

**KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT**  
**BUREAU OF WASTE MANAGEMENT POLICY 97-02**  
related to  
**GROUNDWATER CONTAMINATION AT SMALL ARID LANDFILLS**  
May 2, 1997

**Background**

There are currently 33 landfills in western Kansas which have been classified as "small arid landfills" in accordance with the qualifying criteria specified in state and federal regulations. This classification exempts the landfills from certain design and operating requirements as set forth in the federal and state Subtitle D regulations. However, Kansas has adopted special regulations which are applicable to small arid landfills (K.A.R. 28-29-103). These small landfill regulations address how small landfills obtain the small arid landfill designation and how the "exempt" status can be lost. One way that a small landfill can lose its "exempt" status is to contaminate the groundwater.

**Purpose**

This BWM policy provides guidance to staff to address situations where groundwater contamination is confirmed above the MCL. This policy is needed to ensure consistent responses to inquiries and to provide direction for communicating with the city or county which is responsible for the landfill. Overall guidance and rule interpretation is provided; however, the detailed requirements specified in applicable regulations are not repeated.

**Applicable Regulations**

Paragraph (f) of K.A.R. 28-29-103 addresses one of the three available methods for demonstrating that naturally occurring soil is adequately protective of the groundwater and it establishes ongoing groundwater monitoring requirements for small landfills. Sub-paragraph (f)(6) states: **"If the second sample confirms that contamination levels exceed the maximum contaminant level of any constituent listed in Table 1, the exempt status of the landfill shall be revoked and the owner shall comply with K.A.R. 28-29-104 (design) and K.A.R. 28-29-110 through 28-29-114 (groundwater monitoring systems and corrective action)."** This requirement applies to any contamination confirmed after the effective date of the above regulation which was December 13, 1996. This regulation clearly explains that counties or cities operating under the small landfill exemption could face significant costs to comply with applicable regulations if the exemption is lost due to the presence of confirmed groundwater contamination.

While it is clear that these rules apply to any small landfill that confirms the presence of groundwater contamination above the listed MCLs, the department has flexibility in how the applicable requirements are applied. It is appropriate for staff to consider all relevant site specific factors when directing counties as to how to comply. In addition, because most rural counties have limited technical and financial resources, department staff should offer technical assistance to ensure that all requirements are clearly understood. Such assistance could include meetings and guidance in preparing a plan to implement a series of required activities.

Because the loss of exempt status is strictly tied to the contaminants listed in **Table 1**, the question arises regarding the potential identification of elevated levels of contaminants which are not listed in Table 1. If other constituents are measured and if other MCLs are exceeded, **the landfill does not lose its exempt status**. This conclusion is based upon a strict reading of the regulatory language. However, the federal criteria for establishing "exempt" status does not allow any groundwater contamination associated with the landfill. Because Kansas has been authorized by EPA to administer the municipal

solid waste landfill permitting program, the department has some flexibility in how the program is implemented. This flexibility is especially relevant to small arid landfill issues which EPA has repeatedly addressed in a slow and incomplete manner.

When contaminant levels are detected for constituents not listed in Table 1, staff should responsibly determine an appropriate course of action. **However, the exempt status of the facility should not be revoked.** Increased monitoring requirements may be appropriate and certain corrective measures may even be warranted depending upon the observed contaminant(s) and proximity to receptors.

#### Location of Monitoring Wells

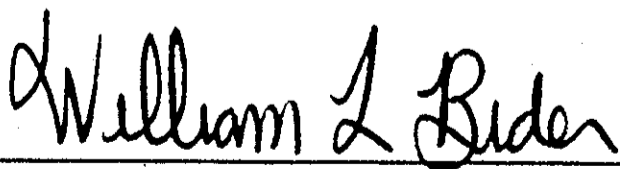
Another important factor relates to the location of well(s) which yield elevated contaminant level(s). If a contaminated well was improperly located, such as too close to the waste, it may be acceptable to relocate the well in a downgradient direction and establish a new compliance monitoring point. If the new well is clean, the landfill will not lose its exempt status. Staff must have a technically justifiable reason to relocate a compliance monitoring well. Simply moving it further downgradient to get out of the contamination plume, but staying within the allowable 150 meters, is not an acceptable reason.

#### Local Actions and Negotiated Agreements

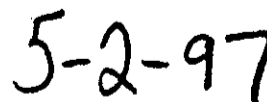
Any small landfill which confirms groundwater contamination above the MCLs listed in Table 1, immediately loses its exemption to certain requirements. However, that landfill will not be required to immediately close its doors. A **reasonable transition time** to establish an alternative local disposal system should be established under the conditions of a consent agreement. Counties will generally have three alternatives when contamination is found: (1) upgrade the facility and operational practices to comply with all Subtitle D requirements; (2) design and build a transfer station to haul the waste outside the county; or (3) site, design, and build a new small exempt landfill within the county. Option No. 1 is very unlikely due to cost. Options No. 2 and 3 seem equally probable and both will take several months to carry out.

Because the exempt status is immediately revoked at contaminated small landfills, instant non-compliance with the full Subtitle D requirements also occurs. To address this situation, the **consent agreement** should be put into place as soon as possible. This offers some degree of protection for the county and provides KDHE with assurances that certain actions will be taken within appropriate time periods. The consent agreement should not be used to re-state all requirements set forth in regulations, but rather to primarily establish timeframes for the development and implementation of a new disposal method. In some cases, the consent agreement may be used to specify variances to certain regulations or more flexible ways to accomplish goals without jeopardizing the protection of human health or the environment. In addition, a consent agreement can require interim measures when appropriate related to facility operation. This may be particularly important when a long transition period is anticipated.

BWM staff should immediately implement this policy and coordinate as appropriate with BER.



William L. Bider  
Director  
Bureau of Waste Management



Date