EXHIBIT A

EMISSION LIMITATIONS AND CONDITIONS

ASARCO Lead Smelter
East Helena, Montana

SECTION 1. AFFECTED FACILITIES

(A) Plant Location:

The ASARCO primary lead smelter is located immediately south of the community of East Helena, Montana in Lewis and Clark County, Township 10 North, Range 3 West, Section 36. The plant's slag pile is adjacent to and on the south side of U.S. Highway 12.

(B) Affected Equipment and Facilities:

The combination of numbers and letters contained in the parentheses in the following list provides a cross reference to the emission points identified in the ASARCO East Helena Primary Lead Smelter Emission Inventory, North American Weather Consultants, May 1992, and the Demonstration of Attainment Modeling Report Revised East Helena, Montana Lead SIP, Cermak Peterka Peterson, Inc., July 1995. These documents quantify the baseline emissions and describe how the emissions were handled in the compliance modeling demonstration. The cross referencing provides a means to track the changes in the emission configuration from the baseline situation to the lead emission control plan encompassed in this Exhibit. The following equipment and facilities are subject to this Exhibit:

(1) Sample Mill and Sample Mill Baghouse Stack (1P);
(2) Laboratory and Laboratory Assay Stacks (2P);
(3) Crushing Mill, including Crushing Mill Baghouse Stack #1 Venting Crusher (3P), Crushing Mill Baghouse Stack #2 Venting Crusher (4P), Crushing Mill Baghouse Stack #3 (5P), Crushing Mill Track Hopper (1Va), Crushing Mill Product Conveyor (1Vb), and Crushing Mill Building (1V);
(4) **Sinter Plant Roof Baghouse #7 Venting the Sinter Building** (3Pa);
(5) **Sinter Plant Roof Baghouse #8 Venting the Sinter Building** (4Pa);
(6) Concentrate Storage and Handling Building (CSHB) Baghouse Stack (6P), CSHB, Sinter Plant Ventilation System (SPVS), Acid Dust Handling System and Associated Ventilation Facilities;
(7) Sinter Plant (D&L) Baghouse Stack (7P), Sinter Machine, and Associated Ventilation Facilities;
(8) Acid Plant and Acid Plant Stack (8P);
(9) Sinter Storage Building and Sinter Storage Building Baghouse Stack (9P);
(10) Tetrahedrite Drier and Tetrahedrite Drier Baghouse Stack (10P);
(11) Kettles #1 and #3 Combustion Ventilation (11P);
(12) Kettles #1, #2, and #3 (previously Kettles #2, #4, and #5) Combustion Ventilation (Existing 12P);
(13) Kettle #6 Combustion Ventilation (13P);
(14) Kettle #7 Combustion Ventilation (14P);
(15) Blast Furnace, Associated Equipment, and Blast Furnace Baghouse Stack (16P);
(16) Acid Dust Bin System, including Acid Dust Bin Baghouse Stack (17P), Acid Dust Bin Building (17V), and Acid Dust Conveyor Drop (17Va);
(17) Zinc Plant, including Zinc Furnace Baghouse Stack (18P), Zinc Plant Building (20V), and Zinc

Baghouse Building (21V);
(18) Dross Building (19P);
(19) Dross Plant, Associated Equipment, and the New Dross Plant Baghouse Stack (21P);
(20) Hopto Unloading and Blast Furnace Baghouse Dust Reclaiming (2V);
(21) Old Ore Storage Yard (3V);
(22) High Grade Building Dumping Area (4V);
(23) Sinter (D&L) Building (6V);
(24) Cottrell Penthouse (7V);
(25) Breaking Floor Building (8Va);
(26) Blast Furnace Charge Building (8Vb);
(27) Sinter Handling by Payloader (8Vf);
(28) Matte Handling by Payloader (8Vh);
(29) Direct Smelt Bins Charging (8Vi);
(30) 47 Feeder Charging (8Vk);
(31) Blast Furnace Feed Floor (9V);
(32) Blast Furnace Tapping Platform (10V);
(33) Slag Handling Facility (11V);
(34) Slag Pile Dumping (12V);
(35) Speiss Handling Area (15V);
(36) Tetrahedrite Drier Bin Charging (16V);
(37) Blast Furnace Baghouse Cleanout (18V); and
(38) Blast Furnace Flue Cleanout (19V).

SECTION 2. DEFINITIONS

(A) The following definitions apply throughout Exhibit A:

(1) "Acfm" means air flow measurement in actual cubic feet per minute.

(2) "Afternoon Shift" means the eight hour period beginning at 3:00 p.m. and ending at 11:00 p.m.

(3) "Attachment #1" means the "Sampling and Analysis of Paved Road Dust Samples in East Helena, May 1995."

(4) "Attachment #2" means the "Compliance Plan for Process Weight and Time of Day Restrictions, July 1995."

(5) "Attachment #3" means the "East Helena Lead SIP Road Dust Control Analytical Quality Assurance Plan, May 1995."

(6) "Attachment #4" means the "ASARCO East Helena Compliance Modeling - Legal Description and Map of the Boundaries Between Ambient Air and Areas of Restricted Public Access, July 1995."

(7) "Attachment #5" means the "Compilation of Air Pollutant Emission Factors (AP-42), Appendix D.2 (July 1993), Appendix D.3 (July 1993), Appendix E.1 (July 1993), Appendix E.2 (July 1993), Appendix E.3 (July 1993)."

(8) "Attachment #6" means the "Quality Assurance/Quality Control (QA/QC) and Standard Operating Procedure (SOP) for Continuous Opacity Monitoring Systems, November 20, 1995."

(9) "Attachment #7" means the "Baghouse Maintenance Plan, January 1996."

(10) "Board" means the Montana Board of Environmental Review.

(11) "Day Shift" means the eight hour period beginning at 7:00 a.m. and ending at 3:00 p.m.

(12) "Department" means the Montana Department of Environmental Quality.

(13) "Dust" means any lead bearing material, excluding East Helena Slag, East Helena Sinter, and East Helena Speiss/Matte, that has a Lead Content greater than 1.0% and that:
(a) was collected by an air pollution control device other than a wet scrubber, or
(b) has an Emission Potential greater than 57.6.

(14) "Emission Potential" means a numerical value which describes how readily a material can become airborne and is calculated in accordance with the following equation:

$EP = (S/5) / (M/2)^2$

Where:

/ = Denotes division throughout this Exhibit,

EP = Emission Potential,

S = Silt Content as determined from the most recent analysis of the material, and

M = Moisture Content as determined from the most recent analysis of the material.

(15) "Equation 1" means

$E = M * PB_w * EP_w * C$

Where:

* = Denotes multiplication throughout this Exhibit,

E = Quarterly lead emissions in pounds (Lbs/Qtr),

M = Tons of Dust handled per Quarter as determined by the payloader Load Cell measurement system (Tons/Qtr),

PB_w = Average Lead Content, in percent, divided by 100, weighted by the amount of each type of Dust handled,

EP_w = Average Emission Potential weighted by the amount of each type of Dust handled, and

C = A constant which is specific to a particular process or source as defined below:

Reclaiming Blast Furnace Baghouse Dust	0.00428
Dropping Dust in the Old Ore Storage Yard	0.00428
Charging Dust to the Direct Smelt Bins	0.00500
Cleaning out the Blast Furnace Flue	0.00355

The above constants were calculated using the following equation and assumptions:

$C = [0.0018] * [(U/5) * (H/5)] / [Y/6]^{0.33}$

Where:

U = a wind speed of 10.4 mph.
H = a drop height in feet, and
Y = a drop capacity in cubic yards.

Equation 1 can be used for total Quarterly lead emissions, or Quarterly lead emissions for a particular shift by using the appropriate amount of Dust handled for the entire Quarter, or a particular shift during the Quarter.

(16) "Equation 2" means

$E_{Qtr} = E_{Ton} * tons$

Where:

E_{Qtr} = Quarterly lead emission rate in pounds per Quarter,

E_{Ton} = Pounds of lead emissions per ton of material processed (Lbs/Ton) as determined by the most recent source testing, and

Tons = Tons of material processed during the Quarter.

(17) "Equation 3" means

$E_{Qtr} = E_{FAC} * tons$

Where:

E_{Qtr} = Quarterly lead emission rate in pounds per Quarter,

E_{FAC} = Source specific emission factor stated in this Exhibit , and

Tons = Tons of material processed during the Quarter.

(18) "Furnace Lead" means the total tons of bullion and Speiss/Matte produced.

(19) "Lead Content" means the content of lead (in percent) in any specified material.

(20) "Load Cell" means Loadrites or an equivalent weighing system which can be attached to a loader or forklift, and meets the criteria set forth in Attachment #2.

(21) "Malfunction" means any sudden and unavoidable failure of air pollution control equipment or process equipment, or a process when it affects emissions, to operate in a normal manner. A failure caused entirely or in part by poor maintenance, careless operation, poor design, or any other preventable upset condition or preventable equipment breakdown is not a Malfunction.

(22) "Moisture Content" means the content of moisture in percent in any material as determined according to Attachment #5, Appendix E.2. Sampling from storage piles or other bulk sampling shall be performed using Attachment #5, Appendix D.3 ~~or an equivalent procedure~~. Splitting of samples for analysis shall be performed according to Attachment #5, Appendix E.1 ~~or an equivalent procedure.~~

(23) "Natural Draft Opening" or "NDO" means any permanent opening that remains open while the facility is Operating and is not connected to a ventilated duct. Garage doors, employee doors, and temporary openings necessary for maintenance and repairs shall not be considered as NDO, provided that ASARCO keeps such openings in their closed position except when actually in use.

(24) "Night Shift" means the eight hour period beginning at 11:00 p.m. and ending at 7:00 a.m.

(25) "Non-dust" means material that is not Dust, and has a Lead Content of greater than 1%. The term excludes cast metal shapes, granulated furnace bullion, East Helena slag, East Helena sinter, and East Helena Speiss/Matte. Wet Scrubber Filter Cakes greater than 1% lead are considered Non-dust.

(26) "Operating" means whenever an affected facility is starting up, shutting down, using fuel, or processing materials, and lead emissions are expected from the source, building, or stack.

(27) "Quarter" means the three month calendar period ending on the last day of the months of March, June, September or December.

(28) "Silt Content" means the percent mass which passes through a #200 mesh screen (75 micrometers), as determined according to Attachment #5, Appendix E.3. Sampling of paved roads shall follow the procedure outlined in Attachment #5, Appendix D.2, and sampling from storage piles or other bulk sampling shall be performed using Attachment #5, Appendix D.3 ~~or an equivalent procedure.~~ Splitting of samples for analysis shall be performed according to Attachment #5, Appendix E.1 ~~or an equivalent procedure~~.

SECTION 3. EMISSION LIMITATIONS

(A) Affected Facilities:

(1) Sample Mill and Sample Mill Baghouse Stack (1P)

(a) The Sample Mill Baghouse and associated ventilation equipment shall be used to supply ventilation to and control emissions from the Sample Mill.

