

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

www.dnr.mo.gov

SEP 27 2012

Mr. Mark Cummings
The Doe Run Company
Southeast Missouri Mining and Milling Division
P.O. Box 500
Viburnum, MO 65566

RE: Doe Run, Buick Mine/Mill, MO-MO0002003
Biotreatment Cell Pilot Project Approval

Dear Mr. Cummings:

We have received your request, dated September 13, 2012, to pursue a small scale pilot project at the Buick Mine. The planned project involves the construction of a biotreatment cell below the Buick Mine tailings dam and at the head waters of the meander system. The proposed cell will be 30 feet by 30 feet and will be designed to treat approximately 10 gpm.

Please note that the Department of Natural Resources, Water Protection Program, has not conducted a technical engineering review of the proposed system. Biotreatment is considered an innovative technology and is not covered in the Design Guides (10 CSR 20-8). Further, the Department does not guarantee that the proposed system will meet effluent limitations.

In light of the above, the proposed pilot project is hereby approved with the following conditions:

1. To ensure a stable and water tight structure that can be easily and safely maintained, the design and construction of the biotreatment cell dikes shall be in accordance with the requirements of 10CSR 20- 8 for pond dikes.
2. Doe Run shall notify the Department 15 days prior to the biotreatment cell beginning operation. As-built Engineering plans and specification certified by a professional engineer registered in the State of Missouri shall be submitted to the Department of Natural Resources prior to commencement of operations.

3. The pilot system shall be operated for a period of eight months. If Doe Run wishes to extend the timeframe for the pilot project, an extension request must be submitted at least 30 days prior to the end of the eight month test period. This extension request shall include the reason for the extension and a summary of operations and test results up to that point.
4. During operation, Doe Run shall collect and analyze weekly influent and effluent samples for lead, zinc, copper, arsenic, cadmium, nickel, BOD, ammonia, and pH.
5. Within 45 days of the conclusion of operations of the pilot project, Doe Run shall submit to the Department a report summarizing the data collected and an overall assessment of the project.
6. If it is determined at the conclusion of the project that a permanent treatment system is necessary to achieve compliance with effluent limitations, a construction permit application shall be submitted 180 days in advance of the date on which construction begins. Doe Run accepts liability associated with the possibility of denial of a permit application for this treatment type.
7. This approval does not relieve Doe Run of their obligation to meet effluent limitations. In the event effluent limitations are exceeded, Doe Run may be subject to enforcement action.

For questions related to technical issues such as the engineering report, construction permit, or plans and specifications, please contact Mr. Jalal El-Jayyousi, at (573) 526-8403 or Missouri Department of Natural Resources, P.O. Box 176, Jefferson City MO 65102-0176.

Thank you for your efforts to help ensure clean water in Missouri.

Sincerely,

WATER PROTECTION PROGRAM



John Madras
Director

JM:jen

c: Mr. Robert Brundage, Newman, Comley & Ruth P.C.
Mr. Mike Hefner, Southeast Regional Office
Chris Wieberg, Water Protection Program
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