PPC 9484.1986(02)

CLOSURE OF A DOE SURFACE IMPOUNDMENT
THAT LOST INTERIM STATUS

April 2, 1986

MEMORANDUM

SUBJECT: Closure of a DOE Surface Impoundment Unit that has Lost Interim Status

FROM: Marcia Williams, Director
Office of Solid Waste

TO: James H. Scarbrough, Chief
Residuals Management Branch, Region IV

Thank you for your memorandum of December 30, 1985, in which you requested clarification of several issues relating to the closure of a DOE surface impoundment unit in South Carolina that has lost interim status. This memo addresses your questions in the same order in which you stated them. Your first issue is further divided into two related issues.

1. Can hazardous waste be removed from a surface impoundment unit, and then be placed back in that unit at closure if it has lost interim status?

   Yes--if the wastes are removed during closure for the purpose of treating them to enhance the effectiveness of the closure. The closure period occurs after the active life of the unit and calls for activities not normally carried out during operation of the unit (e.g., application of the final cover). Removal of waste, treatment, and replacement for the proposes of enhancing the closure process may be essential to assuring long-term integrity of the closure (e.g., stabilization may be required to prevent differential settlement of the final cover). Other activities which may be necessary to effect proper closure of the unit may also be allowed. (We note that a contrary policy would merely act as a disincentive to taking appropriate steps to enhance closure.)

   The position outlined above is consistent with closure regulation language at §265.113(a): "within 90 days after receiving the final volume of hazardous waste... the owner or operator must treat, remove from the site, or dispose of on-site all hazardous wastes..." (emphasis added). EPA took a similar position regarding the closure of surface impoundments after January 25, 1983 when it stated that removal and

3. As part of closure, can hazardous waste be removed from the Lost Lake area and placed in the settling basin? Assuming this can be considered to be one waste management area, is it acceptable to remove waste from one part of the waste management area and place it in another?

   In reviewing the drawings contained in the "Closure Plan for the M-Area Settling Basin and vicinity at the Savannah River Plant" (July 1985), it is apparent that the waste in the settling basin is the same as that found in the Lost Lake area. In fact, these two areas are hydraulically connected by an open ditch such that these areas could be construed to be a single waste management unit for the purposes of closure. As such, waste movement during closure from one part of a single unit to another part of that unit is permissible, and may be desirable from an environmental standpoint. In this case it would appear that removal of waste from the Lost Lake are to consolidate these wastes in the settling basin enhances environmental protection far more than leaving the waste where it is and applying the final cover to the entire area.

   It should be noted, however, that a significant change in the configuration of the impoundment structure during the closure process, i.e., moving existing dikes to increase the areal extent of the impoundment, does constitute a lateral expansion and will require retrofitting with a double liner. Mounding of waste or soils within the existing dike area for the purpose of promoting runoff and preventing ponding is allowable, since it may be necessary for the proper construction of the final cover.

4. A remedial action program to remove chlorinated organics from the ground water in M-area is in operation. DOE would like to remove sludge and soils from the ditch, seep area, and Lost lake and not cap these units. All metals contamination can be removed but some chlorinated organics will remain. Is it absolutely imperative that these units be capped?

   As discussed in issue 13, this area could be considered one unit. Since all constituents are not going to be removed during closure, the requirements of §265.210 (including final cover) apply. In this case, however, delay of the final cover may be desirable if it is found that construction of the final cover might interfere with the objectives of any corrective action

program that may be instituted as a result of a 3008(h) order or a post-closure permit.

Attachment

cc: Bruce Weddle
John Lebran
Lloyd Guerci
Peter Guerrero
Ken Shuster
Bob Tonetti
Terry Grogan
Dave Fagan
Mark Greenwood
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Chris Rhyne
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Kent Anderson
Bill Hanson

ATTACHMENT A <1986\ATAC-01.PIC>
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ATTACHMENT B

BACKGROUND PAPER

SUBJECT: Facts Relevant to Decisions on the Regulatory Jurisdiction of Impoundments Associated with NPDES Permits

PREPARED BY: Solid Waste and Emergency Response Division
Office of General Counsel

This document presents a discussion of the multiple considerations which are relevant in a decision on the regulatory status of wastes discharged 1) into waters of the United States and 2) into impoundments from an NPDES discharge point.

Whether a particular unit can be controlled under RCRA depends, among other things, on whether the waste discharged into it is a RCRA hazardous waste or is covered by the industrial wastewater exclusion contained in 40 C.F.R. §261.4(a)(2). That determination, in turn, depends on whether the unit is in waters of the United States, and whether a NPDES point upgradient of the unit is a discharge point or just a monitoring point.1/

The wastewater exclusion covers wastewater discharges subject to regulation under Section 402 of the Clean Water Act, 33 U.S.C. §1342. This section regulates point source discharges, which include any addition of any pollutant to waters of the

United States from any discernible, confined, and discrete conveyance (except discharges of dredged and fill material regulated under Section 404). See CWA §502(7), (12), (14).

