



**DIRECTIVE NUMBER:** 9487.00-9

**TITLE:** Vertical Expansion at the U.S. Ecology's  
Trench 10, Beatty, Nevada Facility

**APPROVAL DATE:** 02/10/88

**EFFECTIVE DATE:** 02/10/88

**ORIGINATING OFFICE:** Office of Solid Waste

☒ **FINAL**

☐ **DRAFT**

**STATUS:**

- [ ] A- Pending OMB approval
- [ ] B- Pending AA-OSWER approval
- [ ] C- For review &/or comment
- [ ] D- In development or circulating

**REFERENCE (other documents):** headquarters

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United States Environmental Protection Agency  
Washington DC 20460

# OSWER Directive Initiation Request

1 Directive Number

9487.00-9

## 2 Originator Information

Name of Contact Person

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3 Title

Vertical Expansion at the U.S. Ecology's Trench 10, Beatty, Nevada Facility

4 Summary of Directive (include brief statement of purpose)

This memorandum explains the circumstances under which additional hazardous waste can be placed on a landfill that had a pre-HSWA elevation restriction.

5 Keywords

Minimum Technological Standards / Closure

6a Does This Directive Supersede Previous Directive(s)?

☒ No

☐ Yes

What directive (number, title)

b Does It Supplement Previous Directive(s)?

☒ No

☐ Yes

What directive (number title)

7 Draft Level

☐

A - Signed by AA/DAA

☐

B - Signed by Office Director

☐

C - For Review & Comment

☐

D - In Development

8. Document to be distributed to States by Headquarters?

☒ Yes

☐ No

This Request Meets OSWER Directives System Format Standards

9 Signature of Lead Office Directives Coordinator

Jennifer A. Basher, OSW

Date

02/12/88

10 Name and Title of Approving Official

Marcia Williams, Director, Office of Solid Waste

Date

02/10/88

EPA Form 1315-17 (Rev 5-87) Previous editions are obsolete

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D C 20460

OSWER Policy Directive No. 9437.JG-9

FEB 10 1988

OFFICE OF  
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Vertical Expansion at U.S. Ecology's  
Trench 10, Beatty, Nevada Facility.

FROM: Marcia Williams, Director  
Office of Solid Waste (WH-562) *[Signature]*

TO: Jeff Zelikson, Director  
Toxics and Waste Management Division  
Region IX

This is in response to your memorandum of December 30, 1987 requesting a written clarification as to whether the Minimum Technology Requirements would apply to a vertical expansion at U.S. Ecology's Trench 10 in Beatty, Nevada. Based on our understanding of the facts contained in your memorandum, we agree with Region IX and conclude that the Minimum Technological Requirements do not apply to Trench 10. Our position is based on the following:

1. The existing unit had obtained all necessary permits and was operational as of November 8, 1984.
2. The Part A submitted by U.S. Ecology in 1980 indicates a landfill capacity of 800 acre-feet. Neither the landfill nor the proposed vertical expansion will exceed that capacity.
3. The TSCA permit in effect on November 8, 1984 required a three-feet-below-grade limit on placement of PCB waste (this limit was rescinded in August 1987). This applied to PCB wastes only and did not affect the RCRA permit for this unit. Other permits that would affect RCRA wastes placed in this unit placed no limitations on the elevation of RCRA waste.
4. The proposed vertical expansion will not allow placement of waste beyond the unit's existing lateral boundaries.

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5. Dikes constructed to provide for additional waste are not addressed in any permit in effect on November 8, 1984, and State and local permits do not require a permit change to address construction of the dikes.

