PPC 9554.1991(01)

LAND DISPOSAL RESTRICTIONS REGULATION OF CYANIDES

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

JAN 8 1991

Richard J. Pastor
Director, Government Relations
Envirosafe Mgt. Services, Inc.
P.O. Box 833
Valley Forge, Pennsylvania 19482-0833

Dear Mr. Pastor:

This letter is in response to your letter dated October 25, 1990, concerning a possible inconsistency in the Agency's policy on the regulation of cyanides under the Land Disposal Restrictions Program of RCRA. In particular, you indicated specific instances where you believe the Agency has been inconsistent in its position on the use of stabilization for wastes containing cyanides. I hope that this letter will help to clarify this matter. In that vein, I would like to review the points you raised in some detail, and to provide an explanation of our views, particularly as to the full meaning of preamble language in the Land Disposal Restriction rules.

First, you referred to the promulgation of the First Third Land Disposal Restrictions (53 FR 31152) for F006 wastes, where the Agency stated that the treatment standards f or F006 were based on stabilization using cement kiln dust and that the use of other agents in the stabilization process is not precluded. Then you noted the statement that EPA does not consider stabilization an appropriate BDAT for cyanides. While you did not discuss these references any further, you seemed to imply that when compared to each other, an inconsistent policy on cyanides could be seen.

However, a closer examination of the First Third Land Disposal Restrictions shows that the Agency did establish treatment standards based on stabilization, but only for the metals contained in B006. (Note: The First Third LDR rule promulgated treatment standards for cyanides in F006 wastes as “reserved").

The preamble for F006 wastes (53 FR 31152, column 3) specifies the Agency's position on stabilization of cyanides in F006 wastes versus stabilization of metals by stating; "EPA does not consider stabilization--BDAT for the metals

in this waste--to be a demonstrated technology for the treatment of cyanide." This statement is, to my reading, an accurate reflection of EPA's current position.

Your letter also emphasized some of the Agency's language in the Second Third LDR rule (54 FR 26609) as follows: "The Agency does not agree with commenters that stabilization is an applicable technology for the treatment of the majority of cyanide wastes. While some data may indicate that stabilization processes appear to reduce the leachability of some forms of cyanides, the Agency contends that destruction of cyanide is clearly a preferred treatment method." Your added emphasis appears to imply that the Agency was trying to indicate a degree of uncertainty about its position. Your letter then quotes a later section of the preamble as follows: "... based on the review of the available treatment data, the Agency believes that the conventional cyanide treatment technologies provide substantial treatment of both the amenable and total cyanide concentrations as measured by the cyanide amenable to chlorination test in method 9010 (EPA Publication SW846."

Emphasis of these passages appears to give the impression that the Agency was stressing the use of the test method to meet the numerical treatment standard as being more important than destroying the cyanide. However, the language that directly precedes the emphasized phrase sheds light on how to read the quoted passage, i.e., that the Agency believes that conventional cyanide treatment technologies provide the necessary treatment to achieve these standards. This is in agreement with the legislative history (cited in our preamble and your letter) that "destruction of total cyanides would be required as a precondition to land disposal."

Certainly, the Agency is on record as saying that "other technologies that can achieve these concentration based standards are not precluded from use." However, this statement cannot be taken alone, and all other applicable regulatory language must be considered. In particular, section 268.3(a) states that "...no generator, transporter, handler, or owner or operator of a treatment, storage, or disposal facility shall dilute a restricted waste as a substitute for adequate treatment to achieve compliance with subpart D of this part, ..." Given the Agency's firm position that cyanides must be destroyed and that stabilization, as cyanide treatment, is considered impermissible dilution based on the current lack of substantive evidence of cyanide destruction in the stabilization process, use of general statements to contradict specific determinations on BDAT standards is not the appropriate reading of our intentions.

Your letter also refers to a letter dated June 13, 1990, from Douglas MacMillan of NSWMA to Richard Kinch of EPA. The example referred to in your letter as question number 15 is really NSWMA's question number 17, a

hypothetical situation for stabilization of cyanides not supported by any submitted data. Our July 31, 1990, response was that "destruction of cyanides is a precondition for land disposal" and that the situation presented in question number 17 "is not permissible because stabilization is not an applicable technology for the treatment of cyanide wastes." I have enclosed a copy of EPA's response.

The Agency has established a treatment standard for the majority of cyanide wastes at 590 mg/kg total cyanides based on data from well-designed, well-operated cyanide destruction technologies. (Lower standards have been established for a few cyanide wastes.) As noted in the administrative record for the Second Third LDR Rule, data from certain land disposal facilities indicate that the majority (85%) of F006 wastes were below the original proposed treatment standard of 110 mg/kg total cyanides. In fact very few wastes that were treated for cyanides indicated total cyanides of 5,900 mg/kg (as in question 17) or as much as 1% (as in your intended waste acceptance policy). Perhaps these cyanide wastes that you were considering for stabilization did not receive efficient cyanide treatment in the first place.

Your reference to the "on-going" stabilization of F001, F002, F003, F004, and F005 solvents does not really bear upon the Agency's position on cyanides. Given what we consider to be a clear indication of our position on the stabilization of cyanides in regulatory discussions, the determinations of BDAT for these solvents should not raise any indirect ambiguities on our separate decisions for cyanide.

I trust that the fuller explanations above will assist you in working with the treatment standards for cyanides as a precursor to land disposal. I encourage you to continue to discuss this matter more fully with members of my staff if any questions still remain. In that event, I suggest that you contact Richard Kinch, Acting Chief of the Waste Treatment Branch (703-308-8434). I am certain that Envirosafe shares our concern about the safe and effective treatment and disposal of cyanides. We look forward to continued mutual efforts in this regard.

Sincerely,

Original Document signed

Sylvia K. Lowrance
Director
Office of Solid Waste

Enclosure