

"S" AREA DOCUMENTS

1. DOH results for December 1981 Niagara Falls Water Treatment Plant (WTP) well samples.
2. DOH results for water and sediment samples collected during the fall clean-up program at the WTP on October 22, 1981.
3. October 1981 results for 1979 "S" Area well samples.
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- 5c. Shallow Groundwater Quality Investigation HCPC Niagara Falls Plant. Progress Report #3, June 1979.
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- 5e. Shallow Groundwater Quality Investigation HCPC Niagara Falls Plant. Progress Report #5, September 1979.
- 5f. Shallow Groundwater Quality Investigation HCPC Niagara Falls Plant. Progress Report #6, November 1979.
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- 6b. HCPC Niagara Plant Comprehensive Water Management Study - Conestoga-Rovers; Field Investigation. September 1980.
- 6c. HCPC Niagara Plant Comprehensive Water Management Study - Conestoga-Rovers; Plates. September 1980.
- 6d. HCPC Niagara Plant Comprehensive Water Management Study - A.D. Little; Chemical Loadings and Groundwater Study. September 1980.
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- 12d. WTP Investigatory Team - Progress Report #4.
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32. Conestoga-Rovers, Overburden Investigation, "S" Area, December 1981 - March 1982 (May 1982).
33. Analysis of Sixteen Soil Samples from Pacell 14 (April 22, 1981).
34. Analysis of N.F.W.T.P. Samples - Memo - Health Department, October 8, 1981.
35. MOE Report - Hydrogeologic Investigation - July 13, 1982. DRAFT
36. Analyses of NF WTP - Health memo - Oct. 8/81.
37. Report on Wastewater Outfall. Volume 1 - Fracture Summary. September 22, 1980. Vol. II and Vol. III.
38. USA Complaint for Injunctive Relief. (original suit)
39. USA Complaint for Injunctive Relief (amended)
40. "S"-Area Hydrogeologic Evaluation August 24, 1982. GTC Geologic Testing Consultants Limited.
41. Hydrogeologic Conditions East of "S"-Area at the Drinking Water Treatment Plant and PASNY Property, August 11, 1982. Conestoga-Rovers and Associates Limited.
42. Overburden Investigation "S"-Area December 1981 - March 1982. Conestoga-Rovers and Associates Limited.

43. Water Quality Assurance Data, Monitoring and Maintenance Program, City of Niagara Falls, June 21, 1982
44. Spring 1982 Water Plant Cleanup, City of Niagara Falls, July 6, 1982.
45. Water Treatment Plant Daily Chemical Concentration Data, A.D. Little, June 1982

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RECENT PUBLICATIONS BY THE POLLUTION PROBE FOUNDATION

BOOKS:

Profit from Pollution Prevention: A Guide to Industrial Waste Reduction and Recycling. This book documents hundreds of success stories of both large and small business firms that have turned waste products into financial assets. These innovative companies have saved money through product reformulation, process redesign, more efficient equipment installation, use of recycling technologies, and inter-industry waste exchange. 1982. 416 pages.

The Invisible Additives. This book covers the many ways in which food can become contaminated by chemicals in the environment, from pesticide residues to heavy metals and organic pollutants. 1981. 216 pages.

Additive Alert. This is a guide to food processing additives for the Canadian consumer. It covers types of additives, safety of chemicals and government regulation of additives. 1981. 143 pages.

Acid Rain Primer. This book outlines the sources of acid rain, the impacts, and outlines appropriate action that citizens can take to help alleviate this pollution problem.

BOOKLETS:

Toxics on Tap: Toronto Drinking Water Report. This report surveys the pollution problems affecting Lake Ontario and the Niagara River, examines the inability of existing water treatment plants to deal with toxic chemical removal, and presents a plan of action for municipalities wishing to upgrade the quality of their drinking water. 1981. 14 pages.

Drinking Water: Make It Safe. This report analyses Toronto drinking water data before and after treatment, identifies existing contaminants in the finished water, and makes recommendations for action by Canadian government agencies to ensure a protected supply of finished drinking water.

The Need for A Safe Drinking Water Act in Canada. This report, produced in conjunction with the Canadian Environmental Law Association, identifies the need for and conceptually outlines a federal safe drinking water act for Canada.

2,4-D and 2,4,5-T Phenoxy Herbicides: A High Powered Battle Against Weeds. A discussion of phenoxy herbicides which includes their safety to humans and animals, the necessity of their use, and the alternative methods to chemical weed control. 1980. 9 pages.

The Great Lakes Are Not. This publication examines the sources and types of pollutants entering the Great Lakes. Of concern are toxic chemicals, acid rain and phosphates. 1980. 6 pages.