We are in agreement with your general conclusion that the vertical expansion is permissible, however, we believe your discussion of "vertical expansion" should emphasize the fact that regardless of whether the expansion occurs within the unit boundary or not, vertical expansions are limited by the Federal, State and local permits in effect prior to the enactment of HSWA including any requirements for pre-approval of a vertical expansion of RCRA wastes. Thus, consistent with our May, 1985 guidance, where a permit concerning the placement of hazardous waste includes an elevation limit, a vertical expansion beyond that elevation limit after November 8, 1984 would constitute a "new unit" subject to Minimum Technological Requirements. This is because the vertical expansion would not be "operational" due to the legal impediment to its operation. (See also, 50 FR 28702 & 28707, July 15, 1985.) On the other hand where no elevation or construction limits are required by applicable permits and/or other State, local, or Federal requirements concerning hazardous waste, as in this case, additional waste can be placed on the area taking into consideration the slope of the final cover at closure. Furthermore, the limitations imposed on U.S. Ecology for disposal of PCB wastes are not relevant in this case but would have been meaningful, as is apparent from the preceding discussion, if RCRA hazardous wastes had been included in the height limitation specified in the TSCA permit.

I hope this clarifies Headquarters' position that the vertical expansion at Trench 10 of U.S. Ecology's Beatty, Nevada facility does not constitute a new unit or a lateral expansion. To promote national consistency in determining the applicability of the Minimum Technological Requirements to new units and lateral expansions, all Regions will receive a copy of this memorandum.

Should you have additional questions, please contact Chris Rhyne, of my staff, on FTS 382-4695.

cc: RCRA Branch Chiefs, Regions I-X  
Permit Section Chiefs, Regions I-X  
Bob Tonetti  
Les Otte  
Frank McAlister  
Pam Savage



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

215 Fremont Street

San Francisco, Ca. 94105

DEC 30 1987

CONFIDENTIAL: Attorney Work Product/Attorney Client Privileged

MEMORANDUM

SUBJECT: Minimum Technological Requirements (MTRs) for Vertical Expansion of a Landfill at Beatty, Nevada

FROM: Jeff Zelikson, Director *David Blanton*  
Toxics & Waste Management Division

TO: Marcia Williams, Director  
Office of Solid Waste

## I- INTRODUCTION:

We would like you to clarify an issue recently raised during the public comment period on the draft permit for U.S. Ecology's landfill in Beatty, Nevada. The issue was raised by U.S. Pollution Control Inc., a competitor of U.S. Ecology, and by the Hazardous Waste Treatment Council. The issue raised relates to a provision in the draft permit that allows U.S. Ecology to vertically expand an existing trench to provide an additional year of waste disposal capacity.

## II- ISSUE:

Does a vertical expansion of an existing Interim Status RCRA-regulated landfill require that the above-grade expansion meet the minimum technological requirements (MTRs) either because the expansion constitutes "a lateral expansion" or "a new unit"?

## III- BACKGROUND:

The Beatty landfill site is owned by the State of Nevada and operated by U.S. Ecology. The site is situated approximately 11 miles southeast of the City of Beatty. It consists of 80 acres along the eastern edge of the Amargosa Desert in the southern portion of Nye County. Desolate arid desert surrounds the entire region. There are no residences close to the site. There is no shallow ground water (upper aquifer is about 250-300 feet below the surface).

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The site consists of two distinct sections: 47 acres of a radioactive disposal area and 33 acres of chemical disposal area. The facility opened in 1961 as a low-level radioactive disposal site, and in 1970, started accepting chemical wastes. The chemical disposal area consists of 10 trenches and a waste pile. Trenches 1 through 9 and the waste pile are closed. Trench 10, the hazardous waste management unit in question, started operating under a TSCA permit issued by EPA in 1978. Trench 10 also accepts RCRA wastes under Interim Status (Part A submitted 8/18/80, Part B submitted 8/1/83). Part A of the application was for a capacity of 800 acre-feet (100 feet deep). However, Trench 10 was excavated only 45 feet below grade.

The original TSCA permit limited the disposal of PCB wastes to three feet below grade. There are, however, no regulatory requirements for this limit. Further, there is no environmental reason to impose the 3-foot below grade limit at this site. However, the provision was copied from TSCA permits issued in other Regions. In October 1987, we amended the TSCA approval to eliminate this limitation.

In August 1987, we public noticed a draft RCRA permit for Trench 10. The draft permit allows U.S. Ecology to continue to dispose of RCRA wastes above grade, without meeting MTRs.

The landfill is presently filled almost to capacity and the above grade expansion would only allow for an additional year of operation, during which time we would make our final permit determination on a new trench at the facility. The new trench shall meet MTRs.

