

AIR CONSERVATION COMMISSION

STATE OF MISSOURI

In the matter of)
 The Doe Run Company)
 Lead SIP)
 Respecting the Lead Emissions)
 Reduction Program)

STIPULATION

Come now the Doe Run Company (hereafter Doe Run) and the Missouri Department of Natural Resources (hereafter DNR), and agree as follows:

1. The State of Missouri, through DNR and the Missouri Air Conservation Commission (hereafter Commission), for, and in consideration, of Doe Run's agreement to complete the implementation of supplemental control strategies and lead emission data related actions upon the time schedules as more fully set forth below, and Doe Run for and in consideration of the State of Missouri's agreement to accept the implementation of said strategies and actions as sufficient, under current information and belief, to contribute to attaining the federal and Missouri ambient air quality standard for lead and to accept the time table for completion of such strategies and actions as being as expeditious as practicable; Now therefore, the State of Missouri and Doe Run have and do hereby agree to consent to the entry of the following Order by the Commission approving and adopting this Supplemental Agreement.

2. To this end, DNR and the Commission are preparing a SIP Revision to demonstrate attainment and maintenance of the national ambient air quality standard for lead. As part of the SIP Revision, a lead emissions reduction program at Doe Run's Herculaneum, Missouri, facility is required. DNR and Doe Run agree that the Commission may enter the Order set forth below, to be binding on the parties, providing for a lead emissions reduction program which Doe Run has volunteered and hereby does agree to undertake and complete on the schedule set forth in the Order. The parties, by their signatures hereto, acknowledge that they have read and understand the terms of this Stipulation and the Order of the Commission, and hereby agree to be bound thereby. The parties further acknowledge and agree that the terms of the below Order may be enforced by suit for injunction and penalties pursuant to Section 643.151, RSMo.

ORDER

This matter coming before the Commission on the Stipulation of the parties and after public hearing, the Commission having jurisdiction over the subject matter and the parties; and being fully advised in the premises;

IT IS ORDERED that the following lead emission reduction control strategies and lead emission data related actions, on the schedule set forth is approved and adopted as part of the SIP Revision for Doe Run's Herculaneum, Missouri facility, and that parties will comply with the terms herein:

It is acknowledged and agreed that the schedule set forth below shall not apply in the event Doe Run is prevented from completing this lead emissions reduction program during time periods as stated as the result of strikes, Acts of God and other circumstances are in effect. Doe Run must notify MDNR of such circumstances and the length of the delay anticipated. MDNR must establish a revised schedule and compliance date in each situation..

This Stipulation and Order shall not affect in any way Doe Run's rights and liabilities under any regulation hereinafter duly promulgated by the Commission.

SUPPLEMENTAL SIP AGREEMENT ITEMS

PROJECTS

End month

1. The southend crushing circuit will be designed to allow it to be washed down by hose without shorting out electrical equipment or endangering employees from electrical hazards. To the extent possible other areas in the sinter plant will be similarly retrofited. Mar 1992
2. During the sinter plant outage when the south end crushing circuit is being constructed, a crew will be deployed to make an extensive lead dust cleanup of the sinter plant including the mixing plant areas on the top floor and feed floor. Sep 1991
3. Install water spray on conveyor belt CV-13 to reduce blast furnace charging emissions. Jan 1990
4. During the sinter plant outage when the south end crushing circuit is being constructed, part of the sinter plant operating crew (or another crew) will be deployed to make an extensive lead dust cleanup of the blast furnace feed system from CV-12 through CV-20 and areas overhead as feasible. Sep 1991
5. A Natural Work Team will be established to identify one or more best approaches to attempt to eliminate the caustic dross storage at the north end of the refinery.

(*The March 9, 1990 consent Order items 4 and 5 will reduce the production of caustic dross and therefore reduce the volume of caustic dross storage.)