(b) Lead emissions from the Sample Mill Baghouse Stack (1P) shall not exceed 0.0204 Lbs/Hour.

(c) Visible emissions from the Sample Mill Baghouse Stack (1P) shall not exhibit an opacity of 20% or greater.

(d) The Sample Mill Baghouse ventilation system shall maintain a minimum airflow of 4,800 Acfm when the Sample Mill is Operating, except as provided in Section 7.

(e) Dust captured by the Sample Mill Baghouse shall be recovered from the baghouse hopper by a vacuum truck or other means which will minimize emissions.

(f) ASARCO shall utilize a device to monitor and record the hours of fan operation on the Sample Mill Baghouse Fan.

(g) The effective date of Section 3(A)(1) shall be upon issuance of the Board Order adopting this Exhibit.

(2) Laboratory and Laboratory Assay Stacks (2P)

(a) The Laboratory shall not analyze more than 16,000 lead crucibles per Quarter. (For informational purposes only, this corresponds to a Quarterly lead emission rate of 96 pounds.)

(b) Visible emissions from the Laboratory Assay Stacks (2P) shall not exhibit an opacity of 20% or greater.

(c) The effective date of Section 3(A)(2) shall be upon issuance of the Board Order adopting this Exhibit.

(3) Sinter Plant Roof Baghouse #7 Venting Sinter Building (3Pa)

(a) The Sinter Plant Roof Baghouse #7 and associated ventilation equipment shall be used to supply ventilation to and control emissions from the Sinter (D&L) Building (6V).

(b) Lead emissions from the Sinter Plant Roof Baghouse #7 shall not exceed 0.0889 Lbs/Hour.

(c) Visible emissions from the Sinter Plant Roof Baghouse #7 shall not exhibit an opacity of 20% or greater.

(d) Dust captured by the Sinter Plant Roof Baghouse #7 shall be recovered from the baghouse hopper by vacuum truck or other means which will minimize emissions.

(e) The Sinter Plant Roof Baghouse #7 and associated ventilation system shall maintain a minimum airflow of 20,000 Acfm when the Sinter Plant is Operating, except as provided in Section 7.

(f) ASARCO shall utilize a device to monitor and record the hours of fan operation on the Sinter Plant Roof Baghouse #7 Fan.

(g) The effective date of Section 3(A)(3) shall be 4 months following issuance of the Board Order adopting this Exhibit, but not later than January 6, 1997."

(4) **Sinter Plant Roof Baghouse #8 Venting Sinter Building (4Pa)**

(a) The Sinter Plant Roof Baghouse #8 and associated ventilation equipment shall be used to supply ventilation to and control emissions from the Sinter (D&L) Building (6V).

(b) Lead emissions from the Sinter Plant Roof Baghouse #8 shall not exceed 0.0225 Lbs/Hour.

(c) Visible emissions from the Sinter Plant Roof Baghouse #8 shall not exhibit an opacity of 20% or greater.

(d) Dust captured by Sinter Plant Roof Baghouse #8 shall be recovered from the baghouse hopper by vacuum truck or other means which will minimize emissions.

(e) The Sinter Plant Roof Baghouse #8 and associated ventilation system shall maintain a minimum airflow of 14,000 Acfm when the Sinter Plant is Operating, except as provided in Section 7.

(f) ASARCO shall utilize a device to monitor and record the hours of fan operation on the Sinter Plant Roof Baghouse #8 Fan.

(g) The effective date of Section 3(A)(4) shall be 4 months following issuance of the Board Order adopting this Exhibit, but not later than January 6, 1997."

(5) Concentrate Storage and Handling Building (CSHB) Baghouse Stack (6P), Sinter Plant Ventilation System (SPVS), Acid Dust Handling System, and Associated Baghouses

(a) The CSHB baghouses and associated ventilation equipment shall be used to supply ventilation to and control emissions from the CSHB and the Acid Dust Handling System. The SPVS Baghouse and associated ventilation equipment shall be used to supply ventilation to and control emissions from the Sinter Plant and shall exhaust through the

CSHB Baghouse Stack (6P).

(b) Lead emissions from the 187 foot CSHB Baghouse Stack (6P) shall not exceed 4.0876 Lbs/Hour.

(c) Visible emissions from the CSHB Baghouse Stack (6P) shall not exhibit an opacity of 20% or greater.

(d) The CSHB Baghouses, SPVS Baghouse, and associated ventilation equipment shall maintain a minimum airflow of 243,000 Acfm when the CSHB, the Sinter Machine and the Acid Dust Handling System are Operating, except as provided in Section 7.

(e) The SPVS Baghouse and associated ventilation system shall maintain a minimum airflow of 36.000 Acfm when the Sinter Plant is Operating, except as provided in Section 7.

(f) ASARCO shall utilize devices that monitor and record the hours of fan operation on each of the following: CSHB North Baghouse Fan, CSHB South Baghouse Fan, CSHB Feeder Room Baghouse Fan, SPVS Baghouse Fan, and the Acid Dust Handling System Fan.

(g) The effective date of Section 3(A)(5) shall be January 6, 1997.

(6) Sinter Plant (D&L) Baghouse Stack (7P), Sinter Machine, and Associated Ventilation Facilities

(a) The Sinter Plant (D&L) Baghouse and associated ventilation equipment shall be used to supply ventilation to and control emissions from the Sinter Machine and associated equipment.

(b) Lead emissions from the Sinter Plant (D&L) Baghouse Stack (7P) shall not exceed 1.8176 Lbs/Hour.

(c) The Sinter Plant (D&L) Baghouse and associated ventilation equipment shall maintain a minimum airflow of 112,000 Acfm when the Sinter Machine is Operating, except as provided in Section 7.

(d) ASARCO shall utilize devices that monitor and record the hours of fan operation on each of the following: Sinter Plant Baghouse Fan, Sinter Plant No. 5 Ventilation Fan, and the Sinter Plant Stack Fan.

(e) The effective date of Section 3(A)(6) shall be upon issuance of the Board Order adopting this Exhibit.

(7) Acid Plant and Acid Plant Stack (8P)

(a) The Acid Plant, Cottrell, and associated ventilation equipment shall be used to supply ventilation to and control emissions associated with the strong gas (high SO_2 concentration) from the Sinter Machine.

(b) Lead emissions from the Acid Plant Stack (8P) shall not exceed 0.0698 Lbs/Hour.

(c) Visible emissions from the Acid Plant Stack (8P) shall not exhibit an opacity of 20% or greater.

(d) The Acid Plant, Cottrell, and associated ventilation equipment shall maintain a minimum airflow of 30,000 Acfm when the Sinter Machine, Acid Plant, Cottrell, and associated equipment are Operating, except as provided in Section 7. Airflow testing of the Acid Plant Baghouse shall only be conducted when the Sinter Plant feed material has a sulfide content of 6% or greater.

(e) ASARCO shall utilize devices that monitor and record the hours of fan operation on each of the following: Acid Plant Hot Gas Fan, and the Acid Plant Main Blower.

(f) The effective date of Section 3(A)(7) shall be upon issuance of the Board Order adopting this Exhibit.

(8) Sinter Storage Building and Sinter Storage Building Baghouse Stack (9P)

(a) The Sinter Storage Building Baghouse and associated ventilation system shall be used to supply ventilation to and control emissions from the Sinter Storage Building, Breaking Floor Building (8Va), Blast Furnace Charge Building (8Vb), and sinter drop into storage bin.

(b) By January 6, 1997, emissions from the Sinter Storage Building Baghouse shall be vented through the Dross Plant Baghouse Stack (21P).

(c) Dust captured by the Sinter Storage Building Baghouse shall be recovered from the baghouse hopper by vacuum truck or other means which will minimize emissions.

(d) The Sinter Storage Building Baghouse and associated ventilation equipment shall maintain a minimum airflow of 35,000 Acfm when the Blast Furnace and Sinter Plant are Operating, except as provided in Section 7.

(e) ASARCO shall utilize a device to monitor and record the hours of fan operation on the Sinter Storage Baghouse Fan.

(f) The effective date of Section 3(A)(8) shall be January 6, 1997.

(9) Tetrahedrite Drier and Tetrahedrite Drier Baghouse Stack (10P)

(a) The Tetrahedrite Drier Baghouse and associated ventilation equipment shall be used to supply ventilation to and control emissions from the Tetrahedrite Drier.

(b) Quarterly lead emissions from the Tetrahedrite Drier Baghouse Stack (10P) shall not

exceed 4.9 Lbs/Qtr. If the Tetrahedrite Drier is operated less than or equal to 30 days per calendar year, then the Quarterly emissions shall be determined by using an emission factor of 0.0018 pounds of lead emissions per ton of tetrahedrite dried (Lbs/Ton) and Equation 3. If the Tetrahedrite Drier is operated greater than 30 days per calendar year, then the Quarterly emissions shall be determined by using the most recent Lbs/Ton emission factor determined by the most recent source testing and Equation 2.

(c) Visible emissions from the Tetrahedrite Drier Baghouse Stack (10P) stack shall not exhibit an opacity of 20% or greater.

(d) Dust captured by the Tetrahedrite Drier Baghouse shall be recovered from the baghouse hopper by vacuum truck or other means which will minimize emissions.

(e) The Tetrahedrite Drier Baghouse and associated ventilation equipment shall maintain a minimum airflow of 19,000 Acfm when the Tetrahedrite Drier is Operating, except as provided in Section 7.

(e) ASARCO shall utilize a device to monitor and record the hours of fan operation on the Tetrahedrite Drier Baghouse Fan.

(g) The effective date of Section 3(A)(9) shall be upon issuance of the Board Order adopting this Exhibit.

(10) Blast Furnace, Associated Equipment, and Blast Furnace Baghouse Stack (16P)

(a) The Blast Furnace Baghouse and associated ventilation equipment shall be used to supply ventilation to and control emissions from the Blast Furnaces; Blast Furnace Tapping Platform (10V), including but not limited to the Forebay, Slag Pans, lead pots; and the Blast Furnace Feed Floor (9V), including the enclosures; and the Speiss/Matte Granulating Pit.

(b) Only one Blast Furnace shall be operated at a time.

(c) Lead emissions from the Blast Furnace Baghouse Stack (16P) shall not exceed 3.7145 Lbs/Hour.

(d) Visible emissions from the Blast Furnace Baghouse Stack (16P) shall not exhibit an opacity of 20% or greater.

(e) The Blast Furnace Baghouse and associated ventilation equipment shall maintain a minimum volumetric flowrate of 249,000 Acfm when the Blast Furnace, Blast Furnace Tapping Platform (10V), Blast Furnace Feed Floor (9V), and the Speiss/Matte Granulating Pit are Operating, except as provided in Section 7.

(f) Hoods shall be operated on the No. 1 and No. 3 Blast Furnace slag tapping pans and shall meet the following requirements:

(i) The hoods shall be large enough and shaped appropriately to effectively cover the slag pans, and

(ii) The hoods shall be in place at all times the blast furnace is Operating and the Jittney is in place.

