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Sewage Pollution of Northrop and Slater Creeks, The Lower Genesee, and Lake Ontario*

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SEWAGE POLLUTION OF NORTHROP AND SLATER CREEKS, THE LOWER
GENESEE, AND LAKE ONTARIO

During November, 1966, the Committee carried out chlorination tests on the Latta Road sewage treatment plant (STP) of Greece, and on Irondequoit's Summerville and Pattonwood STP's. Beaches were checked for grease balls on three dates. Coliform counts and chemical oxygen demand analyses were made on Northrop Creek in the vicinity of the dump of the Town of Greece.

Residual free chlorine tests taken on Greece's Latta Road STP on November 6 were strongly positive, as were tests taken the same day on Irondequoit's Pattonwood STP. Free chlorine tests on the water at the outfall of Irondequoit's Summerville STP were negative, which was expected, as there was no evidence that the plant was discharging.

Residual free chlorine tests run on the water at the Summerville STP outfall on November 19 were negative, but again the plant did not appear to be discharging. We understand that the Summerville plant has been converted into a station pumping to the Pattonwood plant. Tests made on this date on the effluent of the Pattonwood STP were negative, although the plant was discharging at the time. Quite a bit of sediment was observed in the effluent. Our previous experience with this plant has been that the plant's effluent is not disinfected when residual free chlorine tests are negative.

Very light deposits of sewage grease balls were seen on Durand-Eastman and Webster beaches on November 6 and November 19. On these dates extensive deposits of grease balls were seen on the beach at Sea Breeze. On the 19th there had been a strong northerly wind blowing for several hours, with the result that grease balls were washing up onto the beach at Sea Breeze in large numbers and the water there possessed a strong fetid odor. The occurrence of extensive deposits of grease balls along this beach, which is near the outfall of Irondequoit's Northeast STP, suggests that these grease balls may originate with this plant. The deposits were localized along a relatively short stretch of the beach just west of the mouth of Irondequoit Bay. (During the summer months this is a densely populated area.) More general dispersion of the grease balls would be expected if they came from the Durand-Eastman plant.

Coliform counts were run on November 6 on Northrop Creek in the vicinity of the dump of the Town of Greece. The results were as follows:

<u>Location</u>	<u>Coliform Index</u>
Northrop Creek at North Greece Rd. (above dump)	460
" " " " " " " "	250
Northrop Creek at Flynn Rd. (below dump)	500
Dump leachings into Northrop Creek	14,000

Chemical oxygen demand analyses carried out on Northrop Creek above and below the dump did not differ significantly. A chemical oxygen demand analysis of the dump leachings gave 300 mg oxygen required per liter of water, a rather high figure.

The origin of the coliform organisms in the dump leachings may be septic tank sludge or similar material which was observed in the dump. The chemical oxygen demand figure on the leachings is quite high. Three small ponds of leachings were observed; the water was grey, filled with sediment, foul-smelling. All of these ponds discharge into Northrop Creek. However, the volume of material being discharged into the creek was sufficiently small that it did not appear to significantly alter the character of the water at the time the samples were taken.

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