The work team will prepare and issue a report of the findings. Dec 1990

6. Rework drainage and pave existing caustic storage area. Feb 1993
7. Install Electrostatic Precipitator to replace Baghouse #4 in Acid Plant dust cleaning train. Jun 1991

TESTING

8. Conduct process fugitive emission monitoring and/or review emission estimates and discharge elevation assumptions for the following areas and submit data to DNR for evaluation:
- EP# 15 - blast furnace doghouses (charge belts)
 - EP# 16 - blast furnace roof monitor
 - EP# 18 - roof vents in crossing area
 - EP# 19 - roof vents in refinery area Dec 1991
9. Stack test at Emission Point Numbers 2, 3, 4 (Scrubber No. 12 and the replacement baghouse(s) for scrubbers 11 and 13) and 13A, the new sinter plant stack in accordance with 10 C.S.R. 10-6.030(14). Dec 1992
10. Doe Run to date has not been able to prove the feasibility of gross furnace enlargement (see Item 4 -- Milestone 2 in the March 1990 consent order). Therefore, in lieu of the second gross furnace enlargement, Doe Run will install a baghouse(s) in place of the existing # 11 and # 13 scrubber to reduce lead emissions so as to maintain the modelled demonstration of attainment.
- Therefore, Doe Run will perform the following:
- Doe Run will initiate engineering of the # 11 and # 13 scrubber replacement baghouse. Dec 1990
 - Doe Run will complete engineering of the # 11 and # 13 scrubber replacement baghouse. Jul 1991

Doe Run will complete installation of
the # 11 and # 13 scrubber replacement
baghouse.

Nov 1992

Entered: _____

MISSOURI AIR CONSERVATION COMMISSION

Paul M. ...
John ...
Michael R. ...
Harriet Beard

THE DOE RUN COMPANY

by: David ...
Secretary & General Counsel

7/26/90
(Date)

MISSOURI DEPARTMENT OF NATURAL RESOURCES

by: B. ...

8/17/90
(Date)

BEFORE
THE AIR CONSERVATION COMMISSION
STATE OF MISSOURI

In the Matter of)
The Doe Run Company)
(Herculaneum Smelter))
Consent order)
respecting lead emissions)

STIPLULATION

Come now the Doe Run Company (hereafter Doe Run) and the Missouri Department of Natural Resources (hereafter DNR), and covenant and agree as follows:

1. The State of Missouri, through DNR and the Missouri Air Conservation Commission and Doe Run are desirous of submitting to the U. S. Environmental Protection Agency (hereafter EPA) a State Implementation Plan (hereafter SIP) for the attainment and maintenance of the national ambient air quality standard for lead, and having same approved by EPA pursuant to the Clean Air Acts amended in 1990.

2. To this end, DNR and the Missouri Air Conservation Commission are preparing a SIP to be submitted to EPA, to demonstrate attainment and maintenance of the national ambient air quality standard for lead. As part of the SIP, certain emission reductions from Doe Run's Herculaneum, Missouri facility are to be undertaken. DNR and Doe Run agree that the Missouri Air Conservation Commission may enter the order set forth below, to be binding on the parties, providing for certain emission control projects which Doe Run agrees to undertake and complete on the schedule set forth in the order. The parties, by their signatures hereto, acknowledge that they have read and understand the terms of this Stipulation and the order of the Commission, and agree to be bound thereby. The parties further acknowledge and agree that the terms of the below order may be enforced by suit for injunction and penalties pursuant to Section 643.151. RSMo 1986.

ORDER

This matter coming before the Commission on the Stipulation of the parties and after public hearing, the Commission having jurisdiction over the subject matter and the parties, and being fully advised in the premises;

IT IS ORDERED that The Doe Run Company undertake and complete, at its Herculaneum, Missouri facility, the following emission control projects, on the schedule set forth:

A. Projects required as SIP control measures.

Project	Completion Date
1. Install new mixing drum baghouse in the sinter plant (SIP ref. No. 22, Technical Memorandum, February 1993, TM No. 1). Complete installation by	09/30/93
2. Install equipment to modify present transfer of sinter plant's ESP, crusher, and cooler baghouse fume by drag conveyor to a mix room metering bin (TM No. 2). Complete engineering by Complete installation by	05/31/93 10/31/93
3. Install automatic dampering equipment in both dross furnaces as they are rebuilt (TM No. 3).	
Complete installation on #1 dross furnace by	12/31/93
Complete installation on #2 dross furnace by	06/30/94