(g) Hoods designed to effectively control emissions shall be operated on each Jittney.

(h) Hoods designed to effectively control emissions shall be operated on the Blast Furnace lead pots during tapping.

(i) ASARCO shall install a Continuous Opacity Monitoring System (COMS) which meets the requirements of Section 6 on the Blast Furnace Baghouse Stack (16P).

(j) ASARCO shall utilize devices that monitor and record the hours of fan operation on each of the following: Blast Furnace Baghouse Fan, and Blast Furnace Stack Fan.

(k) Devices that monitor and record the hours of fan operation shall be installed on the Blast Furnace Tapping and Feed Floor Enclosure Ventilation Fan and the Blast Furnace Baghouse Enclosure Baghouse Fan.

(l) The effective date of Section 3(A)(10), except Section 3(A)(10)(a and e), shall be January 6, 1997. The effective date of Section 3(A)(10)(a and e) shall be August 29, 1998.

(11) Dross Building (19P)

(a) Fugitive lead emissions from the Dross Building shall not exceed 103 Lbs/Qtr as determined by Equation 3 using an emission factor of 0.0031 pounds of lead per ton of Furnace Lead produced (Lbs/Ton).

(b) The NDO of the Dross Building shall not exceed 560 square feet. This shall be accomplished by removing all existing wall and roof sheets and installing new siding and new roofing sheets on the Dross Building.

(c) All wall and roof penetrations (e.g., ducts, piping, etc.) in the Dross Building shall be sealed to the maximum extent practicable.

(d) ASARCO shall maintain the siding and roofing of the Dross Building in good repair. ASARCO shall repair any damage to the siding or roofing of the Dross Building (19P) within ten (10) days of ASARCO or the Department discovering damage.

(e) The Dross Plant Baghouse and associated ventilation equipment shall be used to supply ventilation to and control emissions from the Dross Building.

(f) The effective date of Section 3(A)(11) shall be January 6, 1997.

(12) Dross Plant, Associated Equipment, and the Dross Plant Baghouse Stack (21P)

(a) **The Dross Plant Baghouse and associated ventilation equipment shall be used to supply ventilation to and control emissions from the dross reverberatory furnace, the #4 Kettle and launder, the charge hole, the Speiss/Matte tap, the Speiss/Matte launder, the dross Kettles (both combustion and process emissions), and the Dross Building general ventilation while the Dross Plant is Operating.**

(b) The Dross Plant Baghouse shall have a maximum air-to-cloth ratio of 3.6 to 1.

(c) By December 31, 1995, ASARCO shall construct a new Dross Reverberatory Furnace to replace the existing furnace.

(d) Lead emissions from the Dross Plant Baghouse Stack (21P) shall not exceed 3.4923 Lbs/Hour.

(e) ASARCO shall construct a Dross Plant Baghouse Stack with a minimum height of 200 feet above ground level.

(f) The emissions from the Dross Plant Baghouse shall be vented through the stack required by Section 3(A)(12)(e).

(g) Visible emissions from the Dross Plant Baghouse Stack (21P) shall not exhibit an opacity of 20% or greater.

(h) ASARCO shall install a Continuous Opacity Monitoring System (COMS) which meets the requirements of Section 6 on the Dross Plant Baghouse Stack (21P).

(i) **Emissions generated from the burning of natural gas to heat dross Kettles #1, #2, #3 (previously designated as kettles #2, #4, and #5) (12P) and the #4 Kettle shall be vented to combustion ventilation ducts. These ducts must run to the roof area and emissions will be collected by the ductwork providing general ventilation to the Dross Building.**

(j) General Dross Building and roof area ventilation shall maintain a minimum airflow of 52,000 Acfm when the Dross Plant is Operating, except as provided in Section 7.

(k) The Dross Plant Baghouse Stack (21P) and associated ventilation system shall maintain a minimum airflow of 117,000 Acfm when the Dross Plant is Operating, except as provided in Section 7.

(l) Each dross kettle shall have a ventilated hood which shall be designed and operated to provide ventilation at all times that the kettle is in use, including during the following activities: drossing (black skimming), pumping of molten lead, adding of fluxes, and stirring of fluxes.

(m) **The #4 Kettle shall have a ventilated hood which shall be designed and operated to provide ventilation at all times that the kettle is in use.**

(n) No more than two dross kettles shall be operated at a time when the dross reverberatory furnace is Operating.

(o) Hoods shall be operated on the dross reverberatory furnace, the #4 Kettle and launder, the Speiss/Matte tap, the Speiss/Matte launder, and the Speiss/Matte granulating pit.

(p) The plenum ventilating the dross reverberatory furnace, the #4 Kettle and launder, the Speiss/Matte tap and the Speiss/Matte launder shall maintain a minimum volumetric flowrate of 28,000 Acfm, except as provided in Section 7.

(q)

(r) } removed

(s) A hood designed to effectively control emissions shall be constructed and operated on the reverberatory furnace charge hole.

(t) A device to monitor and record hours of fan operation shall be installed on the Dross Plant Baghouse Fan.

(u) Dust from the Dross Plant Baghouse shall be transferred in a totally enclosed conveying system.

(v) The effective date of Section 3(A)(12), except Section 3(A)(12)(a and p), shall be January 6, 1997. The effective date of Section 3(A)(12)(a and p) shall be August 29, 1998.

(13) Hopto Unloading and Blast Furnace Baghouse Dust Reclaiming (2V)

(a) Quarterly emissions of lead from Blast Furnace Baghouse Dust Reclaiming shall not exceed 67.7 pounds as determined by Equation 1.

(b) Quarterly emissions of lead from reclaiming Blast Furnace Baghouse Dust during the Afternoon Shift shall not exceed 3 pounds as determined by Equation 1, except that any unutilized Night Shift emissions allocations may be transferred to the Afternoon Shift.

(c) Quarterly emissions of lead from reclaiming Blast Furnace Baghouse Dust during the Night Shift shall not exceed 2.6 pounds as determined by Equation 1.

(d) No more than 3000 tons of Non-dust material shall be unloaded by the Hopto type loader per Quarter as determined by plant accounting records. In accordance with the 1992

Lead Emission Inventory and the 1995 Demonstration of Attainment Modeling, this tonnage corresponds to a Quarterly lead emission rate of 1.0 pounds.

(e) Dust shall no longer be unloaded by the Hopto type loader.

(f) During the reclaiming of Blast Furnace Baghouse Dust, the average payloader drop height shall not exceed 5 feet, as determined by visual observation of the Department.

(g) The payloaders used in reclaiming Blast Furnace Baghouse Dust shall have bucket sizes sufficient to ensure that the average bucket size is 3.5 cubic yards or greater. If an inspection by the Department reveals that this requirement is not being met, then the Department may request and ASARCO shall submit data from the payloader Load Cell records to demonstrate compliance.

(h) Material specified in Section 3(A)(13)(a-c) shall not be reclaimed when the hourly average wind speed at the ASARCO meteorological monitoring site is greater than 12.0 mph for the hour prior to the reclaiming of the material.

(i) The effective date of Section 3(A)(13) shall be 2 months following issuance of the Board Order adopting this Exhibit, but not later than January 6, 1997.

(14) Old Ore Storage Yard (3V)

(a) Quarterly emissions of lead from dropping Dust in the Old Ore Storage Yard shall not exceed 252 pounds as determined by Equation 1.

(b) Quarterly emissions of lead from dropping Dust in the Old Ore Storage Yard during the Afternoon Shift shall not exceed 22.4 pounds as determined by Equation 1, except that any unutilized Night Shift emissions allocations may be transferred to the Afternoon Shift.

(c) Quarterly emissions of lead from dropping Dust in the Old Ore Storage Yard during the Night Shift shall not exceed 9.9 pounds as determined by Equation 1.

(d) No more than 9600 tons of Non-dust material shall be dropped in the Old Ore Storage Yard per Quarter as determined by plant accounting records. In accordance with the 1992 Lead Emission Inventory and the 1995 Demonstration of Attainment Modeling, this tonnage corresponds to a Quarterly lead emission rate of 3.1 pounds.

(e) Dust shall no longer be dropped outdoors by rail crane or any other crane.

(f) During the dropping of Dust in the Old Ore Storage Yard, the average payloader drop height shall not exceed 5 feet, as determined by visual observation of the Department.

(g) The payloaders used in the dropping of Dust in the Old Ore Storage Yard shall have bucket sizes sufficient to ensure that the average bucket size is 3.5 cubic yards or greater. If an inspection by the Department reveals that this requirement is not being met, then

the Department may request and ASARCO shall submit data from the payloader Load Cell records to demonstrate compliance.

(h) Material specified in Section 3(A)(14)(a-c) shall not be dropped when the hourly average wind speed at the ASARCO meteorological monitoring site is greater than 12.0 mph for the hour prior to the dropping of the material.

(i) The effective date of Section 3(A)(14) shall be 2 months following issuance of the Board Order adopting this Exhibit, but no later than January 6, 1997.

(15) High Grade Building Dumping Area (4V)

(a) No more than 3900 tons of Dust and Non-dust material shall be dumped per Quarter at the High Grade Ore Dumping Area as determined by plant accounting records. In accordance with the 1992 Lead Emission Inventory and the 1995 Demonstration of Attainment Modeling, this tonnage corresponds to a Quarterly lead emission rate of 0.74 pounds.

(b) The effective date of Section 3(A)(15) shall be upon issuance of the Board Order adopting this Exhibit.

(16) Sinter (D&L) Building (6V)

(a) After the Crushing Mill is permanently shutdown, the Crushing Mill Baghouses #1 and #2 shall be renamed Sinter Plant Roof Baghouses #7 and #8 respectively and **their associated ventilation equipment shall supply ventilation to and control emissions from the Sinter (D&L) Building (6V) when the Sinter Machine is Operating. In addition, the Sinter Plant Ventilation System (SPVS) shall supply ventilation to and control emissions from the Sinter (D&L) Building (6V) when the Sinter Plant is Operating.**

(b) The NDO of the Sinter (D&L) Building (6V) shall not exceed 1100 square feet. (For informational purposes only, this corresponds to a Quarterly lead emission rate of 76.9 pounds.)

(c) The Sinter Plant Ventilation System (SPVS) shall supply ventilation to the Larry Pit, the Tail No. 2 and No. 4 Pans, the Tail No. 3 Pan, the Smooth Roll, the Down Day Mid 3 Pan, the vibrating conveyor, the moisture screw, the Head E2/D Belt, the nodulizer drum inlet chute, the J Belt/ignition shuttle, the grate rapper, the 1-4 Fan Shafts, the pallet repair and the Sinter Machine tail.

(d) The effective date of Section 3(A)(16) shall be 4 months following issuance of the Board Order adopting this Exhibit, but not later than January 6, 1997.

