



39

DOCKETED
USNRC RA 94-029 ATS

Westinghouse
Electric Corporation Energy Systems

'94 MAY 31 P 5 ^{Box 355}
Pittsburgh Pennsylvania 15230-0355

May 26, 1994

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

The Secretary of the Commission
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

RECEIVED
DOCKET RULE PR 20
(59 FR 9146)

Attention: Docketing and Service Branch

Subject: Disposal Of Radioactive Material by Release Into Sanitary Sewer Systems

Gentlemen:

The Westinghouse Electric Corporation appreciates the opportunity to provide comments on the Advanced Notice of Proposed Rulemaking involving disposal of radioactive material by release into sanitary sewer systems. Westinghouse supports the Commission's effort to permit licensees to dispose of radioactive materials by release into public sanitary sewer systems.

The attached comments are presented for consideration by the Commission in this rulemaking proceeding.

Sincerely,

A. T. Sabo, Manager
Regulatory Affairs

dh

Attachment

940609001B 940526
PDR PR
20 59FR9146 PDR

DS10

COMMENTS ON ADVANCED NOTICE OF PROPOSED RULEMAKING
RELEASE OF RADIOACTIVE MATERIALS INTO SANITARY SEWER SYSTEMS

General Comments:

Westinghouse supports the option that radioactive materials can be released into sanitary sewer systems in concentrations listed in Table 3 of Appendix B to 10CFR20 and in accordance with 10CFR20, 20.2003 "Disposal by Release into Sanitary Sewerage." Meeting the criteria in Part 20 should provide adequate protection to the health and safety of the public. Westinghouse is opposed to additional administrative requirements e.g., 24 hour advanced notification to appropriate sewage treatment plants before releasing activity into the system. Until additional information is made available to licensees as indicated in NRC Information Notice 94-07 concerning the study to clarify the mechanisms underlying reconcentration in sanitary sewerage systems, specific changes to Part 20 should be delayed.

Specific Comments:

Westinghouse licensees are concerned with their ability to demonstrate compliance with 10CFR20.2003, "Disposal By Release Into Sanitary Sewerage" section (a) (1) determining solubility. NRC Information Notice 94-07 does address the subject of readily soluble. Both methods presented will be useful to licensees. However, the issue of colloidal forms present in the discharge may not be efficiently removed by the use of filters and/or resin columns. The question is whether the remaining colloids in the discharge can be classified as soluble or are they to be classified as dispersible. If they are considered dispersible materials, they cannot be released into the sanitary sewer systems since they are not biological materials.

To determine whether contaminated waste water meets the regulatory criteria for discharge into the sewer system, the following methodology is proposed. The waste water after treatment (typically by filtration and ion exchange) would be analyzed in two fractions: soluble and insoluble. The waste water sample would be separated into two fractions by passing it through a 0.45 μm pore size membrane filter. The filtrate would be analyzed using gamma-ray spectroscopy to determine the activity concentration of the soluble fraction. The membrane filter would then be dried and analyzed by gamma spectroscopy to determine the activity concentration of the insoluble fraction. The water would be determined to be acceptable for release into the sewer system provided no significant activity was detected on the filter medium (insoluble fraction), and the sum of the ratios for each radionuclide in the total water sample (soluble and insoluble fraction) to the corresponding sewer release limit does not exceed 1.

COMMENTS ON ADVANCED NOTICE OF PROPOSED RULEMAKING
RELEASE OF RADIOACTIVE MATERIALS INTO SANITARY SEWER SYSTEMS

Page Two

The revised 10CFR20 does not provide a concentration of a radionuclide in Appendix B for which it can be considered as not present except for DAC's (10%/30% rule). Previously, a radionuclide could be considered as not present provided the concentration of that radionuclide to the applicable MPC was less than .10 and the sum of such ratios for all radionuclides considered as not present in the mixture did not exceed 0.25. For releases to the sanitary sewer, a practical approach would be to consider the radionuclide as not present if the concentration of the radionuclide in the waste water was equal to or less than the effluent concentration limit (10CFR20, Appendix B, Table II, Column 2). The effluent concentration limits are exactly 10% of the sewer release limit. Since this determination would be made without taking credit for dilution from other sources of water from the facility entering into the sanitary sewer, it would be a conservative de minimis level. It is therefore, proposed that the activity concentration on the filter medium (insoluble fraction) would be considered as insignificant if it is less than 10% of the sewer release concentration.