MISCELLANEOUS

492 City-Company Teamwork will Lift Pollution Load. Anon. Chem. Eng. 69, 88-90 (Nov. 12, 1962).

A joint venture by the City of South Charleston, West Virginia, and Union Carbide Chemicals Company in a municipal-industrial waste treatment plant to reduce pollutant load entering Kanawha River is described. The article discusses reasons for the joint venture, scope of treatment problem, provisions for growth, type of feed, equipment, control, analog-simulation for design of continuous process, and secondary treatment methods.
-- Public Health Eng. Abstr.

493 Chemical Industry Solids Disposal Problems. M. E. Chodak.
Inst. Sewage Purif. J. Proc. Part 5, 431-438 (1962). (Institute of Sewage Purification, The Journal and Proceedings, 10 Cromwell Place, South Kensington, London SW7, England *).

The problems of production and disposal of sludges from an elemental phosphorus manufacturing plant are discussed. In defining the problems, the composition of the effluent and the development and operation of the treatment are explained. In developing the full scale plant a step by step procedure is described, beginning with an experimental small scale plant and ending with the final acceptance of a centrifuge-thickener set-up for dewatering the sludge. A comparison is made with a U. S. plant using the centrifuge-thickener set-up to dewater raw digested sewage sludge. The application of these advantages to certain processes in the chemical industry where the dewatering of sludges is necessary are given.
-- Public Health Eng. Abstr.

494 Iron from Pickle Liquor. C. L. Mantell and L. G. Grenni.
J. Water Pollution Control Fed. 34, 951-961 (Sept. 1962).

The problem of disposing of spent pickle liquor is explained. Possible electrolytic processes of recovering iron from this liquor using anion exchange permselective membranes are discussed. Cost data and results of considerable laboratory work are presented. The authors conclude that "electrolytic iron from pickle liquor cannot compete with lower cost melting stock, nor as powder could it find markets for the production from even a single large steel mill."
-- Public Health Eng. Abstr.

495 Effects of Naturally Fluoridated Water on Dental Caries in Adults.
H. R. Englander and D. A. Wallace. Public Health Repts. 77, 887-893 (Oct. 1962).

The present study comparing dental caries experience among adults of a city with naturally fluoridated water with similar group in a nearby fluoride-deficient city involved 896 white, continuous residents of Aurora, Illinois, and 935 similar residents of Rockford, Illinois. Aurora water supply contains 1.2 ppm fluorides, while Rockford has 0.1 ppm. Decayed, missing, or filled (DMF) tooth experience was 40% less, and the DMF tooth surface effected were 50% less among Aurorans. Differences might have been greater if a random sample had been examined, but all those having less than 10 teeth were excluded. There were about 7 times as many edentulous persons in Rockford as in Aurora. Additional evidence is provided showing that the low caries experience resulting from the use of fluoridated water persists throughout life.
-- Public Health Eng. Abstr.

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