(17) Cottrell Penthouse (7V)

(a) Visible emissions from the Cottrell penthouse shall not exceed 20% opacity.

(b) For informational purposes only, the Quarterly lead emission rate of the Cottrell

Penthouse is expected to be 108 pounds.

(c) The effective date of Section 3(A)(17) shall be upon issuance of the Board Order adopting this Exhibit.

(18) Breaking Floor Building (8Va)

(a) Fugitive lead emissions from the Breaking Floor Building shall not exceed 45.3 Lbs/Qtr using an emission factor of 0.0205 Lbs/Hour.

(b) The NDO of the Breaking Floor Building shall not exceed 417 square feet.

(c) The effective date of Section 3(A)(18) shall be upon issuance of the Board Order adopting this Exhibit, but not later than January 6, 1997.

(19) Blast Furnace Charge Building (8Vb)

(a) Fugitive lead emissions from the Blast Furnace Charge Building (8Vb) shall not exceed 17.7 Lbs/Qtr using an emission factor of 0.0080 Lbs/Hour.

(b) The NDO of the Blast Furnace Charge Building shall not exceed 1136 square feet.

(c) The effective date of Section 3(A)(19) shall be upon issuance of the Board Order adopting this Exhibit, but not later than January 6, 1997.

(20) Sinter Handling by Payloader (8Vf)

(a) No more than 5500 tons of sinter shall be dropped outdoors by payloader per Quarter as determined by plant accounting records. In accordance with the 1992 Lead Emission Inventory and the 1995 Demonstration of Attainment Modeling, this tonnage corresponds to Quarterly lead emission rate of 440 pounds.

(b) ASARCO shall not exceed 3069 tons of sinter in the outdoor sinter storage area.

(c) The effective date of Section 3(A)(20) shall be 2 months following issuance of the Board Order adopting this Exhibit, but not later than January 6, 1997.

(21) Direct Smelt Bins Charging (8Vi)

(a) Quarterly emissions of lead from charging Dust at the Direct Smelt Bins shall not exceed 96.8 pounds as determined by Equation 1.

(b) Quarterly emissions of lead from charging Dust at the Direct Smelt Bins during the Afternoon Shift shall not exceed 4.3 pounds as determined by Equation 1, except that any unutilized Night Shift emissions allocations may be transferred to the Afternoon Shift.

(c) Quarterly emissions of lead from charging Dust in the Old Ore Storage Yard during the Night Shift shall not exceed 3.8 pounds as determined by Equation 1.

(d) No more than 7315 tons of Non-dust material shall be charged to the Direct Smelt Bins per Quarter as determined by plant accounting records. In accordance to the 1992 Lead Emission Inventory and the 1995 Demonstration of Attainment Modeling, this tonnage corresponds to a Quarterly lead emission rate of 2.9 pounds.

(e) During charging Dust at the Direct Smelt Bins, the average payloader drop height shall not exceed 5 feet, as determined by visual observation of the Department.

(f) The payloaders used in the charging of Dust at the Direct Smelt Bins shall have bucket sizes sufficient to ensure that the average bucket size is 2.0 cubic yards or greater. If an inspection by the Department reveals that this requirement is not being met, then the Department may request and ASARCO shall submit data from the payloader Load Cell records to demonstrate compliance.

(g) Material specified in Section 3(A)(21)(a-c) shall not be charged when the hourly average wind speed at the ASARCO meteorological monitoring site is greater than 12.0 mph for the hour prior to the charging of the material.

(h) The effective date of Section 3(A)(21) shall be 2 months following issuance of the Board Order adopting this Exhibit, but not later than January 6, 1997.

(22) Blast Furnace Feed Floor (9V)

(a) Fugitive lead emissions from the Blast Furnace Feed Floor (9V) shall not exceed 56.0 Lbs/Qtr using an emission factor of 0.0254 Lbs/Hour.

(b) Only one blast furnace shall be operated at a time.

(c) A ventilated enclosure large enough to accept the charge car shall be constructed around the top of each blast furnace.

(d) The NDO of each enclosure shall not exceed 338 square feet.

(e) Each enclosure shall be ventilated with a minimum air flow of 32,000 Acfm, except as provided in Section 7.

(f) The Blast Furnace Baghouse and associated ventilation equipment shall supply ventilation to and control emissions from the Blast Furnace Feed Floor (9V).

(g) The effective date of Section 3(A)(22) shall be January 6, 1997.

(23) Blast Furnace Tapping Platform (10V)

(a) Fugitive lead emissions from the Blast Furnace Tapping Platform (10V) shall not exceed

175 Lbs/Qtr as determined by Equation 3 using an emission factor of 0.0053 pounds of lead emissions per ton of Furnace Lead tapped (Lbs/Ton).

(b) Permanent covers designed to effectively control emissions shall be constructed and used on all Blast Furnace lead pots.

(c) The effective date of Section 3(A)(23) shall be January 6, 1997.

(24) Slag Handling Facility (11V)

(a) No more than 44,000 tons of slag shall be handled in the Slag Handling Facility per Quarter as determined by plant accounting records. In accordance to the 1992 Lead Emission Inventory and the 1995 Demonstration of Attainment Modeling, this tonnage corresponds to a Quarterly lead emission rate of 113 pounds.

(b) The effective date of Section 3(A)(24) shall be upon issuance of the Board Order adopting this Exhibit.

(25) Slag Pile Dumping (12V)

(a) No more than 44,000 tons of slag shall be dumped at the slag piles per Quarter as determined by plant accounting records. In accordance with the 1992 Lead Emission Inventory and the 1995 Demonstration of Attainment Modeling, this tonnage corresponds to a Quarterly lead emission rate of 74.6 pounds.

(b) The effective date of Section 3(A)(25) shall be upon issuance of the Board Order adopting this Exhibit.

(26) Speiss/Matte Handling (15V) (This includes former source 8Vh)

(a) Speiss/Matte shall be air/mist granulated into a ventilated enclosure.

(b) Emissions from the Speiss/Matte air/mist granulating process shall be vented to and controlled by the Blast Furnace Baghouse ventilation system.

(c) Granulated Speiss/Matte shall be removed from the ventilated enclosure by front-end loader.

(d) Granulated Speiss/Matte shall be dewatered on the pad prior to shipment.

(e) Oversized Speiss/Matte shall be screened and returned to the Dross Reverberatory Furnace for re-processing.

(f) No more than 16,600 tons of Speiss/Matte shall be dropped outdoors per Quarter (8,300 tons of Speiss/Matte dropped twice) as determined by plant accounting records. In accordance with the 1992 Lead Emission Inventory and the 1995 Demonstration of Attainment Modeling, this tonnage corresponds to a Quarterly lead emission rate of 4.8

pounds.

(g) The effective date of Section 3(A)(26), except Section 3(A)(26)(b), shall be January 6, 1997. The effective date of Section 3(A)(26)(b) shall be August 29, 1998.

(27) Tetrahedrite Drier Bin Charging (16V)

(a) No more than 2700 tons of Tetrahedrite shall be dried per Quarter as determined by multiplying the number of tote bins loaded by 7.0 tons each. Each tote bin shall have a maximum capacity which shall not exceed 7.5 tons. The number of tote bins loaded shall be determined by plant accounting records. In accordance with the 1992 Lead Emission Inventory and the 1995 Demonstration of Attainment Modeling, this tonnage corresponds to a Quarterly lead emission rate of 0.29 pounds.

(b) The effective date of Section 3(A)(27) shall be upon issuance of the Board Order adopting this Exhibit.

(28) Blast Furnace Baghouse Cleanout (18V)

(a) ASARCO shall construct an enclosure around the Blast Furnace Baghouse cleanout area and reclaim trench (Blast Furnace Baghouse Enclosure) which will be ventilated to a baghouse.

(b) The ventilation system associated with the Blast Furnace Baghouse Enclosure shall maintain a minimum airflow of 35,400 Acfm, except as provided in Section 7. The exhaust from the Blast Furnace Baghouse Enclosure and associated baghouse shall be exhausted through the Blast Furnace Baghouse Stack (16P).

(c) The NDO of the Blast Furnace Baghouse Enclosure shall not exceed 177 square feet. (For informational purpose only, this corresponds to a Quarterly lead emission rate of 17.7 pounds.)

(d) The effective date of Section 3(A)(28) shall be January 6, 1997.

(29) Blast Furnace Flue Cleanout (19V)

(a) Quarterly emissions of lead from cleaning out the Blast Furnace Flue shall not exceed 80.3 pounds as determined by Equation 1.

(b) Quarterly emissions of lead from cleaning out the Blast Furnace Flue during the Afternoon Shift shall not exceed 3.5 pounds as determined by Equation 1, except that any unutilized Night Shift emissions allocations may be transferred to the Afternoon Shift.

(c) Quarterly emissions of lead from cleaning out the Blast Furnace Flue during the Night Shift shall not exceed 3.1 pounds as determined by Equation 1.

(d) During flue cleanout, the average payloader drop height shall not exceed 3 feet, as determined by visual observation of the Department.

(f) The payloaders used in the cleaning out of the Blast Furnace Flue shall have bucket sizes sufficient to ensure that the average bucket size is 1.0 cubic yards or greater. If an inspection by the Department reveals that this requirement is not being met, then the Department may request and ASARCO shall submit data from the payloader Load Cell records to demonstrate compliance.

(g) Blast Furnace Flue cleanout shall not be conducted when the hourly average windspeed at the ASARCO meteorological monitoring site is greater than 12.0 mph for the hour prior to the cleaning of the Flue.

(h) The effective date of Section 3(A)(29) shall be 2 months following issuance of the Board Order adopting this Exhibit, but not later than January 6, 1997.

(B) Equipment Permanently Shut Down:

(1) ASARCO permanently shut down the Zinc Fuming Plant including the following identified points of emissions effective July 6, 1993:

(a) Zinc Plant Building (20V);
(b) Zinc Baghouse Building (21V); and
(c) Zinc Furnace Baghouse Stack (18P).

(2) ASARCO shall construct and operate an Acid Dust Handling System no later than January 6, 1997, and abandon the following points of emissions and equipment effective when the Acid Dust Handling System is in operation:

(a) 130 ton Acid Dust Bin Baghouse Stack (17P);
(b) Acid Dust Bin Building (17V) including the zig-zag blender; and
(c) Acid Dust Conveyor Drop (17Va) point into an open-top gondola railcar.

(3) ASARCO shall shut down the crushing mill and the following points of emissions and equipment effective within 4 months of the issuance of the Board Order adopting this Exhibit, but not later than January 6, 1997:

(a) Crushing mill baghouse #1 while ventilating the crushing mill building (eliminating source 3P);
(b) Crushing mill baghouse #2 while ventilating the crushing mill building (eliminating source 4P);
(c) Crushing Mill Baghouse Stack #3 (5P);
(d) Crushing Mill Building (1V);
(e) Crushing Mill Track Hopper (1Va); and
(f) Crushing Mill Product Conveyor (1Vb).

