DSI WM Guidance 0115

Well Placement Options; Noncontiguous Units

January 7, 2004

APPLICABLE RULES

MSW: OAC 3745-27-10(B)(4)
   OAC 3745-27-14(C)
ISW: OAC 3745-30-08(B)(4)
RSW: OAC 3745-30-08(B)(4)
Tires: NA

PURPOSE

This document discusses the possible implications of well placement options around noncontiguous units of a sanitary landfill facility as a result of the requirements of the ground water detection monitoring program.

APPLICABILITY

This document applies to owners and operators of municipal solid waste (MSW), industrial solid waste (ISW) and residual solid waste (RSW) landfill facilities with noncontiguous units.

PROCEDURE

For a ground water detection monitoring program to be adequate, the number, spacing and depth of the monitoring wells need to be [see OAC 3745-27-10(B)(4) and OAC 3745-30-08(B)(4)]:

(a) Based on site specific hydrogeologic information (including information provided in the permit application); and

(b) Capable of detecting a release from the sanitary landfill facility to the ground water at the closest practicable location to the limits of waste placement.

The rules do not specify that a noncontiguous unit must be monitored separately for the purpose of ground water detection monitoring. Therefore, the option exists for noncontiguous units of a facility to either be monitored together (as if they were one unit surrounded by wells) or separately (each unit isolated and surrounded by wells). See the attached Appendix depicting these well placement options.

Though these options exist for the monitoring of noncontiguous units, the owner or operator should be aware of a situation that may require noncontiguous units to be monitored separately. This situation can occur when a monitoring well is triggered into assessment monitoring. To determine the source of the contamination, it may be necessary to place wells to separately monitor the units (see Appendix, Option 2). The isolation of the source of the contamination during assessment may also be necessary if a corrective measures program results from the assessment and information is needed so that the remediation procedure can be properly chosen and implemented.

The owner or operator will need to decide whether

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Jennette Bradley, Lieutenant Governor
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to initially install separate monitoring wells for each noncontiguous unit or to install additional wells if the need arises for assessment monitoring purposes.

Another factor for the owner or operator of an MSW landfill to consider, is that separate monitoring of a noncontiguous unit may be of advantage during the post closure care period. If a unit is noncontiguous and monitored separately for the purpose of ground water detection monitoring and has completed thirty years of ground water detection monitoring for the unit, the owner or operator may make a written request to discontinue ground water detection monitoring of that unit prior to the end of post closure care for the facility [see OAC 3745-27-14(C)].

**POINT OF CONTACT**

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**DISCLAIMER**

This document is intended for guidance purposes only. Completion of the activities and procedures outlined in this document shall not release an owner or operator from any requirement or obligation for complying with Ohio Revised Code (ORC) Chapter 3734, the OAC rules adopted thereunder, or any authorizing documents or orders issued thereunder, nor shall it prevent Ohio EPA from pursuing enforcement actions to require compliance with ORC Chapter 3734, the OAC rules, or any authorizing documents or orders issued thereunder.
Please note:
The above figures are strictly for visual reference, they do not demonstrate or imply monitoring well locations. Monitoring well locations are dependent upon the number of monitorable zones of ground water in the subsurface at a given facility. Approval of a ground water monitoring system can only be through Ohio EPA.