4. Install equipment to transfer the #5 baghouse fume by drag conveyor to the sinter plant mix room (TM No. 4).
Complete engineering by 01/31/94
Complete installation by 07/31/94

5. Chemically stabilize or pave access road just North of the Strip Mill Building from Station Street to the existing concrete.
Complete paving or initiate stabilization by 07/31/94

Should Doe Run opt for stabilization, stabilization to occur at a minimum of once every 6 months (eg. once during the periods Jul - Dec and Jan - Jun).

6. Chemically stabilize or pave river yard access road.
Complete paving or initiate stabilization by 07/31/94

Should Doe Run opt for stabilization, stabilization to occur at a minimum of once every 6 months (eg. once during the period Jul - Dec and Jan - Jun).

7. Chemically stabilize concentrate storage piles once every 6 months (eg. once during the periods Jul - Dec and Jan - Jun).
Complete first stabilization by 12-31-93

8. Develop formal written guidelines for construction projects, to control fugitive emissions.
Complete by 09/01/93

9. Develop formal written guidelines for temporary sources of dust on paved roads, to control fugitive emissions.

Complete by

10/01/93

B. Projects required as Contingency control measures

The undertaking and completion of any of the following projects is contingent upon not attaining the lead standard in the smelter vicinity after completion of the emission control projects 1. through 9. in section A. of this order.

The criteria for determining the need of undertaking these projects is given in the Missouri SIP for Lead, 1980 and as revised by the Commission through 1993, Section VII, B, 1, P. 5. Contingency Measures.

1. Initiate street sweeping with sweeper truck provided with water spray once per week on those Herculaneum streets within the area with the potential to be most heavily impacted by fugitive emissions and plant resuspension. This area includes streets as described in P.5.c) item 1) on page 23.22
2. Consume stockpile of concentrate to reduce size to working minimum of 15,000 tons and maintain at that size.
3. Consume stockpile of sinter to reduce size to working minimum of 25,000 tons and maintain at that level.
4. Run water and sweeper truck inside plant grounds on two shifts Monday-Friday, in lieu of one shift Monday-Friday (except when icy conditions exist).
5. Cover all remaining lead-bearing stockpiles with plastic, canvas or other dust-impervious material.

If it is determined by DNR that any of these contingency projects are needed for the attainment of the national ambient air quality standard for lead, implementation of contingency measures shall begin within thirty (30) days from receipt of DNR's notice of need.

It is acknowledged and agreed that the schedule set forth above shall not apply in the event Doe Run is prevented from completing these emission control projects during the time periods as stated as the result of strikes, Acts of God, and other circumstances beyond its control, and the completion dates will be extended for periods of time corresponding to the time said circumstances are in effect. The burden shall be on Doe Run to establish to the Commission the circumstances and amount of time necessary for a revised schedule.

THE DOE RUN COMPANY

by Wesley H. Saunders / General Counsel
Neil E. Conley / Director of Env. Affairs

June 24, 1993
(DATE)

MISSOURI DEPARTMENT OF NATURAL RESOURCES

by David R. Orr

7-2-93
(DATE)

entered: _____

MISSOURI AIR CONSERVATION COMMISSION

- James Ray Gill Chairman
- Michael J. Foreman Vice-Chairman
- Dee-Ann D. Crane Member
- Harriet Beard Member
- Linda Vandenberg Member
- Kenneth R. Beck Member
- _____ Member

CONSENT ORDER

This Consent Order is entered into on the 9th day of March, 1990, by the Missouri Department of Natural Resources ("MDNR") and The Doe Run Company ("Doe Run").

WHEREAS, Doe Run operates a lead smelter in Jefferson County, at 881 Main Street in Herculaneum, Missouri, which emits lead, among other pollutants, an air contaminant within the meaning of Chapter 643, RSMo.