Air Pollution: Who Needs It! This publication provides a general introduction to some of our worst air pollution problems: acid rain, automobile emissions, fluorocarbons, asbestos, lead and benzene. 1980. 6 pages.

Car Pollution: A Primer on Automobile Emissions. Health and environmental effects of automobile emissions are examined in concert with the need for greater fuel economy. Canada's emission standards are compared with those of the United States. 1980. 18 pages.

BRIEFS:

Captan: The Legacy of the IBT Affair. Pollution Probe and the Canadian Environmental Law Association look at captan, the most widely used fungicide in Canada, and make recommendations for restricting its use. The need for legislative and policy reforms is addressed. 1982. 11 pages.

Submission to the Ontario Standing Committee on Social Development Regarding Bill 138: A New Public Health Act. This brief includes an introduction to the issue, the shortcomings of Bill 138, exposure to toxic substances, the need for a strong public health act, recommendations and references. 1982. 11 pages.

FACTSHEETS:

Road Salt Fact Sheet. Road salt kills vegetation and can contaminate wells used for drinking water. But there are alternatives, including the use of less than the 350 pounds of salt per car currently applied to Metro roads each winter. 1978. 2 pages.

The Conserver Society. This introduction to the conserver society shows the major differences between consumer and conserver ideas and explains how conserver principles can help solve pressing social and economic problems. 1978. 44 pages.

How Does Your Garbage Grow? This fact sheet provides instructions and diagrams for composting organic waste at home. 1972. 2 pages.

Ecology House Factsheets. These factsheets are produced by Ecology House, Pollution Probe's house demonstrating urban conservation. Topics include: Household Water Conservation and Efficient Appliances; Solar Greenhousing; Passive Solar Heating; Energy Conservation in the Home; Household Waste Management; Furnace Facts; and Alternatives to Centralized Sewage Treatment. 1981-1982. 6-8 pages each.

NEWS MAGAZINES:

Probe Post. The Probe Post is a comprehensive newsmagazine that takes a hard look at the environmental and energy issues and views which affect Canada. It is national in scope and combines news stories with in-depth analysis and clarification of trends in environmental management and energy planning. Bimonthly publication.

Ecology House Monthly Calender of Events. Lists all seminars, workshops and other activities held each month at Ecology House.

POLLUTION PROBE'S CONFERENCE PARTICIPATION

The following is a list of conferences that Pollution Probe staff members attended between 1978 and 1982 to keep abreast of issues relating specifically to hazardous wastes. Those marked with an asterisk (*) are those for which Pollution Probe submitted a brief or participated as a speaker.

Industrial Waste and Engineering Conference, at the University of Toronto.

Ontario Industrial Waste Conference, sponsored by the Ontario Ministry of the Environment.

Industrial Waste Management Disposal Problems in Ontario in the 1980s, Ministry of Industry and Tourism (Ontario), Mississauga.

*Standing Committee on Resource Development, Ontario Legislature: Liquid Industrial Waste Disposal, Toronto.

Hazardous Waste Management Seminar, Fisheries and Environment Canada, Toronto.

*Toxic Waste Seminar, University of Toronto.

*Brief on Toxic Wastes for the Ontario Waste Management Advisory Board, Ministry of the Environment, Toronto.

*Waste Management Guidelines, Ontario Ministry of the Environment, Toronto.

*Technical Task Force on the Use of Cement Kilns for the Destruction of Liquid PCBs, Federal Department of the Environment, Toronto.

Air Pollution Control Association/Pollution Control Association of Ontario, 2nd. Annual Conference, Toronto.

*Toxic and Hazardous Substances in the Great Lakes Basin, International Joint Commission, Ann Arbor, Michigan.

*Ontario Industrial Waste Conference, 26th. Annual Meeting, Toronto.

*Standing Committee on Resource Development, Bill 24: Ontario Spills Legislation, Toronto.

*Public Inquiry into Burning of Waste PCBs at St. Lawrence Cement, Mississauga.

*SCA Disposal Permit Public Hearings, Youngstown, New York.

Wastewater Treatment Workshop 80, University of Toronto.

*Toxic Substances: At Home, At Work, and in the Environment, sponsored by the Coalition on Toxic Substances, Toronto.

*Public & Private Sectors: Similar But Different, Institute of Public Administration of Canada, Toronto.

*John Howard Society, Hamilton.

*Cousteau Society Festival, Hamilton.

*Chemical Institute of Canada Annual Conference, Toronto.

*Air Pollution Control Association Conference, Ottawa.

*Ontario Waste Management Corporation Waste Management Workshop, Niagara-on-the-Lake.