(4) ASARCO shall remove the following equipment and points of emissions by January 6, 1997:

(a) Kettle #1 and Kettle #3 (upon removal of source 11P, ASARCO shall renumber existing Kettles #2, #4, and #5 to Kettles #1, #2, and #3, respectively) along with the associated kettle combustion stack (11P);
(b) Kettle #6 and associated kettle combustion stack (13P); and
(c) Kettle #7.

(5) ASARCO shall no longer charge material to the 47 Feeders (8Vk) after January 6, 1997.

(C) ASARCO Area Source Limitations

(1) Unpaved Roads and Unpaved Areas Within Facility

(a) Visible emissions from unpaved roadways within the ASARCO facility shall not exceed 5% opacity.

(b) ASARCO shall treat all unpaved portions of the in-plant haul roads and the general plant area and areas where unpaved traffic surfaces adjoin paved roads with water, chemical dust suppressant, and/or acceptable oil or asphalt products, as necessary to meet the limitation stated in (C)(1)(a).

(c) All water used on the roads for dust suppression must come from Upper Lake, or have a Lead Content less than or equal to that of Upper Lake.

(d) The use by ASARCO of any dust suppressants, including any oil or asphalt products, shall be in compliance with all applicable local, state, and federal requirements.

(e) ASARCO shall limit traffic on unpaved roadways and parking areas to essential traffic.

(2) Maintenance of Paved Roads and Paved Areas Within Facility

(a) Visible emissions from paved roads within the ASARCO facility shall not exceed 5% opacity.

(b) ASARCO shall sweep or spray with water all paved roads within the facility on a regular basis as necessary to meet the limitation stated in (C)(2)(a).

(c) All paved roads within ASARCO's East Helena facility shall be maintained in good condition.

(d) At a minimum, ASARCO shall maintain two sweepers (roadway or vacuum sweepers) for use in the plant.

(e) The sweeping material collected by dry sweepers shall be emptied within an enclosed building which is ventilated and controlled by a particulate control device(s) which meets the criteria of Best Available Control Technology (BACT). Sweeping material collected by wet sweepers shall be emptied at the equipment washdown area. The emptying of

sweeping material shall be in compliance with all applicable local, state and federal requirements.

(f) Any spills of dust on paved roads or paved areas within the plant shall be cleaned up by ASARCO.

(g) Within the facility, ASARCO shall use only commercially-available sanding material for deicing purposes which has a Lead Content of 0.0148 % or less.

(3) Construction

Any construction, demolition or renovation must maintain compliance with ARM 16.8.1401 (3).

(4) Haul Trucks

All haul trucks carrying lead-containing materials to and from the facility must pass over a grating system for the purpose of dislodging any materials which may be bonded to the truck bed, side walls and undercarriage.

(5) Decrease Disturbance of Outside Storage Piles

(a) All materials stored outside at the ASARCO East Helena Facility with a Lead Content greater than 1% (with the exception of East Helena sinter, East Helena smelter slag, East Helena Speiss/Matte, cast metal shapes, granulated furnace bullion, materials stored in permanent bunkers or bins, and materials which are stored in containers) shall be required to follow the conditions outlined in Section 3(C)(5)(b-e).

(b) Storage piles must be oriented so as to minimize disturbance by wind or plant equipment.

(c) Storage piles are to be chemically sealed with a suitable binder. Sealed piles which are broken into during plant operation are to be resealed as soon as practicable but no later than 24 hours after initial crust breaking, when weather permits.

(d) Concrete dividers must be installed and maintained to separate all storage materials to minimize disturbance of the piles.

(e) Wind screens must be installed and maintained to minimize wind impacts on the storage piles.

(f) The Excavation/Demolition piles between the Upper and Lower Lakes shall be sealed as necessary to ensure that the fugitive emissions from these piles are minimized. The requirements of Section 3(C)(5)(b, d, e) do not apply to these piles.

(6) Property Access Restrictions

(a) ASARCO shall maintain a fence or other barrier sufficient to restrict public access to the area described in Attachment #4. This area was not considered ambient air in the July

1995 compliance demonstration.

(b) Where fencing or other barriers are not feasible due to continual removal by natural causes (e.g., a flooding creek bed), then ASARCO shall be responsible for maintaining signs to discourage public access.

(7) The effective date of Section 3 (C) shall be upon issuance of the Board Order adopting this Exhibit.

(D) East Helena Paved Road Dust Control Requirements

(1) ASARCO shall comply with all requirements contained in Attachment #1.

(2) The following definitions apply to Attachment #1 and Section 3(D):

(a) "Area A," "Area B," and "Area C" mean the areas as defined in Attachment #1.

(b) "Equation 4" means

Lead Loading (grains/ft^2) = SL * PB_{silt} 100

Where:

SL = silt content in grains/ft^2 of area sampled from one street

PB_{silt} = percent lead from one street in silt portion of sample.

(c) "Equation 5" means

Monthly Average Lead Loading (grains/ft^2) =
Σ(Lead Loadings for all individual samples collected in one of the three areas: A, B, or C) ÷ (number of samples collected in the same area for one calendar month).

(d) "Equation 6" means

Quarterly Average Lead Loading (grains/ft^2) =
Σ(Monthly average Lead Loadings for a single area (A, B or C) ÷ (number of months for which valid Monthly Average Lead Loadings are available for that area).

(e) "Lead Loading" means the grains of silt size lead per square foot of street surface for one sample collected in Area A, Area B, or Area C and as calculated by Equation 4.

(f) "Monthly Average Lead Loading" means the average of all Lead Loadings for samples collected during one calendar month in Area A, Area B or Area C as calculated by Equation 5.

(g) "Quarterly Average Lead Loading" means the average of three Monthly Average Lead

Loadings during a calendar Quarter for Area A, Area B or Area C, as calculated by Equation 6 provided, however, that if a Monthly Average Lead Loading sample cannot be obtained for one or more months, the Quarterly Average Lead Loading shall be determined based on data for those months with data divided by the number of months with data.

(3) Effective July 6, 1996, Asarco shall clean the paved public streets and roads (city, county and state jurisdiction) in Area A and Area B as necessary to limit the Quarterly Average Lead Loading of the silt portion of road dust samples taken in those areas to less than 0.05 grains of lead per square foot of paved street surface. Sampling and testing shall be conducted in accordance with Section 3(D)(5) and Attachment #1.

(4) Effective July 6, 1996, Asarco shall clean the paved public streets and roads (city, county and state jurisdiction) in Area C as necessary to limit the Quarterly Average Lead Loading of the silt portion of road dust samples taken in Area C to less than 0.074 grains of lead per square foot of paved street surface. Sampling and testing shall be conducted in accordance with Section 3(D)(5) and Attachment #1. This limit shall be monitored and enforced as follows:

(a) If the sampling results for any 12 consecutive months show that all Monthly Average Lead Loadings for Area C are less than 0.074 grains of lead per square foot of paved street surface, Asarco may cease sampling road dust in Area C: provided, however, that Asarco may only cease sampling after the Department has reviewed the sampling data and agrees with the findings. If an event occurs described by Section 3(D) (6 or 7) during the 12 consecutive months which will prevent Asarco from obtaining a Monthly Average Lead Loading, then all valid Monthly Average Lead Loadings during the 12 consecutive month period shall be considered.

(b) Cessation of sampling in Area C pursuant to Section 3(D)(4)(a) does not relieve ASARCO from its obligation to comply with the Quarterly Average Lead Loading standard for Area C set forth in this Section 3(D)(4). Notwithstanding any cessation of sampling by Asarco in accordance herewith, the Department may sample and test for Lead Loading in accordance with Section 3(D)(5) and Attachment #1.

(c) If, at any time after cessation of sampling by Asarco in Area C, the Department determines, based on at least two samples in Area C, that a Monthly Average Lead Loading exceeds 0.074 grains per square foot, Asarco shall, upon notification by the Department, resume the cleaning and sampling of paved public streets in Area C as necessary to meet the Quarterly Average Lead Loading standard of 0.074 grains per square foot.

(5) In order to determine compliance with the Quarterly Average Lead Loading standard defined in Section 3(D)(3 and 4), ASARCO shall perform street sampling in accordance with the following requirements:

(a) ASARCO shall request, at least once a month, that the Department identify a randomly selected grid in Area A and Area B. Such requests shall also be made at least once a month for Area C during all times when Area C is required to be sampled. ASARCO

may make additional requests for a randomly selected grid in any Area.

(b) Upon ASARCO's request, the Department shall randomly select a grid in the Area or Areas for which ASARCO has submitted a request, and shall provide the coordinates to ASARCO. ASARCO shall, in accordance with the procedures described in Appendix D.2 (7/93), of the Compilation of Air Pollutant Emission Factors (AP-42) (Attachment #5), collect a road dust sample from one street within each randomly selected grid in each such Area. Once ASARCO receives the grid coordinates from the Department, ASARCO shall not sweep in that grid until the road dust sample is collected. ASARCO shall collect the road dust sample within 72 hours of receiving the grid coordinates from the Department. Failure to collect a sample within 72 hours shall only be excused for those reasons described in Section 3(D)(6 or 7). Failure to collect a sample shall not affect ASARCO's right to obtain additional randomly selected grids from the Department, obtain samples from such grids and test such samples in accordance herewith.

(c) ASARCO shall analyze each road dust sample collected for Lead Loading in accordance with Attachment #3, "East Helena Lead SIP Road Dust Control Analytical Quality Assurance Plan."

(d) ASARCO shall calculate and report the Lead Loadings, as defined by Equation 4, the dates and times of sampling of all individual samples obtained in all valid areas, the specific places where the individual samples were obtained, the monthly and Quarterly average lead values for each area as defined by Equations 5 and 6, respectively, and any other requested information as defined in Attachment #3 to the Department within 45 days after the completion of a calendar Quarter. These reports shall be submitted to the Department in both hard copy and magnetic media (disk) formats.

(e) Asarco shall ensure that all samples collected for analysis and reporting are archived for at least 6 months.

(f) The Department may obtain a split of any of ASARCO's archived or current Lead Loading samples for determination of a Lead Loading analysis.

(g) The Department may perform its own sampling of Lead Loading in Area A, Area B and Area C at any time in the future.

(6) After July 1, 1996, any failure to meet the applicable Quarterly Average Lead Loading standard contained in Section 3(D)(3 and 4) or the sampling requirements contained in Section 3(D)(5) shall be excused only if ASARCO shows that the failure was the result of an act of God or of another event that was unforeseeable, beyond ASARCO's control, and which could not reasonably have been prevented or mitigated by ASARCO. Such events shall not include acts or omissions of a road dust sweeping contractor or lack of legal access to roads. ASARCO shall use best efforts to foresee, control, prevent, and mitigate any event that might cause a failure to meet the Quarterly Average Lead Loading, or the monthly sampling requirements.