WHEREAS, on or about February 11, 1978, 10 CSR 10-6.010, "Ambient Air Quality Standards," became effective. This regulation required all installations both new and existing to meet certain ambient lead standards set forth in said regulation.

WHEREAS, a review of the ambient lead data for monitoring sites number 3, number 5, and number 6 at the Doe Run lead smelter in Herculaneum, Missouri by MDNR personnel indicates that Doe Run has been unable to meet the ambient lead standard set forth in said regulation since the second quarter of 1986.

WHEREAS, the MDNR and Doe Run have discussed terms upon which to amicably resolve any and all claims, including the Notice of Violation dated June 22, 1989, which may be made against Doe Run for alleged violations of the Missouri Air Conservation Law and regulations promulgated thereunder occurring prior to the date of this agreement.

WHEREAS, the MDNR, Doe Run, and the Missouri Attorney General desire to resolve amicably all disputes or claims which could be made against Doe Run, including the Notice of Violation dated June 22, 1989, for alleged violations of the Air Conservation Law and regulations, without Doe Run admitting the validity or accuracy of any such claims.

NOW THEREFORE, it is hereby agreed that Doe Run will, in resolution of such disputes or claims and as part of final SIP development to demonstrate attainment of the lead standard, undertake and complete, at its Herculaneum, Missouri smelter, the following emission control projects, to be more fully described in a Technical Memorandum, on the schedule set forth below:

1. Sinter Plant South End Project - Rebuild primary crushing circuit of sinter machine and convert to air from water cooling in order to upgrade low energy scrubbers number 2, 3, and 4 with baghouse dust control. Scrubbers number 8, 9, and 10 will also be removed. There will be three baghouses - one serving the air cooler, one venting the crushing circuit proper, and a small bin vent. The exhaust gas from the two main baghouses will be vented to a common 200 foot high stack. (There may be some relatively insignificant changes in concept as the design process is completed.

- Milestone 1 - order major pieces of process equipment April 15, 1990
- Milestone 2 - initiate site preparation at Herculaneum Sinter Plant March 1, 1991
- Milestone 3 - initiate dismantling and demolition of unwanted equipment July 1, 1991
- Milestone 4 - complete installation of all equipment and startup project November 1, 1991
2. Sinter Machine Tip End Ventilation - Replace #1 scrubber venting the tip end of the sinter machine with a baghouse. This baghouse will vent through a common 200 foot stack with the Sinter Plant South End Project baghouses.
- Milestone 1 - order equipment April 15, 1992
- Milestone 2 - complete installation of all equipment and startup project November 1, 1992
3. Sinter Plant Rail Car Loading Project - Install wind skirting around rail car loading area. Pave the same area. Install ventilation over the feed chute and vent to the sinter machine as make up air.
4. Dross Furnace Enlargement - Enlarge dross furnace #2 by about 30% in order to decrease housekeeping emissions. Enlarge dross furnace #1 if #2 experiment justifies it.
- Milestone 1 - complete installation #2 February 1, 1990
- Milestone 2 - complete installation #1 if justified by #2 December 1, 1993
5. Vacuuming Dezincing - Purchase Britannia Dezincing technology, one kettle setting and dezincer for the purpose of reducing caustic dross evolution and its associated housekeeping and fugitive dust problems. Install second setting if justified.
- Milestone 1 - Purchase and install October 1, 1989
- Milestone 2 - Complete evaluation of feasibility and file report, with determination of continuation based report July 1, 1990
- Milestone 3 - Install second unit if justified by first unit July 1, 1992
6. Furnace Front Ventilation - The ventilation for each operating furnace will be increased. The gas will be ventilated through number 5 baghouse.

Milestone 1 - Purchase equipment, install, and operate

November 1, 1989

7. Silver Retort Ventilation - The ventilation of the operating silver retorts will be upgraded by installation of a manifold and a single 30,000 ACFM fan. The exhaust will be vented through number 3 baghouse.