#### IV- VERTICAL EXPANSION:

As provided in the draft permit Trench 10 would be extended 21 feet vertically from the existing grade. Waste disposal would be confined within the existing boundaries of the trench. To provide a horizontal barrier a compacted soil embankment will be constructed. At the edge of the trench, waste and backfill placement will stop at least three feet below the natural grade to ensure a minimum of an eight-foot cover over buried waste. Geotextile and synthetic liners will be installed around the perimeter of Trench 10 extending out to where it will join the cap liner. Accordingly, there will be no waste placed outside the existing waste management boundary. The vertical extension will be covered with an eight-foot cap which includes a synthetic liner. The cap will extend over the waste and surrounding embankment.

#### V- DISCUSSION:

Section 3004(o) of RCRA, 42 U.S.C. § 6924(o), provides in pertinent part, that all RCRA permits issued after November 8, 1984, must require " for each new landfill, surface impoundment



and new landfill or surface impoundment at an existing facility, each replacement of an existing landfill or surface impoundment, and each lateral expansion of an existing landfill or surface impoundment unit" the installation of the minimum technological requirements ("MTR") (Emphasis added). Because the expansion of the landfill unit at the U.S. Ecology is vertical and "not new" Region IX does not believe that MTRs apply for the following reasons.

A- The proposed expansion is vertical not lateral.

The additional waste will be placed within the boundary of the existing waste management unit. A similar issue is discussed in the "Guidance on the Implementation of the Minimum Technological Requirements of HSWA of 1984, Respecting Liners and Leachate Collection Systems; EPA/530-SW-85-012". Page 8 specifically states the following:

ISSUE:

If berms are constructed after November 8, 1984, to allow wastes to be placed higher on an existing unit, are the MTRs applicable?

RESPONSE:

The new requirements do not apply if the additional waste will be placed within the boundaries of the existing unit and if Federal, State and local requirements, including State and local permits, applicable to the unit on November 8, 1984, would not require the new construction to receive wastes. Id. at 8.

No Federal, State or local requirements, including State and local permits, applicable to Trench 10 on November 8, 1984 required new construction for this trench in order to receive waste. In addition, although the Preamble to the Final Codification Rule on Hazardous Waste Management System (p-28706 FR July 15, 1985) states that neither the statutory nor the legislative history specifically provides an interpretation of the term "lateral expansion", EPA did state that "a lateral expansion would be defined as an expansion of the boundaries of the existing unit". EPA further elaborated that it believed that in a landfill expansion a lateral expansion would usually be accomplished "by excavating an additional area to enlarge the existing trench". Because U.S. Ecology will not be excavating any additional areas to enlarge its existing Trench 10, Region IX does not believe the proposed vertical expansion is a lateral expansion.

B- Above-grade expansion of Trench 10 does not constitute a "New Unit".

On page 28707 of Hazardous Waste Management System, Final Codification Rule, FR July 15, 1985 EPA explained what would constitute a new unit as follows:

If a unit had received waste prior to the date of enactment of HSWA, it would be exempt from the MTR. However, in addition, the unit must also be operational.

Region IX believes that because Trench 10 received waste prior to the date of enactment of HSWA and was operational on the date of enactment, it is not a new unit.

VI- SUMMARY:

Based on the above we believe that above-grade expansion of Trench 10 would constitute only vertical expansion of an existing unit because no waste would be placed or allowed to spread beyond the existing boundary. The additional capacity would also be within the capacity limits stated in the U.S. Ecology's original Part A application. In addition we do not believe that placement of some additional RCRA and TSCA waste in this trench would result in any adverse effect on human health or the environment.

VII- ACTION REQUESTED:

Apparently there are varying interpretations of the MTR for this type of expansion. Our staff has already discussed the issue with the Headquarters Permits Branch staff. It is our understanding that contrary to our interpretation, some regions have required MTR for vertical expansion of existing landfills.

Therefore, we request a written clarification from your office as to whether the MTR would apply to a vertical expansion at the U.S. Ecology landfill.