



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

DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

MAY 06 2016

Mr. Jeff Porter
Christy Minerals Company
833 Booneslick Road
P.O. Box 159
High Hill, MO 63350

Dear Mr. Porter:

Thank you for submitting your letter dated April 4, 2016, in which you commented on the Missouri State Operating Permit MO-G840000 (Clay Mining and Processing). The Department of Natural Resources, Water Protection Program, appreciates the time you have taken to participate in the public comment period which expired on April 4, 2016. The department's responses to your summarized comments are below.

Comment 1:

The revision to the pH number in Table A.1 is acknowledged and appreciated.

Response 1:

Thank you for your comment. This type of feedback is valuable in confirming these changes are for the better.

Comment 2:

The 2-year schedule of compliance that was part of the previous draft has been removed. Even with changes to the pH number in Table A.1., a schedule of compliance is needed in order to develop the treatment systems necessary to meet the revised TSS limit.

Response 2:

Thank you for your concern. It is not appropriate for the department to provide a schedule of compliance in this instance since the proposed change is a technology based effluent limitation

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Comment 3:

Under Applicability Section 3, a statement has been added clarifying that coagulants and flocculants that are used to meet permit effluent limitations are not considered to be additives, and may be added to wastewater. This addition is appreciated.

Response 3:

Thank you for your comment. This type of feedback is valuable in confirming these changes are for the better.

Comment 4:

In Table A.2, sampling frequency is increased from annually to quarterly. I would like to request that for this permit cycle, the frequency be increased to 2 times per year.

Response 4:

The department does not intend to change the schedule of monitoring frequency at this time. In the future, this suggestion may be entertained once sufficient seasonal data have been collected to support the change.

Comment 5:

In the current MO-G84 permit, there is a statement clarifying that a separate land disturbance permit is not required for the holder of the MO-G84 permit. This particular issue has been an area of confusion over the years. I think it would be relevant and helpful to continue to include this clarification.

Response 5:

For the purpose of clarification, language has been added to the permit exempting the need for a land disturbance for activities covered by this permit.

Comment 6:

In the Fact Sheet, Section IV includes a lengthy discussion of how TSS limitations were derived. I would recommend removing the statement that the "effluent limitations in this permit begin the process of transitioning to the established EPA guidelines."

Response 6:

Thank you for pointing this out. The phrase has been removed.

Thank you again for your comments on MO-G840000. The department has issued the new MO-G840000 permit. The new permit can be found at <http://dnr.mo.gov/env/wpp/permits/issued/wpcpermits-general.htm>. If you have any questions or require more information regarding MO-G840000, please contact Ms. Susan Higgins of

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my staff at (573) 526-1002, or by mail at the Department of Natural Resources, Water Protection Program, P. O. Box 176, Jefferson City, MO 65102-0176.

Sincerely,

WATER PROTECTION PROGRAM

A handwritten signature in black ink, appearing to read "Chris Wieberg", with a large, sweeping flourish at the end.

Chris Wieberg, Chief
Operating Permits Section

CW:sh



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MAY 06 2016

Mr. Randy Scherr
Mining Industry Council of Missouri
101 E. High Street, Suite 200
Jefferson City, MO 65102

Dear Mr. Scherr:

Thank you for your letter dated April 12, 2016, regarding the Missouri State Operating Permit MO-G840000 (Clay Mining and Processing). The Department of Natural Resources' Water Protection Program appreciates the time you have taken to participate in the permitting process. The public comment period ended on April 4, 2016. Please see the responses to your summarized comments below.

Comment 1:

Mine dewatering has a daily maximum of 90 mg/L total suspended solids, but the monthly average is 45 mg/L. Why has the limit been reduced to 45 mg/L and why is it half the daily maximum? If we sample once a month, are we violating the permit if we are within the daily maximum, but outside the monthly average?

Response 1:

The department has researched both technology based and water quality based effluent limits while drafting this permit as well as addressed the concern over lowering total suspended solids (TSS) during meetings with industry representatives. The department has determined that separating process wastewater and mine dewatering into two distinct categories with each having their own effluent limitation is an appropriate approach. This approach is protective of water quality while more accurately addressing the various types of discharges that occur from this industry. The U.S. Environmental Protection Agency (EPA) effluent limitation guidance, 40 CFR 436, does establish guidelines for Bentonite, which is one of the minerals covered under this permit. Additionally, effluent limitations proposed in the EPA's development documents for the clay industry are scientifically based and were used as guidance in establishing the effluent limitations in this permit. Page 5 of the Fact Sheet for MO-G840000 goes into detail on how the limits were established and gives suggestions for meeting the requirements. The established limitations are technology based and consistent with literature regarding the achievability by industry best practices. As to your question regarding once a month sampling, the answer is that in the scenario you propose you would be out of compliance with the permit. If once a month sampling reveals a TSS value above the limit for monthly average, even though it is below the daily maximum, then taking subsequent samples during the month in question may be beneficial in bringing the monthly average into compliance range.

