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ON-SITE TREATMENT OF MANHOLE SEDIMENT WHICH MAY EXCEED  
THE TOXICITY CHARACTERISTIC FOR LEAD

United States Environmental Protection Agency  
Washington, D.C. 20460  
Office of Solid Waste and Emergency Response

June 23, 1994

Mr. Roy Deitchman  
Managing Director Environmental Policy  
Technology and Network Planning  
Telesector Resources Group  
1111 Westchester Avenue  
White Plains, New York 10604

Dear Mr. Deitchman:

Thank you for your letter dated March 9, 1994, concerning on-site treatment of manhole sediment which may exceed the toxicity characteristic for lead.

Although you refer to the waste as debris, it does not appear to meet EPA's definition. It seems the pertinent part of the definition of debris at 40 CFR 268.2 (57 FR 37270, August 18, 1992) is that the material must exceed a 60 mm particle size. If your waste does not meet the S 268.2 definition of debris, it would likely be subject to the treatment standard promulgated in the June 1, 1990 Third Third rule for lead waste displaying the characteristic of toxicity as analyzed by both the Toxicity Characteristic (TC) and the Extraction Procedure (EP) (see 55 FR at 22660). That treatment standard requires treatment to achieve a level of 5.0 mg/l, as measured by the TCLP (see 40 CFR 268.41, Table CCWE). Because this is also the characteristic level for lead, the treated waste would no longer be considered a hazardous waste and could be disposed in a nonhazardous waste landfill.

If your waste meets the debris definition, the stabilization process you described (i.e., stabilization using lime, fly ash, or portland-cement) fits under the category of microencapsulation, an immobilization treatment technology described at § 268.45, Table 1, (57 FR 37278). To dispose the immobilized debris in a nonhazardous

waste landfill, you would have to ascertain that it does not display a hazardous characteristic. If it displays no hazardous characteristic, it may be disposed in a nonhazardous waste landfill; otherwise, it must be disposed in a hazardous waste landfill.

As to the paperwork requirements, a uniform hazardous waste manifest would not be needed if the debris is disposed in a nonhazardous waste landfill. You would still need to determine whether the material would be regulated by the Department of Transportation (DOT), and if so, comply with any applicable DOT requirements. You should also contact the appropriate state agency regarding more stringent state requirements for transporting solid waste. Furthermore, the waste would be subject to the recordkeeping requirements of the LDR program found at § 268.9. For your convenience, I have attached a copy of those notification and certification requirements.

If you have any further questions or need additional clarification, please call Richard Kinch of my staff at (703) 308-8434.

Sincerely,

Michael Shapiro, Director  
Office of Solid Waste

cc: Mike Petrusca, Richard Kinch

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Attachment  
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Telesector Resources Group  
Westchester Avenue  
White Plains, NY 10604  
914-544-6250

March 9, 1994

Michael Shapiro  
Director, Office of Solid Waste  
United States Environmental Protection Agency  
401 M Street, SW 5301  
Washington, D.C. 20460

Dear Mr. Shapiro,

Thank you for meeting with our NYNEX group on March 3, 1994 to discuss manhole sediment removal issues. We appreciate the guidance provided by you and your staff members. As discussed, we are writing you, as a follow-up to the meeting, to review our proposed method for proper manhole sediment disposition.

NYNEX conducts telecommunications operations in approximately 100,000 manholes providing local exchange telephone services in the New England area and New York State. The debris (sediment) at the bottom of manholes may need to be removed when a telephone cable failure requires access to a specific cable. NYNEX environmental policy requires analytical testing of the debris for toxicity characteristic leaching procedure (TCLP) lead to characterize the material prior to disposition. Since the laboratory turnaround time for TCLP results has been a minimum of 36 to 48 hours, the practical result of this NYNEX policy has been to treat the material as a hazardous waste in emergency situations so that telephone service can be quickly restored. In 1994, we estimate approximately 400 manholes may need to be properly cleaned using this method - at an average cost of \$5000 per manhole.

NYNEX has not fully identified the source of the manhole sediment lead contamination though we suspect it is a number of potential sources including lead sheathed cable, surface run-off of lead contaminated roadside soil and contaminated groundwater movement.

RO 13681

Since the early 1970's, NYNEX has not placed any new lead sheathed telephone cable and is in the process of removing existing lead sheathed cable in ducts as the telephone network is upgraded with fiber optic cable. We also have used over 200 controlled environmental vaults (cev's) as underground equipment vaults that are water-tight. One of the pollution prevention techniques may be to prevent environmental contaminants from entering telephone plant equipment such as manholes.

To continue our efforts to protect the environment and in a more cost effective manner, we would like to develop a procedure for on-site treatment (at each manhole work area) for lead contaminated manhole sediment. Your comments on the following questions would be most helpful in moving in this direction:

- (1) Is stabilization of lead-contaminated debris, using lime, fly ash or portland cement to create a "matrix," an appropriate on-site treatment method for this material? If successful, can the material be disposed of as a solid waste?
- (2) If treatment is successful, in lieu of a uniform hazardous waste manifest, would the attached NYNEX 5099 form provide sufficient information for recordkeeping? If not, what additional information would be required?

Thank you for your help with this matter.

Sincerely,

Roy Deitchman

cc: D. Feldman  
J. Quatrala  
J. Rosier