(7) If there is a calendar month in which there is snow cover present on all roadways in the randomly

selected grid in any one of the three areas defined in Attachment #1 for the entire balance of any month remaining after the Department has notified Asarco of the randomly selected grid ASARCO shall be excused from sampling that area during that month. Asarco shall use best efforts to prevent and mitigate any loss of sampling due to snow covered roads. Submittal by ASARCO of a request for grid coordinates on or before the fifth calendar day of a month shall be deemed to constitute best efforts to timely attain a sampling grid coordinate.

(8) ASARCO shall obtain written access agreements with owners of the paved public roads included in Area A, Area B, and Area C. Such agreements shall grant legal access to ASARCO and its contractors for purposes of implementing this section. Failure to obtain legal access to roads shall not constitute an event, as described in Section 3(D)(6), excusing ASARCO from meeting the Quarterly Average Lead Loading standards.

(9) ASARCO may elect to have the required sweeping and sampling implemented through a qualified contractor. In that event, ASARCO shall remain liable for meeting the Quarterly Average Lead Loading standards notwithstanding the acts or omissions of its contractor.

(10) ASARCO grants to the Department the right to audit both the sweeping and sampling practices of ASARCO and its contractors.

(11) ASARCO shall handle all materials gathered from street sweeping so as to minimize re-entrainment of such materials into the air. ASARCO shall comply with all local, state and federal requirements applicable to the handling of street sweeping materials.

SECTION 4. COMPLIANCE DETERMINATIONS

(A) Compliance with the emission limitations and requirements contained in Section 3, Subsections A through C shall be determined through Department inspections and using data from the testing, notification, and reporting requirements of Sections 5 through 13.

(B) Compliance with the emission limitations contained in Section 3(D) shall be determined by collecting and analyzing the road dust samples and calculating Quarterly Average Lead Loading for each area in accordance with Attachment #1 and Section 3(D).

SECTION 5. EMISSION TESTING

(A) All emission testing for lead shall be conducted in accordance with the Montana Source Testing Protocol and Procedures Manual. All lead compliance tests shall contain a determination of front and back-half emissions.

(B) All opacity values shall be determined according to 40 CFR Part 60, Appendix A, Method 9 Visual Determination of Opacity of Emissions from Stationary Sources or by a continuous opacity monitoring system (COMS). In cases of determining opacity values on roads, the viewer evaluating the opacity shall determine the opacity through a single point perpendicular to the road, and shall not follow any vehicle during the opacity reading.

(C) ASARCO shall conduct tests in accordance with Section 5(A) within six months of January 6, 1997 and demonstrate compliance with the lead emission limitations contained in the following sections for the specified sources. Testing shall then be conducted every 5 years thereafter.

(1) Section 3(A)(1)(b), Sample Mill Baghouse Stack (1P); and

(2) Section 3(A)(7)(b), Acid Plant Stack (8P).

(D) Except for sources under construction, ASARCO shall conduct tests in accordance with Section 5(A) within six months of January 6, 1997, and demonstrate compliance with the lead emission limitations contained in the following sections for the specified sources. Facilities under construction shall have emission testing performed within six months of completing construction. Testing shall then be conducted annually thereafter.

(1) **Section 3(A)(3)(b), Sinter Plant Roof Baghouse #7 Venting Sinter Building (3Pa);**

(2) **Section 3(A)(4)(b), Sinter Plant Roof Baghouse #8 Venting Sinter Building (4Pa);**

(3) Section 3(A)(5)(b), Concentrate Storage and Handling Building Baghouse Stack (6P);

(4) Section 3(A)(6)(b), Sinter (D&L) Baghouse Stack (7P);

(5) Section 3(A)(10)(c), Blast Furnace Baghouse Stack (16P); and

(6) Section 3(A)(12)(d), Dross Plant Baghouse Stack (21P).

(E) ASARCO shall conduct tests in accordance with Section 5(A) and demonstrate compliance with the lead emission limitations contained in Section 3(A)(9) on the Tetrahedrite Drier Baghouse Stack (10P) if the Tetrahedrite Drier is operated greater than 30 days during any calendar year and if a source test has not been performed in the past 5 years.

(F) Source Testing shall be conducted at specific conditions that are representative of the designed Operating capacity or permitted capacity and at the normal Operating conditions of the ventilated source and the ventilation system. Testing shall not be conducted during the startup or shutdown of the ventilation system, during baghouse cleaning or bag repair (this does not include bag shaking), during scheduled maintenance, or when the ventilated source is not operational.

(G) For materials greater than 1% lead, and which are or will be stored or handled outdoors, ASARCO shall perform analyses to determine Lead Content, Silt Content, and Moisture Content on the following schedule. The Silt Content and Moisture Content shall be calculated as specified in Attachment #5, Appendices E.3 and E.2, respectively, while the collecting of samples shall follow the guidelines set forth in Attachment #5, Appendices E.1 and D.3, ~~or an equivalent procedure~~.

(1) In January 1996, ASARCO determined Lead Content, Silt Content, and Moisture Content of all types of materials which were stored or handled outdoors during the month of January 1996. This will be called the January 1996 inventory.

(2) After the January 1996 inventory, and until the end of the 1996 calendar year, ASARCO shall perform analyses to determine Lead Content, Silt Content, and Moisture Content upon receipt of the first batch of any new type of material entering the ASARCO East Helena facility which will be stored or handled outdoors.

(3) Beginning in the 1997 calendar year, and for every calendar year thereafter, ASARCO shall perform analyses to determine Lead Content, Silt Content, and Moisture Content upon receipt of the first batch of each type of material entering the ASARCO East Helena facility which will be stored or handled outdoors.

(4) Beginning in January 1996, ASARCO shall perform analyses to determine the Lead Content, Silt Content, and Moisture Content the first time during each calendar year that each type of material produced in the ASARCO East Helena facility (e.g., Blast Furnace Baghouse Dust, Blast Furnace Flue Dust, etc.) is handled outdoors. Slag, Sinter, Speiss/Matte, cast metal shapes, and Wet Scrubber Filter Cakes produced in the ASARCO East Helena facility are exempt from these analyses.

(H) The results of the Silt Content and Moisture Content analyses required by Section 5 (G) shall be used to determine if the material is a Dust or Non-dust as defined in Section 2 and, if the material is a Dust, to determine the Quarterly Lead Emissions in accordance with Equation 1.

SECTION 6. CONTINUOUS OPACITY MONITORING SYSTEMS (COMS)

(A) ASARCO shall maintain and operate a continuous opacity monitoring system (COMS) on the Blast Furnace Baghouse Stack (16P). ASARCO shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) on the Dross Plant Baghouse Stack (21P). These two COMS shall monitor and record the opacity from the stacks discharged into the atmosphere.

(B) The COMS required in Section 6(A) above shall conform to all requirements of 40 CFR Part 60, Subpart R (Standards of Performance for Primary Lead Smelters) and Appendix B, Performance Specification 1, (Specifications and Test Procedures for Opacity Continuous Emission Monitoring Systems in Stationary Sources) (PS1).

(C) The COMS required in Section 6(A) above shall follow the specific operational controls, procedures, activities, and requirements set forth in Attachment #6: Quality Assurance/Quality Control (QA/QC) and Standard Operating Procedures (SOP) for Continuous Opacity Monitoring Systems.

(D) Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13 (d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation required in 40 CFR 60.13(e)(1).

(E) If any instrument or equipment is changed or other hardware is placed into service, ASARCO shall develop a new Attachment #6: Quality Assurance/Quality Control (QA/QC) and Standard Operating Procedures (SOP) for Continuous Opacity Monitoring Systems as appropriate for the new equipment. ~~Any revised documents are subject to review and approval by the Department as described in Section 12.~~

SECTION 7. AIRFLOW COMPLIANCE VERIFICATION

(A) ASARCO shall use the following methods to determine compliance with the minimum airflow requirements in Section 3(A).

(1) Test ports shall be installed in all ducts with minimum airflow requirements in Section 3.

(2) 40 CFR Part 60, Appendix A, Method 2, Method 2A, Method 2B, Method 2C, or Method 2D; ~~or a method approved by the Department in accordance with the Montana Source Testing Protocol and Procedures Manual shall be used to measure the volumetric flow rate at each location identified.~~

(B) Except for sources under construction, tests to determine airflow compliance shall be conducted within six months of January 6, 1997. Facilities under construction shall have airflow compliance testing performed within six months of completing construction. Determination of airflow shall be conducted annually thereafter.

(C) Testing shall be conducted at specific conditions that are representative of the designed Operating capacity or permitted capacity and at the normal Operating conditions of the ventilated source and the ventilation system. Testing shall not be conducted during the startup or shutdown of the ventilation system, during baghouse cleaning or bag repair (this does not include bag shaking), during scheduled maintenance, or when the ventilated source is not operational.

(D) If requested by the Department, ASARCO shall provide the Department data on the sulfide content of the Sinter Plant feed material for a period of seven (7) days prior to airflow compliance testing on the Acid Plant and the associated ventilation equipment.

SECTION 8. DATA COLLECTING

(A) ASARCO shall monitor and record the number of hours of fan operation per Quarter for the following fans (Sources listed in parentheses are used as a cross reference for facilities the fans affect.):

(1) Sample Mill Baghouse Fan (Source 1P),
(2) Sinter Plant Roof Baghouse #7 Fan (Source 3Pa),
(3) Sinter Plant Roof Baghouse #8 Fan (Source 4Pa),
(4) CSHB North Baghouse Fan (Source 6P),
(5) CSHB South Baghouse Fan (Source 6P),
(6) CSHB Feeder Room Baghouse Fan (Source 6P),
(7) Sinter Plant Ventilation System Baghouse Fan (Source 6P),
(8) Acid Dust Handling System Fan (Source 6P),
(9) Sinter Plant Baghouse Fan (Source 7P),
(10) Sinter Plant Number 5 Ventilation Fan (Source 7P),
(11) Sinter Plant Stack Fan (Source 7P),
(12) Acid Plant Hot Gas Fan (Source 8P),
(13) Acid Plant Main Blower (Source 8P),

(14) Sinter Storage Baghouse Fan (Source 9P),
(15) Tetrahedrite Baghouse Fan (Source 10P),
(16) Blast Furnace Baghouse Fan (Source 16P),
(17) Blast Furnace Stack Fan (Source 16P),
(18) Blast Furnace Tapping and Feed Floor Enclosure Ventilation Fan (Source 16P),
(19) Blast Furnace Baghouse Enclosure Baghouse Fan (Sources 18V and 16P), and
(20) Dross Plant Baghouse Fan (Source 21P).

(B) ASARCO shall determine and record the total number of Operating hours during the Quarter for the following facilities:

(1) Sample Mill,
(2) Concentrate Storage and Handling Building,
(3) Sinter Plant,
(4) Acid Plant,
(5) Tetrahedrite Drier,
(6) Blast Furnaces,
(7) Dross Plant.

(C) ASARCO shall determine and record the number of days that the Tetrahedrite Drier was Operating during the Quarter.