Milestone 1 - Purchase equipment, install, and operate

July 1, 1989

8. Lead Pot Cooling - Utilize additional lead pots in transferring lead from the furnace to the dross plant in order to cool the lead before pouring.

Milestone 1 - Assemble equipment for initial trials

March 1, 1990

Milestone 2 - Certify feasibility to MDNR by letter, otherwise prepare infeasibility showing report

October 1, 1990

Doe Run shall notify MDNR within a two month period after each milestone is met. Doe Run shall maintain within its operating records information which identifies malfunctions of plant process or pollution control equipment which could result in increased lead emissions and actions taken, when appropriate, regarding such malfunctions. These records shall be retained a minimum period of three years.

Doe Run, in compromise and satisfaction of all allegations or claims from April 1, 1987 to October 1, 1989, pursuant to the Missouri Air Conservation Law, which could be made by the MDNR as to any alleged violations on or before the above dates agrees, without admitting liability or fault, to pay the sum of \$50,000. The parties hereto agree that a certified check in the amount of \$50,000 made payable to the "Jefferson County Treasurer as Trustee for the Jefferson County School Fund" shall be provided to the MDNR and the Attorney General at the time of execution of this Agreement, receipt for which is acknowledged by MDNR and the Attorney General's signatures affixed hereto.

Doe Run agrees to pay \$5000 to the Jefferson County School Fund for each day beyond the final compliance dates in Sections 1, 2, 3, 4 and 8 that Doe Run fails to complete the required abatement projects.

The MDNR and the Attorney General's Office of Missouri agree not to bring or cause to be brought any civil action against Doe Run for penalties arising out of any claimed violations from April 1, 1987 to October 1, 1989.

It is acknowledged and agreed that the schedule and stipulated penalties set forth above shall not apply in the event Doe Run is prevented from completing these emission control projects during the time periods as stated as the result of strikes, acts of God, and other circumstances beyond its control. Doe Run must notify MDNR of any such circumstances and the length of the delay anticipated. MDNR must establish a revised schedule and compliance date in each such situation.

IN WITNESS WHEREOF, the parties hereto have executed this Consent Order as of the date first above written.

THE DOE RUN COMPANY

By: *Patrick W. [Signature]*
Title: Secretary & General Counsel

WILLIAM L. WEBSTER
Attorney General

By: *Edward F. Downey*
Edward F. Downey
Assistant Attorney General

MISSOURI DEPARTMENT OF NATURAL
RESOURCES

By: *G. Tracy Mehan, III*
G. Tracy Mehan, III
Director

BEFORE THE AIR CONSERVATION COMMISSION

STATE OF MISSOURI

In the Matter of)
The Doe Run Company (Herculaneum)
Smelter) Consent Order)
respecting lead emissions)

STIPULATION

COME NOW the Doe Run Company (hereafter Doe Run) and the Missouri Department of Natural Resources (hereafter DNR), and covenant and agree as follows:

1. This Stipulation modifies and supersedes the previous Stipulation duly executed by the parties and entered by the Missouri Air Conservation Commission.

2. The State of Missouri, through DNR and the Missouri Air Conservation Commission and Doe Run submitted to the U. S. Environmental Protection Agency (hereafter EPA) a State Implementation Plan (hereafter SIP) for the attainment and maintenance of the national ambient air quality standard for lead in the vicinity of the Herculaneum smelter, and are desirous of having same approved by EPA pursuant to the Clean Air Act as amended in 1990 (hereafter CAA).

3. EPA, in reviewing the SIP as submitted for their approval, has advised DNR and Doe Run that the five (5) Contingency Control Measures that are listed in Section B. of the previous Order dated July 2, 1993, do not provide sufficient emissions reduction to satisfy the amended Part D. requirements in the CAA.

4. To this end Doe Run has prepared and DNR herein sets forth a new set of five (5) Contingency Control Measures to replace the set listed in Section B. of the previous Order.

5. In addition, DNR and Doe Run are desirous of amending projects 5 and 6 in Section A of the previous consent order dated July 2, 1993. These two projects provide Doe Run an optional method of implementation for each control measure. Doe Run has now opted for one method of the two provided for each project and herein sets forth the options for projects 5 and 6.

