



Date: July 21, 2009

To: Region Office Directors/Program Directors

From: Mike Larsen, Staff Director, Land Reclamation Program (*original signed by Mike Larsen*)

Subject: Mining Law Information

From time to time, questions come up about the Land Reclamation Program's authority at mine sites. In particular, many programs are not clear on what is or is not regulated under Missouri's mining laws. As a result, I have collected information to help other programs become more familiar with our program's role regarding mining in Missouri.

Attached is a narrative explanation of the program's authority at mine sites entitled "Land Reclamation Program – What We Regulate". This should help answer some questions that may arise related to various mine sites and mineral commodities in Missouri.

While I recognize that the information enclosed with this memo is limited and very brief, if there is ever a need for you or any member of your staff to ask for more detailed information or explanation, please do not hesitate to contact us. We would be more than glad to provide additional information about our mining laws or for a specific mine site.

Thank you

ML:ts

Attachments

C: Dan Schuette, DEQ
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Land Reclamation Program What Do We Regulate?

Program Web Page

<http://www.dnr.mo.gov/env/lrp/index.html>

Program Authorization

Metallic Minerals Waste Management Act (Metallic Minerals Permitting, Inspection and Enforcement)

- RSMo 444.350 through 444.380

Land Reclamation Act (Industrial Mineral Permitting, Inspection and Enforcement)

- RSMo 444.760 through 444.790

Surface Coal Mining Law (Coal Permitting, Inspection and Enforcement)

- RSMo 444.500 through 444.755 (Strip Mining Law, "Old Coal Law")
- RSMo 444.800 through 444.970 (Surface Coal Mining Law, "New Coal Law")

The Land Reclamation Commission

The Land Reclamation Commission regulates surface mining for coal and industrial minerals. The commission also administers the reclamation of coal mine lands that have been abandoned prior to the passage of the federal Surface Mining Control and Reclamation Law (August 3, 1977). The seven-member commission includes four public members appointed by the Governor plus the Director of the Water Pollution Control Program, the State Geologist, and the Director of the Department of Conservation.

The Land Reclamation Program

The primary responsibility and mandate of the program is reclamation of mined lands. While we inspect and enforce the mining laws during operation, the real goal is final reclamation after the mining is complete. The program implements the authority of the Commission as commission staff. The program has most contact with other programs when members of the public object to or have complaints concerning a mining permit or operation.

For mine sites under permit, the program is responsible for enforcing reclamation provisions of the mining laws. All of Missouri's mining laws require the post-mining restoration of land. This includes coal mining, industrial minerals mining and metallic minerals waste disposal. Field personnel enforce the provisions of each permit and law through inspections. Each of the three mining laws differs in their applicability. See the individual references below.

Land Reclamation Program What Do We Regulate? (Continued)

Metallic Minerals

The Land Reclamation Program administers the Metallic Minerals Waste Management Act (lead, iron, zinc, copper, gold and silver) for the department. The program's involvement in metallic minerals relates to permitting, inspecting and enforcement of the metallic mineral waste product from the mining and primary smelting operations. This law does not regulate the active mining operations, but only the placement and reclamation of mining waste.

Regulatory Applicability:

Our regulatory activities include the handling of materials such as waste rock, slag, and revegetation on the areas of waste storage, but does not include any of the areas associated with metal mining such as vertical shafts, shop areas or smelters. Environmental issues include erosion by wind or water, sedimentation of materials off the permit, affecting ground not under permit, and groundwater issues. Groundwater monitoring is required.

Metallic Minerals Topics of Current Interest:

- Financial Assurance – Doe Run currently provides reclamation assurance by way of a corporate letter of guarantee. This will not be adequate in case of bankruptcy.
- Closure Plans – As lead mines cease operations, the waste management areas must have an approved closure plan on file to permanently stabilize through reclamation these tailings storage areas.

Industrial Minerals

The LRP regulates the permitting, inspection, enforcement and reclamation of all industrial minerals surface mining activities. The most common industrial minerals are limestone, clay and sand and gravel. Lesser known industrial minerals are barite, tar sands, shale, oil shales, sand, granite, and trap rock. Industrial minerals specifically do not include coal, lead, iron, silver copper or other metals as these are covered in other laws described above and below.

Nearly every quarry must obtain air and water permits as well as a mining permit. Our inspectors will observe and refer issues related to air and water to the appropriate region staff. Mining permits do not allow water borne sedimentation to leave the permit area, even if the operator owns more land than is under mining permit. Dust emissions from the mining site are not so specifically regulated, unless dust crosses a property line.

