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Industrial Radioactive Waste - Bulletin #3*

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Our previous bulletin concerned with the nuclear fuel reprocessing plant in West Valley, Cattaraugus County, N. Y. (Bulletin No. 2, February 24) was discussed by members of this Subcommittee with officials responsible for the operation and safety of the plant. We are grateful for the cooperation shown us by the AEC, the New York State Department of Health, and Nuclear Fuel Services Inc., and we are taking prompt action to correct and clarify the information in our Bulletin No. 2.

1. Strontium - 90 in R.C.S.I. samples. The corrected Table 6, Bulletin 2 is as follows:

Radionuclide concentration, in units of pCi/l, on December 16, 1967

<u>Location</u>	<u>Cs-137</u>	<u>Sr-90</u>
Nuclear Fuel Services outfall	160,000	86,900
Buttermilk Creek	6,600	4,010
(Dilution factor)	24.2x	21.4x

The error in the strontium readings was made by the AEC Health and Safety Laboratory, who supplied us today with the corrected values. The new readings are much closer to the values we predicted (see Bulletin 2, Table 5), and give the same dilution factor for strontium as we found for cesium. We estimate the following average values for the concentration of Strontium-90 in water:

in Buttermilk Creek	655 pCi/l (as given in Bulletin 2)
in the outfall from the plant	14,000 pCi/l (higher than in Bulletin 2)

2. Legal limit for soluble Strontium-90 in effluent. Bulletin 2 quoted the limit of 100 pCi of Sr-90 per liter, published in Par. 10 CFR 20 of 1963. The limit was revised upward in 1965 and is now 300 pCi/l. Buttermilk Creek exceeds this limit by approximately a factor of two. Radioactivity in the Springville Reservoir, however, is well under the new legal limit for radioactive effluent discharged into unrestricted waters (Bulletin 2, Par. 3).

3. The problem of "effluent into unrestricted waters". The Western New York Nuclear Service Center in West Valley is on State-owned land. The U.S. Atomic Energy Commission and the New York State Department of Health monitor jointly the safety of nuclear fuel processing there (as per Agreement, 27 Fed. Register 10419, October 25, 1962). There is at present no disagreement on their part with the corrected figures given in our bulletins. The official view, however, based on property lines, is that these measurements comply with the law, because Cattaraugus Creek itself meets the standards of safety for radioactivity of industrial effluent. The R.C.S.I. questions this view.

For the Radioactive Pollution Subcommittee

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