1/ A discharge point mens the place at which the discharge of a pollutant occurs. See 40 C.F.R.§122.2. This should be distinguished from a monitoring point, which is the place either upgradient or downgradient of the discharge point or at the point of discharge at which information about the discharge is gathered. See 40 C.F.R. §§122.44(i), 122.48. A discharge point should also be distinguished from points at which NPDES controls are placed upstream of the point of discharge since EPA has authority under §402 to impose controls not only at the point of discharge but further up the waterstream or internally so long as there is a rational connection between the control

imposed and the attainment of applicable effluent limitations. See Opinion of the General Counsel No. 43, Friendswood Development Co. and 40 C.F.R. §122.45(h).

The purpose of the wastewater exclusion is to avoid potentially duplicative regulation of point source discharges under RCRA and the Clean Water Act. See generally 45 FR 33098, May 19, 1980. Once wastewater flows from an NPDES discharge point into waters of the United States, that wastewater is exempt from RCRA regulations (but not necessarily materials settling out of than wastewater). This is true even if the discharge could be regulated under §402, but is not. A point source discharge without an NPDES permit would not be subject to RCRA. Such a discharge would be a violation of the CWA, and should be subject to an enforcement action under that Act. Even if the waste water contains hazardous constituents other than the 126 priority pollutants currently addressed by the NPDES program, these constituents cannot be regulated under RCRA, since they could be regulated under §402.

The purpose of preventing dual coverage also implies that the exemption applies only to the actual point source discharge and not to the wastewater, or sludges generated from the wastewater, before discharge. These materials are not directly regulated under the CWA. See CWA §§402, 502(12),(14). They also do not fit the language of the statutory exemption, which is limited to "industrial discharges which are point sources." RCRA §1004(27); see also CWA §502(12),(14). The wastewater, and sludges generated from this wastewater, before discharge can be regulated under RCRA. See 45 FR 33098, May 19, 1980; Comment following 40 C.F.R. §261.4(a)(2).

One could argue that the term "subject to regulation" in the regulatory exclusion, §261.4(a)(2), includes all materials examined under authority of the CWA rather than just the actual

discharge. This would include at least all material from the

NPDES monitoring point furthest upstream to that monitoring or discharge point furthest downstream. As the comment following §261.4(a)(2) and the CWA definitions make clear, however, only the wastewater discharge itself is excluded. It is thus critical to find the NPDES discharge point, which depends on where the wastestream enters the waters of the United States.

Waste treatment systems, such as lagoons, or settling ponds, generally are subject to regulation under RCRA. Certainly, wastewater, and sludges generated from such wastewater, above the NPDES discharge point are subject to regulation under RCRA. The definition of waters of the U.S. is ambiguous on whether certain treatment systems are included in waters of the U.S. The answer will determine whether the NPDES discharge point is at the outflow from or inflow into those treatment systems.

EPA's regulatory definition of waters of the U.S. 2/ includes a provision indicating that waste treatment systems designed to meet the requirements of the CWA are not waters of the United States. 40 C.F.R. §122.2.

2/ Waters of the United States or waters of the U.S. means:

(a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide:

(b) All interstate waters, including interstate "wetlands,"

(c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands,: sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

(1) Which are or could be used by interstate or foreign travelers for recreational or other purposes;

(2) From which fish or shell fish are or could be taken and sold in interstate or foreign commerce; or

(3) Which are used or could be used for industrial purposes by industries in interstate commerce;

(d) All impoundments of waters otherwise defined as waters of the United States under this definition;

(e) Tributaries of waters identified in paragraphs (a) through (d) of this definition;

(f) The territorial sea; and

(g) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States.

Exactly what constitutes a waste treatment system "designed to meet the requirements of the CWA" is unclear. An exclusion for waste treatment systems was first added to the regulatory definition of "waters of the United States" on June 7, 1979 (44 FR 32854, 32901). The exclusion simply provided that "waste treatment systems ... are not waters of the U.S." The term "waste treatment system" was not defined. On May 19, 1980, EPA revised the definition of waters of the United States to exclude only waste treatment systems "designed to meet the requirements of the CWA" and created an "exclusion from the exclusion" which limited the scope of the waste treatment system exclusion to "manmade bodies of water which were neither created in waters of the U.S....nor resulted from the impoundment of waters of the U.S." 45 FR at 33424. The preamble to this regulation explained that the CWA was "not intended to license dischargers to freely use waters of the U.S. as waste treatment systems and that the revised definition "makes clear that treatment systems created in those waters or from their impoundment remain waters of the U.S." 45 FR at 3298. This "exclusion from the exclusion," was however, subsequently suspended in response to industry's objections that it would require them to obtain permits for discharges into existing waste treatment systems which had been in existence for many years and for which EPA had issued NPDES permits for discharges from, not into these systems. EPA agreed that the regulation might be overbroad and suspended its effectiveness pending further rulemaking. 45 FR at 48620. Such rulemaking has not yet occurred.

