



*Rochester Committee
for Scientific Information
Rochester, NY*

*RCSI Bulletin 39
Water Pollution in the Town of Victor*

*By: Regina Stewart & David J. Wilson
October 9, 1967*

THE ROCHESTER COMMITTEE FOR SCIENTIFIC INFORMATION

#39(w)

P. O. Box 5236
River Campus Station
Rochester, New York 14627

WATER POLLUTION IN THE TOWN OF VICTOR

This report describes observations and data taken on Great Brook and Mud Creek in the vicinity of Victor. It demonstrates the gross pollution of Great Brook with industrial waste from the Victor Insulators Division plant and with inadequately treated sewage from the Victor sewage treatment plant.

The Location.

Great Brook flows through Victor in the vicinity of Maple Avenue, passing through the plant of the Victor Insulators Division of the I-T-E Circuit Breaker Company; after passing through the village, it then winds past the Victor sewage treatment plant; it then joins Mud Creek a couple of hundred yards further on, at which point Mud Creek becomes Ganargua Creek; this creek then flows in a northeasterly direction up toward the Barge Canal. Our study was made on 24 September.

Observations and Data.

Great Brook, at railroad track, immediately upstream from Victor Insulator. Water clear, aquatic insects present, no traces of white clay on creek bottom, no visible evidences of pollution.

Great Brook, immediately downstream from 10" outfall pipe from Victor Insulator. Creek bottom plastered with white clay deposit for at least 100 yards downstream from this outfall, no white clay upstream from this outfall. Below the outfall the water was very turbid, and no insects or other aquatic animals were seen.

Great Brook at Maple Avenue Bridge (near the railroad, downstream from Victor Insulator). Water very turbid, lots of light-colored (white to pale tan) clay sludge on the stream bottom. Leeches, pollywogs, and water striders seen; no minnows, caddis fly larvae, or stone fly larvae. No sludgeworms or bloodworms. Dissolved oxygen, 11 ppm. Total coliform count (by membrane filter method), 5500 coliforms per 100 ml of water. Ortho phosphate, 0.1 ppm.

Great Brook at the outfall of the Victor sewage treatment plant. Extensive banks of black sludge downstream from the outfall for at least 50 yards; no black sludge whatsoever upstream from the outfall. The sewage effluent tested strongly positive for free chlorine. Water quite turbid both above and below the sewage outfall.

Mud Creek, at confluence with Great Brook. Water clear, rocky bottom, aquatic insects and minnows present. Ortho phosphate, 0.5 ppm; total coliforms, 1900 per 100 ml; dissolved oxygen, 12 ppm.

Great Brook, at confluence with Mud Creek; downstream from the sewage plant and Victor Insulator. Water quite turbid, clay and black sludge bottom, no aquatic animals whatsoever. Orthophosphate, 1.6 ppm; dissolved oxygen, 6 ppm; total coliforms, 0 per 100 ml. (plates sterile).

Mud Creek at new Farmington sewage treatment plant on McMahan Road. (This plant is not yet in operation). Water clear, rocky bottom, aquatic animals present (minnows, insects). Ortho phosphate less than 0.1 ppm, total coliforms 1800 per 100 ml.

Conclusions.

These results, taken on a week-end and shortly after heavy rains, demonstrate the gross pollution of Great Brook with industrial waste from the Victor Insulators Division plant and with inadequately treated sewage from the Victor sewage treatment plant. We note that this sewage does contain free chlorine (to the extent that it sterilizes the brook quite some distance downstream!), and so we would not state that the brook downstream from the sewage plant constitutes a health hazard. Victor Insulator is responsible for very high turbidities and for extensive silt deposits in the streams; these appear to make it impossible for a normal population of aquatic animals to survive in the stream. The sewage plant is responsible for extensive deposits of black sewage sludge in the stream and for a very marked depletion of the dissolved oxygen in the stream water. The high flow present in Mud Creek on 24 September minimized the effects of these discharges upon Mud Creek, but local residents informed us that nuisance conditions (sludge and odors) in the creek are common during the summer; in view of the conditions we observed in Great Brook this would be expected.

We note construction of new facilities at the Victor sewage treatment plant, and hope to report the abatement of some of this pollution when the improvement of the plant is complete. We have received no reply to our inquiry of village officials as to when this will be. We also note that the new Farmington sewage plant includes sand filtration treatment; this type of treatment is supposed to result in effluent of very high quality, and we look forward to seeing what this plant will do when it goes on stream.

Acknowledgements.

We are indebted to the Scientists' Institute for Public Information for their assistance in supporting this work.

Regina Stewart
David J. Wilson
Water Pollution Subcommittee

9 October 1967