5) Commencing July 1, 1971, no person shall 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. The provisions of (5) shall not apply to:

(a) The burning of sulfur, hydrogen sulfide, acid sludge or other sulfur compounds in the manufacturing of sulfur or sulfur compounds.

(b) The incinerating of waste gases provided that the gross heating value of such gases is less than 300 Btu's per cubic foot at standard conditions and the fuel used to incinerate such waste gases does not contain sulfur or sulfur compounds in excess of the amount specified in this rule.

(c) The use of fuels where the gaseous products of combustion are used as raw materials for other processes.

(d) Small refineries (under 10,000 barrels per day crude oil charge) provided that they meet other provisions of this rule.

(6) The following are exceptions to this rule:

(a) A permit may be granted by the director to burn fuels containing sulfur in excess of the sulfur contents indicated in (2) through (5) of this rule provided it can be shown that the facility burning the fuel is fired at a rate of 1 million Btu per hour or less.

(b) For purpose of this rule, a higher sulfur-containing fuel may, upon application to the director, be utilized in (2), (3) or (4) of this rule if such fuel is mixed with 1 or more lower sulfur-containing fuels which results in a mixture, the equivalent sulfur content of which is not in excess of the stated values when fired.

(c) The requirements of (2), (3), or (4) of this rule shall also be deemed to have been satisfied if, upon application to the director, a sulfur dioxide control process is applied to remove the sulfur dioxide from the gases emitted by burning of fuel of any sulfur content which results in an emission of sulfur in pounds per hour not in excess of the pounds per hour of sulfur that would have been emitted by burning fuel of the sulfur content indicated without such a cleaning device. (History: 75-2-111, 75-2-203, MCA; IMP, 75-2-203, MCA; Eff. 12/31/72; TRANS, from DHES, 1996 MAR p. 2285.)

17.8.324 HYDROCARBON EMISSIONS--PETROLEUM PRODUCTS

(1) No person shall place, store or hold in any stationary tank, reservoir or other container of more than 65,000 gallons 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 pressures sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere, or

is designed and equipped with one of the following vapor loss control devices, properly installed, in good working order and in operation:

(a) A floating roof, consisting of a pontoon type or double deck type roof, resting on the surface of the liquid contents and equipped with a closure seal, or seals to close space between the roof edge and tank wall. The control equipment provided for in this subsection shall not be used if the gasoline or petroleum distillate has a vapor pressure of 13.0 pounds per square inch absolute or greater under actual storage conditions. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

(b) A vapor recovery system, consisting of a vapor gathering system capable of collecting the hydrocarbon vapors and gases discharged and a vapor disposal system capable of processing such hydrocarbon vapors and gases so as to prevent their emission to the atmosphere and with all tank gauging and sampling devices gas-tight except when gauging or sampling is taking place.

(c) *

(2) No person shall 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 one of the following vapor loss control devices, constructed so as to prevent any emission of hydrocarbon vapors to the atmosphere, properly installed, in good working order and in operation.

(a) A solid cover with all openings sealed and totally enclosing the liquid contents. All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

(b) A floating roof, consisting of a pontoon type or double deck type roof, resting on the surface of the liquid contents and equipped with a closure seal, or seals, to close the space between the roof edge and containment wall. All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

(c) A vapor recovery system, consisting of a vapor gathering system capable of collecting the hydrocarbon vapors and gases discharged and a vapor disposal system capable of processing such hydrocarbon vapors and gases so as to prevent their emission to the atmosphere and with all tank gauging and sampling devices gas-tight except when gauging or sampling is taking place.

(d) *

(e) This rule shall not apply to any oil-effluent water separator used exclusively in conjunction with the production of crude oil.

(3) No person shall 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 as described in (1) of this rule, or is a pressure tank as described in (1) of this rule.

(a) The provisions of the first paragraph of (3) shall not apply to the loading of gasoline into any tank having a capacity of 2,000 gallons or less, which was installed prior to June 30, 1971 nor any underground tank installed prior to June 30, 1971 where the fill line between the fill connection and tank is offset.

(b) A person shall not install any gasoline tank with a capacity of 250 gallons or more unless such tank is equipped as described in the first paragraph of (3).

(4) The provisions of this rule do not apply to any stationary tank which is used primarily for the fueling of implements of husbandry.

(5) Existing refineries normally processing less than 7,000 barrels per day of crude oil charge shall be exempt from the provisions of this rule.

(6) Refineries normally processing 7,000 barrels per day or more of crude oil charge shall comply with (1) of this rule by January 1, 1977.

(7) Facilities used exclusively for the production of crude oil are exempt from this rule. (History: 75-2-111, 75-2-203, MCA; IMP, 75-2-203, MCA; Eff. 12/31/72; AMD, Eff. 9/5/75; AMD, 1993 MAR p. 2530, Eff. 10/29/93; TRANS, from DHES, 1996 MAR p. 2285.)

17.8.325 MOTOR VEHICLES

(1) No person shall intentionally remove, alter or otherwise render inoperative, exhaust emission control, crank case ventilation or any other air pollution control device which has been installed as a requirement of federal law or regulation.

(2) No person shall operate a motor vehicle originally equipped with air pollution control devices as required by federal law or regulation unless such devices are in place and in operating condition. (History: 75-2-111, 75-2-203, MCA; <u>IMP</u>, 75-2-203, MCA; <u>Eff. 12/31/72</u>; <u>TRANS</u>, from DHES, 1996 MAR p. 2285.)