(D) In accordance with Section 5(G), ASARCO shall collect and record the latest data on the Lead Content, Silt Content, and Moisture Content of the all Dust material handled outdoors during the Quarter.

(E) For Hopto Unloading and Blast Furnace Baghouse Dust Reclaiming (2V), ASARCO shall collect and record the following tonnages to demonstrate compliance:

(1) The total tons of Blast Furnace Baghouse Dust reclaimed during the Quarter,

(2) The tons of Blast Furnace Baghouse Dust reclaimed on the Afternoon Shift during the Quarter,

(3) The tons of Blast Furnace Baghouse Dust reclaimed on the Night Shift during the Quarter, and

(4) The tons of Non-dust unloaded by the Hopto type loader during the Quarter.

(F) For the Old Ore Storage Yard (3V), ASARCO shall collect and record the following tonnages to demonstrate compliance:

(1) The total tons of Dust dropped in the Old Ore Storage Yard during the Quarter,

(2) The tons of Dust dropped in the Old Ore Storage Yard on the Afternoon Shift during the Quarter,

(3) The tons of Dust dropped in the Old Ore Storage Yard on the Night Shift during the Quarter, and

(4) The total tons of Non-dust material dropped in the Old Ore Storage Yard during the Quarter.

(G) For the High Grade Dumping Area (4V), ASARCO shall collect and record the total tons of Dust and Non-dust material dumped in the High Grade Building Dumping Area during the Quarter.

(H) For Sinter Handling (8Vf), ASARCO shall collect and record the total tons of Sinter dropped outdoors by Payloader during the Quarter.

(I) For Direct Smelt Bins Charging (8Vi), ASARCO shall collect and record the following tonnages to demonstrate compliance:

(1) The total tons of Dust charged at the Direct Smelt Bins during the Quarter,

(2) The tons of Dust charged at the Direct Smelt Bins on the Afternoon Shift during the Quarter,

(3) The tons of Dust charged at the Direct Smelt Bins on the Night Shift during the Quarter, and

(4) The total tons of Non-dust charged at the Direct Smelt Bins during the Quarter.

(J) For the Blast Furnace Tapping Platform (10V), ASARCO shall collect and record the total tons of Furnace Lead tapped from the furnace during the Quarter.

(K) For the Handling of Slag by Payloader (11V), ASARCO shall collect and record the total tons of Slag Handled at the Slag Handling Facility during the Quarter.

(L) For Slag Pile Dumping (12V), ASARCO shall collect and record the total tons of Slag dumped at the Slag piles during the Quarter.

(M) For the Speiss/Matte Handling Area (15V), ASARCO shall determine and record the total tons of Speiss/Matte dropped during the Quarter.

(N) For the Charging of Tetrahedrite to the Drier Bin (16V), ASARCO shall determine and record the total tons of Tetrahedrite dried during the Quarter.

(O) For the Blast Furnace Flue Cleanout (19V), ASARCO shall collect and record the following tonnages to demonstrate compliance:

(1) The total tons of Dust material cleaned out from the Blast Furnace Flue during the Quarter,

(2) The tons of Dust material cleaned out from the Blast Furnace Flue on the Afternoon Shift during the Quarter, and

(3) The tons of Dust material cleaned out from the Blast Furnace Flue on the Night Shift during the Quarter.

(P) ASARCO shall collect and record the hourly average windspeed and wind direction at the ASARCO meteorological monitoring site.

(Q) On a regular basis and using the Load Cell records for each loader performing the following functions,

ASARCO shall collect and record the date, time, tonnage, and material location/identifier.

(1) Reclaimed Blast Furnace Baghouse Dust,
(2) Dropped Dust in the Old Ore Storage Yard,
(3) Charged Dust at the Direct Smelt Bins, and
(4) Cleaned out Blast Furnace Flue Dust.

SECTION 9. DATA REPORTING

ASARCO shall submit to the Department, within 45 days after the end of the Quarter, a Quarterly Report, both in a written format and where possible, a magnetic media (disk) format compatible with the Departments data management system.

(A) ASARCO shall report the Lead Content, Silt Content, Moisture Content, and tonnages of all Dust material handled per Quarter outdoors.

(B) ASARCO shall report the number of hours of fan operation per Quarter for the following fans (Sources listed in parentheses are used as a cross reference for facilities the fans affect):

(1) Sample Mill Baghouse Fan (Source 1P)
(2) Sinter Plant Roof Baghouse #7 Fan (Source 3Pa)
(3) Sinter Plant Roof Baghouse #8 Fan (Source 4Pa)
(4) CSHB North Baghouse Fan (Source 6P)
(5) CSHB South Baghouse Fan (Source 6P)
(6) CSHB Feeder Room Baghouse Fan (Source 6P)
(7) Sinter Plant Ventilation System Baghouse Fan (Source 6P)
(8) Acid Dust Handling System Fan (Source 6P)
(9) Sinter Plant Baghouse Fan (Source 7P)
(10) Sinter Plant Number 5 Ventilation Fan (Source 7P)
(11) Sinter Plant Stack Fan (Source 7P)
(12) Acid Plant Hot Gas Fan (Source 8P)
(13) Acid Plant Main Blower (Source 8P)
(14) Sinter Storage Baghouse Fan (Source 9P)
(15) Tetrahedrite Baghouse Fan (Source 10P)
(16) Blast Furnace Baghouse Fan (Source 16P)
(17) Blast Furnace Stack Fan (Source 16P)
(18) Blast Furnace Tapping and Feed Floor Enclosure Ventilation Fan (Source 16P)
(19) Blast Furnace Baghouse Enclosure Baghouse Fan (Source 18V)
(20) Dross Plant Baghouse Fan (Source 21P)

(C) ASARCO shall report the total number of hours of operation for the following facilities

(1) Sample Mill
(2) Concentrate Storage and Handling Building
(3) Sinter Plant
(4) Acid Plant
(5) Tetrahedrite Drier

(6) Blast Furnaces
(7) Dross Plant

(D) ASARCO shall report the tons of material handled per Quarter for the following sources:

(1) Non-dust material unloaded by the Hopto type loader (Source 2V),
(2) Non-dust material dropped in the Old Ore Storage Yard (Source 3V),
(3) Dust and Non-dust material dumped at the High Grade Dumping Area (Source 4V),
(4) Sinter dropped outdoors by payloader (Source 8Vf),
(5) Non-dust material charged at the Direct Smelt Bins (Source 8Vi),
(6) Slag handled at the Slag Handling Facility (Source 11V),
(7) Slag dumped at the Slag Piles (Source 12V),
(8) Speiss/Matte dropped per Quarter (Source 15V), and
(9) Tetrahedrite charged to the bin per Quarter (Source 16V).

(E) ASARCO shall report the total pounds per Quarter (Lbs/Qtr) lead emissions, the pounds per Quarter (Lbs/Qtr) of lead emissions for the Afternoon Shift, and the pounds per Quarter (Lbs/Qtr) of lead emissions for the Night Shift for the following sources:

(1) Reclaiming Blast Furnace Baghouse Dust (Source 2V),
(2) Dust dropped in the Old Ore Storage Yard (Source 3V),
(3) Dust charged at the Direct Smelt Bins (Source 8Vi), and
(4) Dust cleaned out of the Blast Furnace Flue (Source 19V).

(F) ASARCO shall report the total number of lead crucibles analyzed at the Laboratory per Quarter (Source 2P).

(G) ASARCO shall report the number of days that the Tetrahedrite drier was Operating during the Quarter.

(H) ASARCO shall report the total tons of Furnace Lead tapped from the furnace per Quarter.

(I) Continuous Opacity Monitoring System (COMS)

(1) ASARCO shall submit to the Department, in the Quarterly Report, a section addressing all excess emissions during the Quarter. Periods of excess emissions shall be defined as those emissions in excess of the opacity limitations identified in Sections 3(A)(10) and (12) for each stack on a rolling six-minute basis. The excess emissions section shall include, at a minimum, the following information:

(a) The magnitude of excess emissions and the date and time of commencement and completion of each time period of excess emissions.

(b) Specific identification of each period of excess emissions that occurs during start-ups, shutdowns, and Malfunctions of the affected facility. The nature and cause of any Malfunction (if known), the corrective action taken or preventative measures adopted.

(c) The date and time identifying each period during which the COMS was inoperative. The nature of the system repairs or adjustments must also be reported.

(d) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

(e) The percentage of time the COMS was operating, calculated as:

$$\left[\frac{1 - \text{hours of COMS downtime during source Operating hours for the reporting period}}{\text{hours the sources were Operating during reporting period}}\right] x100$$

This shall be reported as % Time Available

(f) The percentage of time the COMS indicated compliance. This shall be calculated as:

$$\left[\frac{1 - \text{hours of excess opacity during source Operating hours for the reporting period}}{\text{total hours of COMS availabili ty during reporting period}}\right] x100$$

This shall be reported as percent compliance.

(g) The excess emission reports shall be submitted to the Department as a separate section of the Quarterly Report.

(2) ASARCO shall maintain a file of all measurements from the COMS; all performance testing measurements; all COMS performance evaluations; all COMS or monitoring device calibration checks and audits; and adjustments and maintenance performed on these systems or devices. The file must be recorded in a permanent form suitable for inspection.

(J) ASARCO shall report the hourly windspeed and wind direction from the meteorological monitoring site for the Quarter as required in Section 11. This data shall only be reported in a magnetic media (disk) format compatible with the Department's data management system.

(K) ASARCO shall report all information required under Section 3 (D).

SECTION 10. NOTIFICATION REQUIREMENTS

(A) Within 15 days after completion, Asarco shall notify the Department in writing that the following activities have been accomplished:

(1) Installation of all the devices which monitor and record the fan operating hours of those fans identified in Section 3(A) which due to construction activities were not installed at the time the Board adopted this Exhibit.

(2) Removal of Kettle #1 and Kettle #3 along with the associated Kettle Combustion Stack (11P),

(3) Removal of Kettle #6 and associated Kettle Combustion Stack (13P),

(4) Removal of Kettle #7,

(5) Permanent shutdown of the Crushing Mill and associated equipment (3P, 4P, 5P, 1V, 1Va, and 1Vb),

(6) Permanent shutdown of the Acid Dust Handling System (17P, 17V, and 17Va),

(B) Within 30 days after completion, Asarco shall notify the Department in writing that the following activities have been accomplished:

(1) Installation of all broken bag detectors as required in Section 11(B)(1), on all baghouses installed and operating at the time the Board adopted this Exhibit.

(2) Installation of all broken bag detectors as required in Section 11(B)(1), on all baghouses not installed or operating at the time the Board adopted this Exhibit.

SECTION 11. ADDITIONAL REQUIREMENTS AND CONDITIONS

(A) Notwithstanding the testing that is required and specified by this Exhibit, the Department may require additional emission testing per ARM 16.8.704, Testing Requirements.

(B) ASARCO shall install, operate, and maintain bag break detectors on all baghouses except those which have COMS on their stacks.

