

US EPA ARCHIVE DOCUMENT

Appendix H – Enclosure of Lead Concentrate Storage and Handling

In accordance with, and in addition to, the provisions of Section XIV of this Consent Decree (Additional Injunctive Relief), Doe Run shall comply with the provisions of this Appendix. Any submissions required of this Appendix shall be submitted to EPA and MDNR in accordance with Section XXIII (Notices) of this Consent Decree.

A. Doe Run shall install and operate a building enclosure/ventilation system at the lead concentrate handling, storage and loading areas at the following mill facilities owned and operated by Doe Run: Buick Mine/Mill, Brushy Creek Mine/Mill, Sweetwater Mine/Mill, and Fletcher Mine/Mill. The building enclosure/ventilation system shall address the following specific components/areas: any interior lead concentrate conveyance system (i.e., conveyance system located totally inside an enclosed storage/loading building), the lead concentrate storage stockpile, the area containing the scale, and the vehicle loading zone (i.e., the area between the lead concentrate storage stockpile and the scale, within which the front-end loader or other loading equipment operates); and any exterior lead concentrate conveyance system (i.e., conveyance system located between the enclosed mill building and the enclosed storage/loading building). The exterior conveyance enclosure system may be ventilated by sharing the negative pressure ventilation system of the enclosed storage/loading building connected thereto. The enclosure/ventilation systems shall meet the following requirements:

1. all subject areas shall be fully enclosed with limited openings to allow proper ventilation, and access and egress for people and vehicles, as necessary;
2. any enclosure shall be subject to general ventilation that maintains the interior of the building enclosure at a lower than ambient pressure to ensure in-draft through any openings at all times;
3. any enclosure shall be ventilated to a baghouse or other type of filter particulate collection equipment;
4. all connected enclosures may utilize the same shared ventilation system, provided that the required negative pressure level is maintained; and
5. any enclosure/ventilation system shall provide adequate enclosure and ventilation for any interior lead concentrate conveyance system without the need for a redundant enclosure/ventilation of the interior conveyance system.

B. Doe Run shall sequentially complete installation and begin operation of an enclosure/ventilation system at the respective mill facilities by September 1 of the following consecutive years: 2012, 2013, 2014, and 2015. The sequence of enclosure/ventilation system installation and operation at the respective mill facilities will be determined by Doe Run; provided however, that Doe Run shall complete installation and begin operation of an enclosure/ventilation system at the Buick Mine/Mill facility by

no later than September 1, 2013. If Doe Run chooses to substantially revise the engineering design of its enclosure/ventilation system based on comments received by EPA and/or MDNR and such revision requires delay of the finalization of the plans beyond December 1 of the year preceding the established installation/operation date (i.e., less than nine (9) months prior to the established completion/operation date), then such revisions shall be a basis for an extension of the compliance schedule equivalent to the actual period of delay and any related delay due to seasonal construction limitations. Any extension of the compliance schedule shall not be classified as a "material modification" of the Consent Decree. If Doe Run revises the engineering design of its enclosure/ventilation system based on comments received by EPA and/or MDNR, Doe Run shall submit the final plans to EPA and MDNR thirty (30) days prior to commencing construction on the enclosure/ventilation system.

C. In accordance with the schedule set forth in Section B of this Appendix, Defendants shall install and operate a differential pressure gauge on the leeward wall of the enclosure at each facility to measure the pressure difference between the inside and outside of the enclosure that meets the following requirements: (1) the pressure gauge shall be certified by the manufacturer to be capable of measuring pressure differential in the range of 0.02 to 0.2 mm Hg; (2) both the inside and outside taps shall be shielded to reduce the effects of wind; and (3) Defendants shall demonstrate that the inside of the building is maintained at negative pressure as compared to the outside of the building no less than 0.02 mm Hg when all doors are in the position they are in during normal operations. Doe Run may seek to implement an alternate method to that stated herein for monitoring negative pressure or in-draft, if such method is proven to be at least equivalent to or more accurate than the above described method. Any such alternate proposal shall be submitted to and reviewed by EPA in accordance with the schedule set forth in Section B of this Appendix.

D. No later than fourteen (14) months before the enclosure/ventilation system installation completion/operation commencement date for any enclosure/ventilation system required under Section A of this Appendix, and consistent with the schedule established in Section B of this Appendix, Doe Run shall submit to EPA and MDNR plans containing the specifications for the enclosure/ventilation system that will be installed at the specific mill facility selected by Doe Run. EPA will consult with MDNR and provide any comments on the proposed plans to Doe Run within sixty (60) days. If comments are not provided within the established timeframe, it will be assumed that EPA and MDNR have no comments, and Doe Run will proceed with the plans as submitted. The plans shall include the following information:

1. A detailed description of the area and equipment to be enclosed at each facility listed above.
2. The engineering designs, drawings, and cost estimates created by or for Doe Run for the building enclosure/ventilation system for the following areas: (a) the interior lead concentrate conveyance system (i.e., conveyance system located totally inside an enclosed storage/loading building); (b) the lead

concentrate stockpile storage area; (c) the area containing the scale; and (d) the vehicle loading zone. The plans shall also include a detailed description and design basis for the enclosure system that will be used on any exterior lead concentrate conveyance system (i.e., conveyance located between exterior walls of the enclosed mill building and the enclosed storage/loading building), including enclosure options designed to prevent spillage to the ambient environment. The plans shall be based on an evaluation of best industry practices and shall present to EPA and MDNR the enclosure and ventilation technologies that are demonstrated to best minimize fugitive emissions and/or spillage to the ambient environment, to the extent practicable, and to best minimize the spillage of lead concentrate onto the exterior of the transport vehicle during loading inside the enclosed/ventilated storage/loading building (prior to entering the vehicle wash station) to the extent practicable.

3. A description of the ventilation specifications and design basis for maintaining negative pressure in the enclosure, as well as the measurement equipment and the method that will be implemented to measure and confirm that negative pressure is being maintained in the building enclosure.

4. A description of the specifications and design basis for any pollution control equipment that will be employed.

5. The name and qualifications of any contractor candidates that may be used by Doe Run to complete the project, if not previously submitted to EPA and the State.

6. A schedule for completing each portion of the project.

7. A general description of the expected environmental benefits of the project, providing any data or calculations of the expected lead air emissions reductions.

E. Doe Run shall provide an update on the status of these projects as part of the six-month status reports required pursuant to Section XVI (Reporting Requirements) of this Consent Decree.