17.8.326 PROHIBITED MATERIALS FOR WOOD OR COAL RESIDENTIAL STOVES

(1) No person may cause or authorize the use of the following materials to be combusted in any residential solid-fuel combustion device such as a wood, coal, or pellet stove or fireplace:

- (a) food wastes;
- (b) styrofoam and other plastics;
- (c) wastes generating noxious odors;
- (d) poultry litter;
- (e) animal droppings;
- (f) dead animals or dead animal parts;
- (g) tires;
- (h) asphalt shingles;
- (i) tar paper;
- (j) insulated wire;
- (k) treated lumber and timbers including railroad ties;
- (I) pathogenic wastes;
- (m) colored newspaper or magazine print;
- (n) hazardous wastes as defined by administrative rules found at ARM Title 17, chapter 54, subchapter 3; or

(o) chemicals. (History: 75-2-111, 75-2-203, MCA; <u>IMP</u>, 75-2-203, MCA; <u>NEW</u>, 1986 MAR p. 1021, Eff. 6/13/86; <u>AMD</u>, 1993 MAR p. 2530, Eff. 10/29/93; <u>TRANS</u>, from DHES, 1996 MAR p. 2285.)

17.8.330 EMISSION STANDARDS FOR EXISTING ALUMINUM PLANTS--DEFINITIONS For the purposes of this rule, the following definitions apply:

- (1) "Aluminum manufacturing" means the electrolytic reduction of alumina (aluminum oxide) to aluminum.
- (2) "Emission" means a release into the outdoor atmosphere of total fluorides.

(3) "Existing primary aluminum reduction plant" means any facility manufacturing aluminum, by electrolytic reduction, which was in existence and operating on February 26, 1982.

(4) "Owner or operator" means any person who owns, leases, operates, controls, or supervises an existing primary aluminum reduction plant.

(5) "Pot" means a reduction cell.

(6) "Potroom" means a building unit which houses a group of electrolytic cells in which aluminum is produced.

(7) "Potroom group" means an uncontrolled potroom, a potroom which is controlled individually as a group of potrooms or potroom segments ducted to a common control system.

(8) "Total fluorides" means all fluoride compounds as measured by methods approved by the department. (History: 75-2-111, 75-2-203, MCA; <u>IMP</u>, 75-2-203, MCA; <u>NEW</u>, 1982 MAR p. 390, Eff. 2/26/82; <u>AMD</u>, 1989 MAR p. 270, Eff. 2/10/89; <u>TRANS</u>, from DHES, 1996 MAR p. 2285.)

17.8.331 EMISSION STANDARDS FOR EXISTING ALUMINUM PLANTS--STANDARDS FOR FLUORIDE

(1) No owner or operator subject to the provisions of this rule may 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. (History: 75-2-111, 75-2-203, MCA; <u>IMP</u>, 75-2-203, MCA; <u>NEW</u>, 1982 MAR p. 390, Eff. 2/26/82; <u>TRANS</u>, from DHES, 1996 MAR p. 2285.)

17.8.332 EMISSION STANDARDS FOR EXISTING ALUMINUM PLANTS--STANDARD FOR VISIBLE EMISSIONS

(1) No owner or operator subject to this rule may 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. (History: 75-2-111, 75-2-203, MCA; <u>IMP</u>, 75-2-203, MCA; <u>NEW</u>, 1982 MAR p. 390, Eff. 2/26/82, <u>AMD</u>, 1989 MAR p. 270, Eff. 2/10/89; <u>AMD</u>, 1996 MAR p. 1844, Eff. 7/4/96; TRANS, from DHES, 1996 MAR p. 2285.)

17.8.333 EMISSION STANDARDS FOR EXISTING ALUMINUM PLANTS--MONITORING AND REPORTING

(1) For the purpose of this rule the board hereby adopts and incorporates by reference 40 CFR 60.195 which sets forth test methods and procedures for primary aluminum reduction plants. A copy of this incorporated material may be obtained from the Department of Environmental Quality, PO Box 200901, Helena, MT 59620-0901.

(2) An owner or operator shall submit by May 1, 1982 to the department a detailed monitoring program including, but not limited to, a description of monitoring equipment, monitoring procedures, monitoring frequency, and any other information requested by the department. The monitoring program must be approved by the department and may be revised from time to time by the department.

(3) In order to be approved by the department, the monitoring plan must meet the requirements of 40 CFR 60.195 or equivalent requirements established by the department.

(4) An owner or operator of an existing primary aluminum reduction plant shall submit a quarterly emission report to the department, no later than 45 days following the end of the calendar quarter reported, in a format and reporting parameters as requested by the department. (History: 75-2-111, 75-2-203, MCA; <u>IMP</u>, 75-2-203, MCA; <u>NEW</u>, 1982 MAR p. 390, Eff. 2/26/82; TRANS, from DHES, 1996 MAR p. 2285.)

17.8.334 EMISSION STANDARDS FOR EXISTING ALUMINUM PLANTS--STARTUP AND SHUTDOWN

(1) Operations during periods of startup and shutdown shall not constitute representative conditions for the purpose of determining compliance with this rule, nor shall emissions in excess of the levels required in ARM 17.8.331 and 17.8.332 during periods of startup and shutdown be considered a violation of the limits in ARM 17.8.331 and 17.8.332.

(2) At all times, including periods of startup and shutdown, owners and operators shall, to the extent practicable, maintain and operate any existing primary aluminum reduction plant including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.

(3) Any owner or operator of an existing primary aluminum reduction plant shall maintain records of the occurrence and duration of any startup or shutdown in the operation of an affected facility and any period during which a continuous monitoring system or monitoring device is inoperative. (History: 75-2-111, 75-2-203, MCA; <u>IMP</u>, 75-2-203, MCA; <u>IMP</u>, 75-2-203, MCA; <u>NEW</u>, 1982 MAR p. 390, Eff. 2/26/82; <u>TRANS</u>, from DHES, 1996 MAR p. 2285.)