(1) Detectors shall be installed within 2 months of issuance of the Board Order adopting this Exhibit or at start-up for new baghouses, but not later than January 6, 1997.

(2) The detectors shall be equipped with a data logger or similar recording device to record emission variations.

(3) The detectors shall be equipped with alarms designed to identity broken bags and/or identify significant increases in emissions.

(C) ASARCO shall utilize Attachment #7: Baghouse Maintenance Plan, in maintaining the pollution control capabilities of all baghouses listed in Attachment #7, and ensuring that those baghouses listed are operating in an efficient manner. Should ASARCO install an additional baghouse, remove a baghouse, or substantially modify an existing baghouse(s), ASARCO shall modify Attachment #7 to reflect the changes. ~~Such a revised document shall be subject to review and approval by the Department as described in Section 12.~~

(D) ASARCO shall maintain a current or install a new meteorological monitoring site representative of the conditions at the ASARCO East Helena Facility.

If ASARCO elects to initiate operation of a new meteorological monitoring site, then the exact location of the monitoring site must be approved by the Department and meet all the siting requirements contained in the

Montana Air Quality Assurance Manual including revisions, the EPA Quality Assurance Manual including revisions, and Parts 50, 53, and 58 of the Code of Federal Regulations, or any other requirements specified by the Department.

A new site must be in operation within 2 months of the issuance of the Board Order adopting this Exhibit, but not later than January 6, 1997.

(E) Visible emissions from any material handling shall not exhibit an opacity of 20% or greater.

(F) ASARCO shall retain copies of all data collected and reported in accordance with this Exhibit and its Attachments for five (5) years. Data shall be made available to the Department upon request in a format compatible with the Department's data management system, where possible.

SECTION 12. SUPPLEMENTAL DOCUMENTS

(A) ASARCO shall maintain and utilize the following supplemental documents, which have been approved by the Department and are attached to this Exhibit and incorporated herein by reference:

(1) Attachment #1: Sampling and Analysis of Paved Road Dust Samples in East Helena, May 1995, as required by Section 3(D).

(2) Attachment #2: Compliance Plan for Process Weight and Time of Day Restrictions, July 1995, as required by Section (8).

(3) Attachment #3: East Helena Lead SIP Road Dust Control Analytical Quality Assurance Plan (May 1995), as required by Section 3(D).

(4) Attachment #4: ASARCO East Helena Compliance Modeling - Legal Description and Map of the Boundaries Between Ambient Air and Areas of Restricted Access (July 1995), as required by Section 3(C)(6).

(5) Attachment #5: Compilation of Air Pollutant Emission Factors (AP-42), Appendix D.2, (July 1993), Appendix D.3 (July 1993), Appendix E.1 (July 1993), Appendix E.2 (July 1993), Appendix E.3 (July 1993).

(6) Attachment #6: Quality Assurance/Quality Control (QA/QC) and Standard Operating Procedures (SOP) for Continuous Opacity Monitoring Systems (November 20, 1995)..

(7) Attachment #7: Baghouse Maintenance Plan (January 1996). The Department has given partial approval for this maintenance plan. The only lacking requirements to this maintenance plan is that there are currently no inspection, maintenance or corrective action procedures for the bag break detectors. These devices have yet to be purchased by ASARCO, but will be purchased and installed within two (2) months of issuance of the Board Order adopting this Exhibit (see Section 11(B)). Within four (4) months of issuance of the Board Order adopting this Exhibit, ASARCO shall submit to the Department a revised Attachment #7: Baghouse Maintenance Plan, which will include provisions for the inspection, maintenance and corrective action procedures for the bag

break detectors. This revised Attachment shall be subject to the review and approval procedures outlined in Section 12(B). The Baghouse Maintenance Plan shall be effective only upon full approval of the plan, as revised. This approval shall be obtained from the Department by January 6, 1997. This deadline shall be extended to the extent that the Department has exceeded the time allowed in Section 12(B) for its review and approval of the revised document.

(B) The following procedure shall apply to the review of revisions to Attachments which are submitted by ASARCO.

(1) Within 90 days of submittal by ASARCO, the Department shall approve, require revision, or disapprove the document.

(2) Within 45 days after receiving notice from the Department that a document requires further revision or is disapproved, ASARCO shall either revise and resubmit the document to the Department or petition the Board to resolve any disputes between ASARCO and the Department concerning the document.

(3) Within 45 days after receiving the resubmitted document from ASARCO, the Department shall approve or disapprove the resubmitted document.

(4) Department approval of a revised Attachment shall be in writing and shall certify that the revised Attachment has been agreed upon by the parties and meets all applicable requirements of Exhibit A. Upon such certification the revised Attachment shall be deemed incorporated in this Exhibit A and shall supersede the prior version of the Attachment.

(5) Except as provided in Section 12(B)(6), ASARCO shall implement the requirements of an Attachment or a revised Attachment immediately upon approval by the Department or the Board, unless otherwise provided herein.

(6) If both parties agree in writing that it is appropriate and beneficial to do so, Asarco shall implement a draft revision to an attachment.

SECTION 13. GENERAL CONDITIONS

(A) Inspection - ASARCO shall allow the Department representatives access to all airborne sources of lead at the ASARCO facility for the purpose of compliance monitoring and enforcing this lead control strategy such that the Department representatives may enter and inspect, at any reasonable time, any property, premises, or place, except a private residence, on or at which a airborne source of lead is located or is being constructed or installed. The Department representatives shall be allowed to collect samples, obtain data, audit any monitoring equipment, or observe any monitoring or testing, and conduct all necessary compliance monitoring and enforcement functions related to this control plan.

All inspections shall be conducted in compliance with all applicable federal or state rules or requirements for workplace safety and ASARCO East Helena plant safety rules or requirements. ASARCO shall inform Department representatives of all applicable workplace safety rules or requirements at the time of the inspection. Nothing contained in this Stipulation, Exhibit A, and attachments shall be construed to limit the

Department's statutory right of entry and inspection as provided for in Section 75-2-403, MCA.

(B) Compliance with Statutes and Regulations - Specific listing of requirements, limitations, and conditions contained herein does not relieve ASARCO from compliance with all applicable statutes and administrative regulations including amendments thereto, nor waive the right of the Department to require compliance with all applicable statutes and administrative regulations, including amendments thereto.

(C) Enforcement - Violations of limitations, conditions and requirements contained herein ("Stipulation Requirement") may constitute grounds for judicial or administrative enforcement action. If the incident causing the violation would also form the basis of a violation of ARM Title 16, Chapter 8, or of Title 75, Chapter 2, MCA, the Department shall not count the violation of the Stipulation Requirement as an additional or separate violation incident for penalty calculation and assessment purposes.

(D) Baghouses and Associated Ventilation - In addition to meeting the minimum airflow requirements and lead emission limitations contained in this Exhibit, ASARCO shall use its best efforts to operate and maintain all baghouses, ventilation systems, fans, and hoods in order to optimize the capture efficiency and control lead emissions, except during a Malfunction to the fan, or a Malfunction to any equipment or process directly affecting the fan, or during scheduled maintenance to the fan or ventilation system.

SECTION 14 CONTINGENCY MEASURES

(A) Tier I Contingency Measures:

Within 60 days of EPA's notification that the East Helena Lead nonattainment area has failed to attain the lead NAAQS for any Quarter after the first calendar Quarter of 1997, or make reasonable further progress in reducing lead emissions, ASARCO shall implement the following contingency measures set forth in paragraphs 1-5 of Section 14(A). If Section 14(A) is implemented due to a deficiency in making reasonable further progress, then the contingency measures shall stay in effect until such time that the deficiency has been corrected. If Section 14(A) is implemented due to a violation of the lead NAAQS after the first Quarter of 1997, the measures shall remain in effect until a revised Lead SIP is approved by the Board.

(1) Reduce Outdoor Storage of Sinter Material

The outdoor storage of sinter shall be reduced from the allowable limit of 3,069 tons to 2,000 tons. Within 180 days of the notification from EPA that the East Helena Lead nonattainment area has failed to attain the lead NAAQS, the allowable limit of outdoor sinter shall be reduced to 500 tons. Any sinter produced in excess of the capacity of the Sinter Storage Building and the 500 tons allowed outdoors shall be stored in an enclosed facility which only has an opening large enough to allow a payloader or truck to enter.

(2) Cease Operations During Night Shift

The following facilities shall not handle materials during the Night Shift:

(a) Hopto Unloading and Blast Furnace Baghouse Dust Reclaiming (2V)
(b) Old Ore Storage Yard (3V)

(c) High Grade Building Dumping Area (4V)
(d) Breaking Floor Building (8Va)
(e) Direct Smelt Bins Charging (8Vi)
(f) Slag Pile Dumping (12V)
(g) Speiss/Matte Handling Area (15V)
(h) Tetrahedrite Drier Bin Charging (16V)
(i) Blast Furnace Flue Cleanout (19V)

(3) More Stringent Lead Grain Loading on East Helena Paved Roads

ASARCO shall reduce the Quarterly Average Lead Loading of the silt portion of road dust samples for Area A, as defined in Attachment #1, to 0.040 grains of lead per square foot of paved street surface.

(4) Reduce Road Emission from East Helena Roads

(a) ASARCO shall pave the unpaved areas between the Volunteer Firehall and Smith's Bar.

(b) ASARCO shall treat all unpaved streets and alleys within Area A with a suitable road stabilizer.

(5) Reduce Spills On East Helena Roads

(a) ASARCO shall re-route all haul trucks carrying lead-containing material away from the 4-lane highway.

(b) ASARCO shall require all haul trucks carrying lead-containing material to cover their loads.

(B) Tier II Contingency Measures

If, beginning the first full calendar Quarter after the Tier I contingency measures are fully implemented pursuant to Section 14(A), the Department finds that the East Helena lead nonattainment area has failed to attain the lead NAAQS, the Department shall give written notice to ASARCO that the Tier II contingency measures are to be implemented. Within 60 days of the date of the notice, ASARCO shall implement the following additional contingency measures contained in Section 14(B). If Section 14(B) is implemented due to a deficiency in making reasonable further progress, then the contingency measures shall stay in effect until such time that the deficiency has been corrected. If Section 14(B) is implemented because of a violation of the lead NAAQS after the first Quarter of 1997, the measures shall remain in effect until a revised lead SIP is agreed upon and approved by the Board.

(1) More Stringent Lead Grain Loading on East Helena Paved Roads

ASARCO shall reduce the Quarterly Average Lead Loading of the silt portion of road dust samples for Area A, as defined in Attachment #1, to 0.035 grains of lead per square foot of paved street surface.

(2) Storage and Handling of Sinter Outdoors

ASARCO shall eliminate all storage and handling of sinter outdoors.

(3) Reduce Road Dust Emissions from the ASARCO Plant Property

ASARCO shall pave or cover with gravel a minimum of 50,000 square feet of surface area within the ASARCO East Helena Facility. The areas that will be paved or covered shall be subject to the same requirements set forth in Section 3(C).