Guidance on Operational and Facility Closure Requirements for By-Product Lime Storage Lagoons

Solid waste permitting and municipal wastewater permitting

Issue

The Minnesota Pollution Control Agency (MPCA) needs to clarify operation and closure requirements for by-product lime storage lagoons.

Background

The MPCA has been inconsistent with regard to whether or not permits are required for facilities where by-product lime is stored or disposed. For example, in 1988, after the MPCA significantly amended its solid waste management rules, the MPCA required that all sugar beet facilities disposing by-product lime in the land to obtain a solid waste permit. However, for unknown reasons, this same approach was not implemented for municipal water treatment facilities. Instead, these facilities were allowed to store lime in "lime storage ponds" without a permit. Sometimes this lime would be removed for use as an agricultural liming material (soil amendment), but sometimes this lime would simply be stored in the ponds as a long-term disposal solution. The MPCA has allowed the storage and use of by-product lime as an agricultural amendment for a number of years. In 2004, the agricultural use of by-product lime was specifically codified as a "standing" beneficial use (Minn. R. 7035.2860, subp. 4) for which no permit would be required. However, nothing compels a generator to use by-product lime in this manner, and for some generators there is no convenient place for the by-product lime to be used.

Today, certain municipal generators of by-product lime are requesting that the MPCA approve storage and land disposal of by-product lime without a solid waste permit. The MPCA is also aware of the existence of many by-product lime land disposal facilities that were closed without solid waste permits. These facilities are currently not subject to any regulatory control. Some of these facilities are properly capped to reduce infiltration and nuisance conditions, but others are not.

Decision

The MPCA has adopted an industrial waste land disposal facility rule that is applicable to the land disposal of by-product lime, which is appropriately characterized as an industrial solid waste under Minn. R. 7035.0300, subp. 45. Unless the by-product lime is going to be used as provided under the MPCA's beneficial use rule, Minn. R. 7035.2860, a person proposing to construct or operate a by-product lime storage and disposal facility must obtain a solid waste management permit prior to construction and operation of the facility (or following notice consistent with this guidance) by filing a permit application as provided in Minn. R. 7035.1800.

As a result, the MPCA will now require water treatment or industrial facilities generating lime waste to store and beneficially use the by-product lime in accordance with Minn. R. 7035.2860/Minn. R. 7035.2855, subp. 7, or apply for a solid waste land disposal facility permit for the lime storage/disposal facility (pond). The MPCA will require lime storage/disposal facilities to meet the technical standards under the MPCA's industrial waste facility rule, Minn. R. 7035.1590-.2500. An owner who requests permanent land disposal through capping in-place, shall complete the Environmental Impact Evaluation (EIE) that was specifically created for existing facilities. If the results of the EIE allow for the continued use of the facility until permanent land disposal through capping in-place is approved, the owner must submit an application for a solid waste permit within 30 days.

For lime disposal facilities that are closed and no longer accepting by-product lime, the MPCA will not require the owner to obtain a solid waste permit, but may issue a closure order to the owner if the final cover does not meet the industrial standard or there is other evidence that the facility is having an environmental impact and should be monitored.

Upon the effective date of this guidance, the MPCA will implement this guidance on a compliant basis, upon a receipt of a request for permanent land disposal, or new construction.

Rationale and benefits

The MPCA has determined that, to be consistent with how this issue is handled for industrial generators, municipal generators should be required to obtain a permit for land disposal of by-product lime unless the generator intends to use the by-product lime under the beneficial use rule, and is storing and utilizing the lime as required under the Minn. R. 7035.2855, subp. 7. The MPCA has also determined that lime-disposal facilities that were closed without a permit should comply with the closure standard in Minn. R. 7035.2500 or receive a closure order, if conditions exist suggesting that the facility is having a negative environmental impact. By clarifying the regulatory treatment of facilities that store or dispose of by-product lime, the MPCA promotes environmental compliance by being consistent in the application of its rules.