ORDER

This matter coming before the Commission on the Stipulation of the parties and after public hearing, the Commission having jurisdiction over the subject matter and the parties, and being fully advised in the premises;

IT IS ORDERED that The Doe Run Company undertake and complete, at its Herculaneum, Missouri facility, the following Contingency Control Measures, which replace the Contingency Control Measures for this facility that are listed in Section B. of the previous order dated July 2, 1993.

These measures are to be implemented under the following conditions.

The undertaking and completion of any of the following projects is contingent upon not attaining the lead standard in the smelter vicinity after completion of the emission control projects 1 through 9 in section A of the previous Order.

The criteria for determining the need of undertaking these projects is given in the Missouri SIP for Lead, 1980 and as revised by the Commission through 1993, Section VII, B, 1, P, 5. Contingency Measures.

1. . . Enclose the roof top of the north end of the sinter plant and vent the roof area of the inside of the sinter plant to #3 and #4 sinter machine updraft fan.

HERCULANEUM

A timetable for completion of the installation shall be developed at the time of DNR's notification of need to implement contingency measures. The timetable shall have the agreement of Doe Run, DNR, and EPA, and shall contain intermittent dates for contract award, purchase orders issued, and the receipt of materials, along with the completion date. Note: Bid specifications and engineering are complete for this contingency measure.

The installation schedule shall be developed and agreed upon within sixty (60) days of notification of an air quality violation. If an agreement has not been reached within sixty (60) days of such notification, DNR shall develop an installation schedule. The owner/operator will implement the schedule established by DNR.

2. Replace bags in #5 baghouse.

Approximately half of the cells in #5 baghouse will be hung with teflon coated filter bags to improve the ventilation capacity provided to the furnace process and process fugitives.

A current bid for the bags and installation will be kept on hand. The order will be placed within 60 days of being notified of the need to implement.

3. Replace remaining bags in #5 baghouse.

If after the first full quarter of monitoring following the installation of approximately half of the bags in #5 baghouse with teflon coated bags, the standard has not been achieved, the remaining bags will be replaced unless Doe Run, DNR, and EPA agree that replacing the remaining bags would not be effective in reducing emissions.

4. Add baghouse maintenance personnel.

A baghouse maintenance crew will be put on full time during the period prior to the installation of the new bags in contingency measure No. 2. This will be to further

insure the best possible condition of the baghouse and availability of the maximum number of cells on-line for draft to the furnaces (1st priority) and (secondarily) to the sinter machine.

5. The roof ventilating fans for the #5 baghouse fans will be turned off to reduce potential emissions from the building.

IT IS ALSO ORDERED that the Doe Run Company undertake and complete the following amended control measure projects 5 and 6 as listed in Section A of the previous order dated July 2, 1993.

These two measures are amended following the Doe Run selection of the optional method of implementation previously provided for each control measure.

5. Pave access road just North of the Strip Mill Building from Station Street to the existing concrete.

Complete paving by

07/31/94

6. Chemically stabilize river yard access road. Stabilization to occur at a minimum of once every 6 months (e.g. once during the period July - Dec and Jan - Jun).

Initiate stabilization by

07/31/94

HERCULANEUM

It is acknowledged and agreed that the implementation set forth above shall not apply in the event Doe Run is prevented from implementing these emission control projects during the time periods as stated as the result of strikes, acts of God, or other circumstances beyond its control, and the implementation dates will be extended for a period of time corresponding to the time said circumstances are in effect. The burden shall be on Doe Run to establish to the Commission the circumstances and amount of time necessary for a revised schedule.

BEFORE THE AIR CONSERVATION COMMISSION

STATE OF MISSOURI

In the Matter of)
The Doe Run Company (Herculaneum)
Smelter) Consent Order)
respecting lead emissions)

STIPULATION

COME NOW the Doe Run Company (hereafter Doe Run) and the Missouri Department of Natural Resources (hereafter DNR), and covenant and agree as follows:

1. This Stipulation modified and supersedes the previous Stipulation duly executed by the parties and entered by the Missouri Air Conservation Commission.

