UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Ground-Water Monitoring at Clean-Closing Surface Impoundment and Waste Pile Units

FROM: J. Winston Porter
Assistant Administrator

TO: Regional Administrators
Regions I-X

Several provisions of HSWA have made it necessary or desirable for a number of owners or operators to close their land disposal units. Many of these units are going through "clean closure"; that is, removal of all waste residues, contaminated containment system components, contaminated subsoils, and structures and equipment contaminated with waste and leachate. Several Regions have questioned whether a clean closure demonstration requires ground-water monitoring before the unit is declared clean for the purposes of closure under sections 264.228(a), 264.258(a), 265.228(a), or 265.258(a). The purpose of this memo is to reiterate and clarify Agency policy in this regard.

It has been the Agency's policy for some time that owners and operators must not be allowed to "walk away" from units with inadequate ground-water monitoring systems or with ground-water contamination at closure. This policy has been described in my August 27, 1985 memorandum regarding RCRA policies on ground-water quality at closure, in the FY 1987 and 1988 RCRA Implementation Plans (RIP), and in the clean closure policy outlined in the preamble to the final "conforming changes" rule concerning clean closure of surface impoundments, published in the Federal Register on March 19, 1987 (52 FR 8704). If an adequate ground-water monitoring system is in place, it is still the Agency's policy that as part of the clean closure certification process EPA must review ground-water monitoring data to verify that there is no ground-water contamination from the unit(s).

There exists, however, a universe of land disposal units that may not have a ground-water monitoring system, or may have an inadequate ground-water monitoring system in place at closure. These include interim status waste piles, interim status surface impoundments that contain corrosive-only hazardous waste that are eligible for a waiver under section 265.90(e), interim status units exempted from ground-water monitoring on the basis of the self-implemented waiver found in section 265.90(c), or units simply failing to comply with the Subpart F requirements.

Many of these units have already closed by removing waste and certifying "clean closure" without assuring clean ground water. Congress has made it clear that ground-water contamination at treatment, storage, and disposal units must be addressed. Section 3005(i) of RCRA requires all units receiving hazardous waste after July 26, 1982 to comply with ground-water monitoring standards established under Section 3004, regardless of their current active or inactive status. Any closed interim status unit covered under Section 3005(i) that does not meet the 40 CFR 264 clean-closure standard must be issued a post-closure permit implementing the appropriate Subpart F program. In order to avoid post-closure permit responsibilities, interim status facilities that have "clean closed" will need to present evidence that the "clean closure" is in compliance with the Agency's clean-closure rules found in sections 264.228 and 264.258. (This position is clearly presented in the Final Codification Rule, 52 FR 45788, December 1, 1987). Reexamination of all prior clean closures should be performed as suggested by the 1988 RIP and in concert with individual Regional priorities.

We recognize, however, that under certain circumstances for units that "clean-closed" under interim status a demonstration that ground water is uncontaminated might be made without a ground-water monitoring system in place. In order to preclude the need for ground-water monitoring at a clean closing unit the owner or operator would need to meet the decontamination standard as codified in section 270.1(c)(5) and (6) and make a demonstration in accordance with applicable waiver requirements found in section 264.90(b)(4). For clean-closing units at least the following criteria would need to be met to assure compliance with the general closure performance standard (section 264.111):

1) Accurate historical data on wastes handled at the unit have been carefully recorded, including a complete analysis of waste composition and characteristics;

2) The properties of the waste constituents together with the geochemical environment of the soils show no potential for migration to ground-water during the active life and any post-closure care period; and

3) Other supportive data (e.g., an alternative monitoring system or other geophysical verification) needed to ensure protection of human health and the environment.

We recognize that these criteria for not requiring ground-water monitoring are stringent. However, these restrictions are necessary because the Part 264 clean-closure demonstration may ultimately relieve the owner or operator of any further Subtitle C responsibilities at the closing unit or facility.

For those units authorized to operate under Section 3005(e) that stopped receiving waste prior to July 26, 1982, several tools exist for obtaining confirming data. Where the Administrator has determined, based on any information, that there has been a release of hazardous waste (or hazardous waste constituents) from a facility into the environment, Section 3008(h) may be used to perform studies (including ground-water monitoring) and/or corrective measures, as necessary to protect human health or the environment.

Where imminent and substantial endangerment can be established, studies and corrective measures can be required under Section 7003. Section 3013 could be used to collect data and to implement ground-water monitoring, where the presence or the release of hazardous waste "may present substantial hazard" to human health or the environment.

Where a permit for the facility is otherwise required, corrective action (including ground-water monitoring) for improperly "clean closed" units may be effected under Section 3004(u) during the permit process. In cases where an adequate ground-water monitoring system has not been installed and there is no valid ground-water monitoring waiver, and/or where other Subtitle C requirements have been violated, attempts at clean closure, whether successful or not, should not preclude the imposition of enforcement authorities, for example under Section 3008(a) to obtain remedies and/or penalties under Section 3008(g).

Should you have any questions regarding the content of this memorandum, please contact Chris Rhyne of my staff at FTS 382-4695.

cc: Waste Management Division Directors, Regions I-X
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