Regulatory Applicability:

Our regulatory activities include the handling of materials such as waste rock, topsoil or overburden, but does not include processing areas, the stockpiles of saleable products and the ground where they are stored. Environmental issues include erosion by wind or water, sedimentation of materials off the permit and affecting ground not under permit, but does not include blasting, noise or truck traffic. Groundwater monitoring is not required.

Land Reclamation Program What Do We Regulate? (Continued)

Industrial Minerals Topics of Interest:

- Sand and Gravel – Rules for stream protection, legislation to provide greater exemption for landowners.
- Development vs. Mining – Some developers sell rock off a construction development site. When is this considered mining, and when is it just development? Current law and regulation address this issue.
- Public Meetings and Hearings – Almost every commission meeting contains one or more public challenges to new or expansion industrial mineral mining permits.

Sand and Gravel

This issue is actually a subset of Industrial Minerals, but can be a high profile issue for several reasons. While these commodities are regulated under the same law as quarries, the applicability is substantially different. This type of mining consists largely of skimming materials off of gravel bars, so there is not usually a pit left at the site. As such there are no reclamation requirements if no other damage to the site or stream channel occurs. A few years ago the program worked with stakeholders to develop stream protection guidelines into rules. Every stakeholder indicated to the Land Reclamation Commission that they could live with the stream protection regulations that were negotiated at the end of the process. The rules are now in place.

Sand and Gravel Topics of Current Interest:

In 2009 the legislature passed legislation that gives greater permit exemptions to private landowners. They are now able to sell some gravel under a new permit exemption. However, the same regulations that apply to commercial gravel mining operations also apply to landowners. Currently local governments are exempt only if they use their own personnel and equipment to extract gravel.

Coal Mines

The coal law contains requirements to ensure all coal exploration and active coal surface mining operations are planned and operated in a manner that will not be detrimental to public health, safety, or cause environmental pollution. The surface coal mining law is extensive and comprehensive encompassing almost, if not all, environmental aspects.

Regulatory Applicability:

Our regulatory activities include the handling of materials such as overburden, topsoil, and revegetation of the mine site. In the case of coal mining the processing areas, the stockpiles of saleable products and the ground where they are stored receive even greater regulatory protection due to the toxic nature of coal and its byproducts. Environmental issues include erosion by wind or water, sedimentation of materials off the permit and affecting ground not under permit, and also includes blasting, hydrologic monitoring of both surface and groundwater and proving the post mining soil productivity of the reclaimed land.

The “Surface Coal Mining Law” is very comprehensive with respect to environmental and public protection from the adverse impacts of mining. For a more complete overview of this law, please contact us. There is simply too much detail to provide here.

**Land Reclamation Program
What Do We Regulate?
(Continued)**

Coal Mining Topics of Current Interest:

Two active coal mines remain in Missouri. The program continues to monitor these mines on a monthly basis to ensure compliance with the law and contemporaneous reclamation requirements.

Bond Forfeiture

The LRP's Projects and Inspection Unit oversees completing reclamation at mine sites where permits have been revoked. Normally a reclamation bond will be collected in this type of case and those monies are then used by the program to hire contractors to perform final reclamation of the site. This primarily relates to coal mining, but also includes industrial minerals sites. Since most bond forfeitures are related to coal mining, this is largely a subset of the coal law.

Bond Forfeiture Topics of Current Interest:

- Surety Reclamation in Lieu of Forfeiture – Some sureties prefer to perform reclamation for the mining company in lieu of surrendering the reclamation bond value to the state.
- State Designs and Contracts – Where reclamation bonds have been surrendered, the program must assess, design and implement a final reclamation plan for mining sites.

Abandoned Mine Lands

The Permits, Contracts and Design Unit utilizes federal funds to reclaim pre-law coal mine lands. Since a coal tax funds this activity, it is actually a subset of the coal law. The staff develops federal grant applications for reclamation projects, supervises engineering and technical contracts for the reclamation design, conducts field investigations to facilitate developing in-house designs, and supervises construction activities.

Abandoned Mine Lands Topics of Current Interest:

- Lead Mine Shafts – Hundreds of abandoned lead mine shafts, particularly in southwest Missouri, were left open and are considered to be dangerous. This program is able to reclaim and safely seal at least some of these each year with coal AML funding.