2. The State of Missouri, through DNR and the Missouri Air Conservation Commission and Doe Run submitted to the U. S. Environmental Protection Agency (hereafter EPA) a State Implementation Plan (hereafter SIP) for the attainment and maintenance of the national ambient air quality standard for lead in the vicinity of the Herculaneum smelter, and are desirous of having same approved by EPA pursuant to the Clean Air Act as amended in 1990 (hereafter CAA).

3. EPA, in reviewing the SIP as submitted for their approval, has advised DNR and Doe Run that the five (5) Contingency Control Measures that are listed in Section B of the previous Order dated July 2, 1993, do not provide sufficient emissions reduction to satisfy the amended Part D requirements in the CAA.

4. To this end Doe Run has prepared and DNR herein set forth a new set of five (5) Contingency Control Measures to replace the set listed in Section B of the previous Order.

5. In addition, DNR and Doe Run are desirous of amending projects 5 and 6 in Section A of the previous consent order dated July 2, 1993. These two projects provide Doe Run an optional method of implementation for each control measure. Doe Run has now opted for one method of the two provided for each project and herein sets forth the options for projects 5 and 6.

ORDER

This matter coming before the Commission on the Stipulation of the parties and after public hearing, the Commission having jurisdiction over the subject matter and the parties, and being fully advised in the premises;

IT IS ORDERED that The Doe Run Company undertake and complete, at its Herculaneum, Missouri facility, the following Contingency Control Measures, which replace the Contingency Control Measures for this facility that are listed in Section B of the previous Order dated July 2, 1993.

These measures are to be implemented under the following conditions.

The undertaking and completion of any of the following projects is contingent upon not attaining the lead standard in the smelter vicinity after completion of the emission control projects 1 through 9 in Section A of the previous Order.

The criteria for determining the need of undertaking these projects is given in the Missouri SIP for Lead, 1980 and as revised by the Commission through 1993, Section VII, B, 1, P, 5. Contingency Measures.

1. Enclose the roof top of the north end of the sinter plant and vent the roof area of the inside of the sinter plant to #3 and #4 sinter machine updraft fan.

A timetable for completion of the installation shall be developed at the time of DNR's notification of need to implement contingency measures. The timetable shall have the agreement of Doe Run, DNR, and EPA, and shall contain intermittent dates for contract award, purchase orders issued, and the receipt of materials, along with the completion date. Note: Bid specifications and engineering are complete for this contingency measure.

The installation schedule shall be developed and agreed upon within sixty (60) days of notification of an air quality violation. If an agreement has not been reached within sixty (60) days of such notification, DNR shall develop an installation schedule. The owner/operator will implement the schedule established by DNR.

2. Replace bags in #5 baghouse.

Approximately half of the cells in #5 baghouse will be hung with teflon coated filter bags to improve the ventilation capacity provided to the furnace process and process fugitives.

A current bid for the bags and installation will be kept on hand. The order will be placed within sixty (60) days of being notified of the need to implement.

3. Replace remaining bags in #5 baghouse.

If after the first full quarter of monitoring following the installation of approximately half of the bags in #5 baghouse with teflon coated bags, the standard has not been achieved, the remaining bags will be replaced unless Doe Run, DNR, and EPA agree that replacing the remaining bags would not be effective in reducing emissions.

4. Add baghouse maintenance personnel.

A baghouse maintenance crew will be put on full time during the period prior to the installation of the new bags in contingency measure No. 2. This will be to further insure the best possible condition of the baghouse and availability of the maximum number of cells on-line for draft to the furnaces (1st priority) and (secondarily) to the sinter machine.

5. The roof ventilating fans for the #5 baghouse fans will be turned off to reduce potential emissions from the building.

If it is determined by DNR that any of these contingency projects are needed for the attainment of the national ambient air quality standard for lead, implementation of contingency measures shall begin within sixty (60) days from receipt of DNR's notice of need.

