Policy DSHM-SW-03-14 Sludge Stabilization for Disposal in NY Landfills

I. Summary:

This Program Policy (Policy) provides the criteria that are to be used to determine if a sludge has been stabilized as required for disposal in a landfill. The Policy takes effect 30 days from the date of issuance.

II. Policy:

It is the policy of the Division of Solid & Hazardous Materials (DSHM) that sludge that is disposed in any landfill in New York State meet one of the following criteria:

1. The sludge is either digested or lime stabilized. If lime is used, sufficient lime must be added to raise the pH of the sludge to 12 for at least 30 minutes. The level of treatment does not have to be equivalent to a process to significantly reduce pathogens (PSRP), but must be adequate to reasonably prevent nuisance conditions and provide some pathogen reduction.
2. For a sewage treatment plant (STP) that has a biosolids treatment process other than digestion or lime stabilization, the STP must be able to demonstrate compliance with one of the following criteria. (Note: These criteria can also be used for an STP with digestion, during periods when the digester is not operating normally; i.e., plant upset, etc.)

    a. The mass of volatile solids in the sludge is reduced by a minimum of 38 percent.

    b. For sludge treated in an aerobic process, the specific oxygen uptake rate (SOUR) is equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis), at a temperature of 20 degrees Celsius.

    c. The sludge is composted for a minimum of 14 days. Throughout that treatment time, the temperature of the sludge must remain higher than 40 degrees Celsius, and the average temperature of the sludge must be higher than 45 degrees Celsius.

d. The percent solids of the sludge is equal to or greater than 75 percent.

3. Based on Department experience and/or judgment, Regional staff have determined that a sludge source is acceptable for the particular landfill.

NOTE: If a landfill has a special permit condition that is more stringent than this guidance, the permit condition must be followed. As in the case of disposal of any solid waste, it is the landfill operator's final discretion as to whether the facility will accept a specific load of sludge for disposal.

III. Purpose and Background:

The purpose of the Policy is to provide more specific technical criteria for the 6 NYCRR Part 360 definition of "stabilized sludge." The definition of stabilized sludge in Part 360 is somewhat vague which has led to differing interpretations across the state.

Subdivision 360-2.17(n) requires that all sludges, including publicly-owned treatment work sludges and septage authorized by the Department for disposal in landfills, must first be stabilized and dewatered to 20 percent solids with no free liquid evident in the dewatered sludge. "Stabilized sludge," as defined in paragraph 360-1.2(b)(162), "means sludge that has been digested or otherwise treated to reduce putrescibility and odor, reduce pathogenic organisms and, except for lime stabilization, reduce the volatile solids content."

The technical criteria included in this Policy are taken from the vector attraction reduction standards found in federal 40 CFR Part 503, Standards for the Use or Disposal of Sewage Sludge, and more specifically define the intent of the definition of stabilized sludge that appears in paragraph 360-1.2(b)(162).

IV. Responsibility:

Responsibility for the interpretation and update of this Policy document resides with the Bureau of Solid Waste, Reduction & Recycling (Bureau) within the Division of Solid & Hazardous Materials. The Bureau can provide guidance concerning testing frequency and method, if needed.

Questions regarding this Policy should be directed to:

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V. Procedure:

The criteria contained in this Policy will be used to determine if a sludge is stabilized for the purpose of disposal in a landfill.