

REGIONAL TECHNICAL ASSISTANCE REQUEST FORM

Date: July 10, 1995

Mail or E-Mail to: Robert C. Pierson (RCP), Mail Stop: 8D3-TWFN,
 Chief, Fuel Cycle Licensing Branch
 Division of Fuel Cycle Safety and Safeguards, NMSS

R

From: Gary L. Shear (GLS) Region III
 Chief, Fuel Cycle and Decommissioning Branch

Licensee: Combustion Engineering License No. SNM-36

Problem/Issue: Prior to January 1994, under the old 10 CFR 20, the licensee routinely made 1-3 shipments of approximately 2,000-5,000 gallons of sewage "sludge" per year from their sewage treatment plant to one of the treatment plants of the St. Louis Metropolitan Sewer District (MSD) or Jefferson County Sewer District. The sludge basically appears to be water with suspended solids - the licensee calls it a slurry. The licensee hired a MSD-approved contractor to remove the sludge from its holding tank into a vacuum truck for transport to the sewer district. Before releasing the material, the licensee took a sample and measured the suspended solids content, the uranium content in the sample (10 ml), the uranium concentration in the suspended solids removed, and calculated the total uranium concentration in pCi/l in the sample. Sample results for 1993 shipments yielded suspended solids contents of 1.35% (98.65% water) and 1.52% (98.48% water). Total concentrations for uranium were 7540 pCi/l (0.754×10^{-5} uCi/ml) and 10,800 pCi/l (1.08×10^{-5} uCi/ml). Since these results were below the concentration limit in Appendix B, Table II for insoluble uranium (3×10^{-5} uCi/ml), the licensee believed the material could be released as an effluent to an unrestricted area under 10 CFR 20.106. Thus, the licensee shipped the sludge to the sewer district as "clean" domestic sewer sludge.

Action Required: Please provide guidance on whether or not the licensee could release this material as an effluent to an unrestricted area, in particular, sewage treatment plants, under the requirements in the old Part 20 (10 CFR 20.301 and 10 CFR 20.106).

Recommended Action (with revisions): Approve or Reject

Remarks:

Headquarters Reviewer:

Regional Reviewer: John M. Jacobson (JMJ2)

Reviewer Code: _____

Reviewer Phone No.: (708) 829-9831 Fax No.: (708) 515-1259

Request Needed by: ___/___/___ (date)

Form TAR-10

8/93

P-3

E