IT IS ALSO ORDERED that the Doe Run Company undertake and complete the following amended control measure projects 5 and 6 as listed in Section A of the previous Order dated July 2, 1993.

These two measures are amended following the Doe Run selection of the optional method of implementation previously provided for each control measure.

5. Pave access road just North of the Strip Mill Building from Station Street to the existing concrete.

Complete paving by

07/31/94

6. Chemically stabilize river yard access road. Stabilization to occur at a minimum of once every 6 months (e.g. once during the period July - Dec and Jan - Jun).

Initiate stabilization by

07/31/94

HERCULANEUM

It is acknowledged and agreed that the implementation set forth above shall not apply in the event Doe Run is prevented from implementing these emission control projects during the time periods as stated as the result of strikes, acts of God, or other circumstances beyond its control, and the implementation dates will be extended for a period of time corresponding to the time said circumstances are in effect. The burden shall be on Doe Run to establish to the Commission the circumstances and amount of time necessary for a revised schedule.

HERCULANEUM

EPA Rulemakings

CFR: N/A

FRM: 62 FR 43647 (8/15/97)

PRM: 62 FR 10001 (3/5/97)

State Submission: N/A

State Proposal: N/A

State Final: N/A

APDB File: MO-126

Description: The EPA notified the state of Missouri that the Doe Run Herculaneum nonattainment area failed to attain the NAAQS for lead by June 30, 1995, as required under the provisions of the CAA and the Missouri SIP. This rule required the state to implement specific contingency measures previously identified in the approved SIP. The state of Missouri is also required to submit a SIP revision meeting the applicable provisions of the CAA by September 15, 1998.

CFR: 40 C.F.R. 52.1320(c) (87) (i) (D)

FRM: 60 FR 22274 (5/5/95)

PRM: 60 FR 22334 (5/5/95)

State Submission: 11/23/94

State Proposal: N/A

State Final: 9/29/94

APDB File: MO-65

Description: The EPA approved a consent order which corrected the previous order dated March 31, 1994, which omitted implementation language for contingency measures which had been included in a prior order adopted on June 29, 1993.

CFR: 40 C.F.R. 52.1320(c) (87) (i) (C)

FRM: 60 FR 22274 (5/5/95)

PRM: 60 FR 22334 (5/5/95)

State Submission: 6/30/94

State Proposal: N/A

State Final: 3/31/94

APDB File: MO-65

Description: The EPA approved a consent order in which Doe Run Herculaneum agrees to a new set of five Contingency Control Measures to replace the set listed in section B, and agrees to amend Control Measure projects 5 and 6 as listed in section A of the previous order dated July 2, 1993.

CFR: 40 C.F.R. 52.1320(c)(87)(i)(B)

FRM: 60 FR 22274 (5/5/95)

PRM: 60 FR 22334 (5/5/95)

State Submission: 7/2/93

State Proposal: N/A

State Final: 7/2/93

APDB File: MO-65

Description: The EPA approved a consent order in which Doe Run Herculaneum agrees to undertake and complete specific emissions control projects on the schedule set forth.

CFR: 40 C.F.R. 52.1320(c)(76)(i)(B)

FRM: 57 FR 8076 (3/6/92)

PRM: 56 FR 41500 (8/21/91)

State Submission: 5/8/91

State Proposal: N/A

State Final: 3/9/90

APDB File: MO-65

Description: The EPA approved a consent order in which Doe Run agrees to undertake and complete specific emissions control projects.

CFR: 40 C.F.R. 52.1320(c)(76)(i)(C)

FRM: 57 FR 8076 (3/6/92)

PRM: 56 FR 41500 (8/21/91)

State Submission: 5/8/91

State Proposal: N/A

State Final: 8/17/90

APDB File: MO-65

Description: The EPA approved this stipulation between Doe Run and the MDNR that certain lead emission data and lead emission reduction control strategies be a part of the SIP revision for Doe Run Herculaneum.

Difference Between the State and EPA-Approved Regulation

None.