Comment 2:

Typical stormwater TSS will be higher than 100 mg/L (benchmark value) due to the nature of clay particles. Having to monitor and do a CAR every exceedance will create a large compliance cost of time and paperwork

Response 2:

Benchmarks are considered necessary to evaluate storm water Best Management Practices (BMPs), and if exceeded during discharges resulting from a precipitation event, the facility needs to review the effectiveness of installed BMPs. The exceedance of a benchmark value in itself is not a permit violation. Failure to improve BMPs or take corrective action to address a benchmark exceedance and failure to make tangible progress towards achieving a benchmark is a permit violation. If you have made every effort to improve BMPs to avoid exceedances and they continue to occur, the facility may develop documents to demonstrate they cannot be achieved and submit documentation to the department for review. In most cases, improvement of BMPs should greatly reduce the likelihood of benchmark exceedance.

Comment 3:

Due to the nature of clays and the difficulty of suspended clay particles staying in suspension, without some sort of treatment, the solids will not drop out. It would add an undue burden to treat every stormwater discharge at 19+ locations for a single operator spread out over the state. As it is, it takes a minimum of 3 days to visit every permit location.

Response 3:

Since technology to remove total suspended solids works best at lower pH and after discussion with industry operators and performing additional research, the department has established that a pH of 6.0 – 9.0 Standard Unit is protective of water quality for the process of mine dewatering only. This allows the treatment to effectively remove TSS. The department does not believe the burden of a single operator that manages multiple sites is sufficient basis for removing or reducing a technology based requirement.

Comment 4:

Due to the large number of permits, their locations and current staffing, it is impracticable to reach each permit in the first 60 minutes of discharge.

Response 4:

The requirement to sample within the first 60 minutes of discharge applies only to flow through stormwater BMPs as a result of precipitation events exceeding 0.1 inch during a 24-hour period. This requirement does not apply to stormwater retention BMPs designed to a 10-year, 24-hour rain event, or to process wastewater or mine dewatering discharges. In remote areas where quarterly monitoring is deemed not feasible, a change in the type of BMP may be a solution. By implementing retention BMPs, quarterly stormwater monitoring is only required if there is a discharge. If a BMP does not discharge during a quarter, then no sampling is required and one must report 'no discharge' on their discharge monitoring report.

Comment 5:

Can we reduce site inspection to active pits only? Pits that are stabilized should not be required to be inspected so frequently, and monthly inspections of these stabilized sites would create an undue burden of compliance.

Response 5:

If there are pits that are inactive, satisfactorily stabilized and confirmed by department inspection, then the permit for such facilities may be terminated and thus will not require further inspection or site monitoring. To terminate a permit, one must submit a Form H, Request for Termination. As long as there is an active permit for the facility, permit requirements must be met. Language has been added to the permit to clarify which facilities may be designated as inactive and reducing site inspections to a quarterly basis for inactive sites

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Comment 6:

There seems to be inconsistencies between the different regional offices. SLRO wants DMRs of a different form than NERO or SERO. When asking for releases sometimes there is a wait time on land reclamation release. With the increases in the amount of paperwork involved with permits, it makes for undue burden of compliance for sites that are stabilized and well vegetated. If the mining companies could receive quicker response on mine water discharge permit releases it would help reduce the regulatory compliance burden.

Response 6:

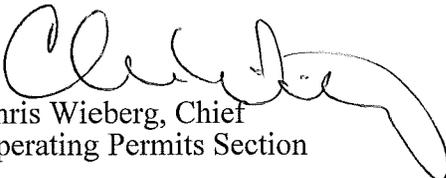
Thank you for bringing your concerns to our attention. To ensure consistency across the state, a Discharge Monitoring Report form has been created and will be used by all Regional Offices and a copy of the DMR form will be issued along with the permit. While not a requirement of this permit, the department's Electric Discharge Monitoring Report Submission (eDMR) initiative is now available and will eventually be required for all permits. You may find eReporting to be simpler and easier when reporting for several facilities. Once an eDMR account is established, all DMR report submissions can be accomplished online. For more information about eDMR, please visit: <http://dnr.mo.gov/env/wpp/edmr.htm>. Free training is offered monthly for the eDMR system. You may contact edmr@dnr.mo.gov if you are interested in attending training.

Your concerns regarding land reclamation release and permit termination will be forwarded to the attention of the Land Reclamation Program.

Thank you again for your comments on MO-G840000. If you have any questions or require more information regarding MO-G840000, please contact Ms. Susan Higgins of my staff at by phone at (573) 526-1002 or by mail at the Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, MO 65102-0176.

Sincerely,

WATER PROTECTION PROGRAM


Chris Wieberg, Chief
Operating Permits Section

CW:shj