One could argue that the suspension of the "exclusion from the exclusion" is an affirmative statement by EPA that any "waste treatment system" which is "designed to meet the requirements of the CWA" is excluded from the definition of "waters of the U.S.," notwithstanding its creation in or by impounding such waters. Such interpretation, however, is inconsistent with EPA's intent. The "exclusion from the

exclusion" was included in the May 19, 1980 rule as a clarification to the existing regulations. The clarification, however, was overbroad in that it would have required NPDES permits for discharges into existing waste treatment systems which had been in existence for many years. EPA suspended the applicability of the "exclusion from the exclusion," 45 FR 48620 (July 21, 1980) thereby restoring the ambiguity of the earlier regulations, so that each case must be decided on its own facts. In this respect, the preamble to the May 19, 1980 regulation suggest that prior CWA regulations, like the CWA itself, were "not intended to license dischargers to freely use waters of the U.S. as waste treatment systems" (that is, even prior to the "exclusion from the exclusion" such use was not intended) and that the new definition "makes clear that treatment systems

created in those waters or from their impoundment remain "waters of the U.S." (emphasis added) 45 FR at 33298. In light of the regulatory history and the intent of the suspension not to require NPDES permits for treatment systems which have been in existence for many years, EPA retains the discretion to determine what constitutes a "waste treatment system." In applying this interpretation to specific cases EPA applies a standard which treats newly created impoundments of waters of the U.S. as "waters of the U.S.," not as "waste treatment systems designed to meet the requirements of the CWA," whereas impoundments of "waters of the U.S." that have existed for many years and had been issued NPDES permits for discharges from such impoundments are "wastewater treatment systems designed to meet the requirements of the CWA" and therefore are not "waters of the U.S." The Region should consult with the Office of Water Enforcement and Permits, Permits Division, if there is any question about whether a particular impoundment or treatment unit is a water of the U.S. If wastewater is discharged into a treatment system which is not waters of the United States, the treatment facility is not exempt from RCRA regulation. See the comment following 40 C.F.R. §261.4(a)(2).

Once the wastewater has been discharged under the CWA, it is usually exempt from regulation under RCRA. By the definitions of discharge and navigable waters, the wastewater must be going into waters of the United States, which generally consist of a large volume of natural, flowing water, such as a stream. The wastewater would lose its separate character and simply merge into a stream.

The mixture of the NPDES discharge, which is not a solid waste, and the stream, which is not a waste, is not a solid or hazardous waste. (See RCRA §1004(27)). The sediment

downstream of the NPDES discharge point, however, may be subject to regulation under RCRA. This sediment is not specifically covered by the statutory or regulatory exclusion, which apply only to point source discharges. (RCRA §1004(27), 40 C.F.R. §261.4(a)(2), CWA §502(14). Where the sediment can be related to the discharge such as an accumulation directly underneath the pipe discharging the wastewater, the sediment could be solid waste under the theory that it is discarded material resulting from industrial activities. (RCRA §1004(27)). The interposition of the wastewater exclusion does not mean that these sediments (or the wastewater) do not result from industrial activities, but only that the wastewater discharge itself is not subject to regulation under RCRA.

When an upstream discharge point was installed is irrelevant to the RCRA status of any downstream treatment impoundment. The wastewater exclusion applies, whenever the discharge began.

There has been a suggestion that the exclusion is limited to final discharge points (e.g., at the property boundary) beyond which the owner does no further treatment, and that owners of impoundments could avoid regulation under RCRA by rewriting their NPDES permits to include an NPDES point up-gradient of their impoundment. The applicability of RCRA regulation depends on whether the impoundment is upstream or downstream of the NPDES discharge point, and whether the dam treatment system constitues an industrial wastewater treatment plant, not where the property boundary is located. An impound-ment owner cannot simply rewrite an NPDES permit to include an NPDES discharge point upgradient of the TSDF. A discharge point must be a discharge into waters of the United States; that a TSDF is downstream of a monitoring point does not exclude an impoundment from RCRA regulation.

To summarize, RCRA staff should consult with the Office of Water Enforcement and Permits, Permits Division, if there is any question about whether a particular impoundment is a water of the U.S. If wastewater is discharged into a treatment system which is not waters of the United States,t he treat-ment facility is not exempt from RCRA regulation. See the comment following 40 CFR §261.4(a)(2)

If the surface impoundment is found to contain hazardous waste and is subject to RCRA, all applicable RCRA regulations apply to that pond (which are applicable is determined by whether the surface impoundment is a treatment, storage, or disposal unit), including corrective action and other HSWA requirements.

If the surface impoundment contains solid, but not hazardous, waste, it is a solid waste management unit, and is subject to corrective action requirements under RCRA if any unit at the facility is subject to a RCRA permit.

Sediments or sludges beyond the discharge point, are releases from solid waste management units and are subject to RCRA corrective action requirements so long as any unit at the facility is seeking a RCRA permit.

Questions about this discussion should be directed to Steve Hirsch at 382-7706.