MEMORANDUM

SUBJECT: Morton Thiokol Thermal Treatment Units

FROM: Sylvia K. Lowrance, Director
Office of Solid Waste (WH-562A)

TO: Robert L. Duprey, Director
Hazardous Waste Management Division
Region VIII

This is in response to your April 13, 1988 memorandum requesting a clarification concerning the scope of Subpart X as related to thermal treatment, and the interaction of Subpart X standards and the land ban restrictions for mixed solvents. I would like to address your concerns in the same order as discussed in your memorandum.

What is the scope of units comprising Subpart X?

Subpart X covers miscellaneous units not regulated under the standards for specific types of treatment, storage, and disposal units in Part 264, Subparts I through O, or Part 146. Likewise, Subpart X will not supersede or replace any specific restrictions on activities contained in another subpart of the regulations, nor provide a vehicle for escaping from these restrictions.

What is the scope of units comprising Subpart X?
Subpart X covers miscellaneous units not regulated under the standards for specific types of treatment, storage, and disposal units in Part 264, Subparts I through O, or Part 146. Like wise, Subpart X will no supersede or replace any specific restriction on activities contained in another subpart of the regulations, nor provide a vehicle for escaping from these restrictions.

Specifically, are the units which are operated by placing the liquid wastewater containing reactive wastes into the pit or surface impoundment and then allowing evaporation and percolation of the liquid prior to burning, regulated as thermal treatment units, surface impoundments, or both?

The ten units which are operated by (1) depositing liquid wastewater, containing varying amounts of reactive wastes, directly in unlined pits, (2) allowing the liquid to evaporate/percolate, and then (3) igniting the residue, are surface impoundments. The described pits are specifically included in the definition of surface impoundment in 40 CFR 260.10 (that is, aeration pits). Being such, the units will require permits based on Part 264 Subpart K. 40 CFR 264.220 states that Subpart K applies to facilities that use surface impoundments to treat, store, or dispose of hazardous waste. However, the permit applicant can be required to supply additional information as required in 40 CFR 270.23 (i.e., for miscellaneous units) if the Subpart K standards do not provide adequate protection for human health and the environment. For example, the Regional Administrator may write permit conditions based on the Subpart X standards which would protect the air or surrounding soils during the burning phase of the treatment process.

What land disposal deadlines and restrictions are applicable to the units as defined by the answer to the above question? Must the units meet the November 8, 1988, retrofit deadline or close?

The Agency has concluded that open burning/open detonation (OB/OD) of waste explosives in a Part 265, Subpart Q, or a Part 264, Subpart X, OB/OD unit does not constitute land disposal because it is treatment, not disposal (52 FR 46592). This is
true except in cases where the residuals from the OB/OD operation remain a hazardous waste. Therefore, OB/OD activities are not automatically subject to the land disposal restrictions.

As we indicated above, the treatment pits are properly classified as surface impoundments; therefore, all land disposal deadlines and restrictions and the surface impoundment retrofit deadline remain applicable. Furthermore; a unit is an OB/OD unit under Parts 264 and 265 when it is not a surface, impoundment and when it open burns/detonates waste explosives. As mentioned in 265.382, non-military waste explosives can be open burned/detonated only when they have the potential to detonate. According to the information we have on Morton Thiokol's treatment pits or impoundments, wastewater that does not have the potential to detonate is placed in a pit and is treated by dewatering and subsequent burning.

Does the burning of solvents which are contaminated with reactive material constitute a violation of 40 CFR 265,382 hazardous waste open burning prohibition? Does the solvent mixed waste meet the Subpart X burning requirements?

The open burning of solvents is strictly prohibited. Only waste explosives that have the potential to detonate, and bulk military propellants which cannot be safely disposed of through other modes of treatment, can be open burned in a Part 264 Subpart X, or Part 265, Subpart Q, unit. (See 40 CFR 265.382) If the waste solvent is a waste explosive that has the potential to detonate, then it can be open burned provided that the unit fits the appropriate criteria. The descriptive information on unit #11 is not definitive but we suspect that "trough" referred to in your memorandum may be a tank, and therefore, also does not qualify as a 264, Subpart X, or Part 265, Subpart Q unit.

More information is needed for us to make a final determination on the potential to detonate (e.g., exact concentration of explosive or ratio of materials is not known nor is its fulfillment of the definition of "detonate" in 265.382 fully known). However, we do not think the open burning of the 1,1,1-trichloroethane or any other solvent will prove to be proper when this information is provided.
What land ban requirements are applicable to the solvent wastes? Can the solvents be opened burned and do the land ban requirements apply to the solvents?

Because disposal of the solvents is not likely to qualify as OB/OD in a Subpart X or Subpart Q unit, all of the land disposal restriction requirements, including those at 40 CFR 268.4, would appear to be applicable to the management of solvents in the situation you outlined. In such event, the solvents cannot be open burned.

If you have a question regarding these clarifications or would like to discuss the issues in more detail, please contact Chester Oszman (382-4499).

cc: Hazardous Waste Branch Chiefs, Regions I-X
Lisa Reed, Region VIII
Fred Chanania, OGC
Kent Anderson, OSW
Chester Oszman, OSW