POLLUTION PROBE'S SCIENTIFIC ADVISORY BOARD

Dr. Ross Hume Hall (Chairman of Scientific Advisory Board)
Department of Biochemistry
Room 4n59, Health Sciences Centre
McMaster University
Hamilton, Ontario L8N 3Z5

Dr. Hall's area of expertise is environmental toxicology and nutrition. He is a Professor of Biochemistry at McMaster University in Hamilton, Ontario. His past affiliations which are of relevance in the present case include: (1) President of the Canadian Biochemical Society; (2) Member of the Council Association of Scientific Engineering and Technical Society of Canada; (3) Member of Grants Committee on Growth and Development, Medical Research Council; (4) Faculty Member of Clinical Ecology Seminars, Dallas, Texas; (5) Faculty Member of the International Academy of Medicine, Dallas, Texas. He also received the Visiting Scientist Award of the Medical Research Council, Faculty of Science of the University of Paris.

Dr. R.G.W. Laughlin, Assistant Director
Department of Environmental Chemistry
Ontario Research Foundation
Sheridan Park Research Community
Mississauga, Ontario L5K 1B3

Dr. Laughlin is a chemical engineer with special expertise in the area of industrial waste utilization, treatment and disposal. His professional affiliations include: (1) Association of Professional Engineers of Ontario; (2) Canadian Society for Chemical Engineering; (3) Director of the International Society for Industrial and Hazardous Waste.

Dr. Richard Frank
Director of Laboratories and Pesticide Coordinator
Agricultural Laboratory Services
Ministry of Agriculture and Food
Building 43, McGilvray Street
c/o University of Guelph
Guelph, Ontario N1G 2W1

Dr. Frank's expertise is in the area of pesticide testing and residue analysis. His professional affiliations include: (1) Chief of Biology and Horticulture, Ridgetown College of Agricultural Technology, Ontario Ministry of Agriculture and Food; (2) Governor's 5-State Interdisciplinary Pesticide Council (Ontario Representative); (3) Ontario Pesticides Advisory Committee; (4) Chairman of Ontario Ministry of Agriculture and Food Pesticide Committee; (5) Ontario Herbicide Committee; (6) Advisory Committee on Pollution Control, Ontario Ministry of the Environment.

Dr. Pamela Stokes
Institute for Environmental Studies
Haultain Building
University of Toronto
Toronto, Ontario M5S 1A1

Dr. Stokes is a botanist; her area of expertise is the physiological impact of metal contaminants on living systems. Dr. Stokes has testified as an expert witness on behalf of the SCA Citizen's Review Board to establish the ecological and physiological impact of metals on the freshwater ecosystem of the Niagara River. Her research projects have included: (1) metal tolerance of freshwater phytoplankton; (2) toxicity of copper to freshwater biota; (3) synergistic effect of metals; (4) role of pH in metal-toxic lake acidification; (5) biological accumulation of metals by fungi or green plants in wastewater treatment.

Dr. Thomas C. Hutchinson
Visiting Scientist
Ecosystems Research Center
Center for Environmental Research
Biological Sciences Building
Cornell University
Ithaca, New York 14853

Dr. Hutchinson is Chairman of the Department of Botany at the University Toronto, currently on a short-term appointment at Cornell University. He is a botanist, his area of expertise being the impact of heavy metal contamination on ecosystems and specific organisms. His professional affiliations include: (1) Chairman, International Conference on Heavy Metals in the Environment; (2) International Institute on the Effects of Acid Rain; (3) Joint U.S.-Canada Committee on Acid Rain; (4) National Research Council of Canada Committee on Heavy Metals; (5) National Science and Engineering Research Council, Environmental Quality Subcommittee: Chairman on Heavy Metals and Other Environmental Substances

Dr. Colin J. Bynes
CJB Associates
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Dr. Bynes is an engineer and an air pollution specialist. He has acted as a consultant to various industries on the ways in which pollutants behave in the atmosphere. He has eight years' experience as an industrial consultant and three years' consulting to Ontario Hydro. His areas of expertise include: (1) air pollution monitoring; (2) environmental assessment; (3) dispersion of air contaminants; (4) meteorology; (5) assessment of potential air pollution associated with nuclear and fossil fuel power generating stations, incinerators and mining activities.

Dr. Donald A. Chant
Chairman
Ontario Waste Management Corporation
2 Bloor Street West, 11th Floor
Toronto, Ontario M4W 3E2

Dr. Chant is a zoologist, with special expertise in entomology and the biological control of plant pests. His further expertise is in the area of industrial waste management and toxicology. He is currently Chairman and President of the Ontario Waste Management Corporation, a Crown agency and founding Director of the new Canadian Centre for Toxicology jointly located at the University of Toronto and the University of Guelph, Ontario. He also serves on the provincial Ministerial Committee to Study the Effect of Lead on the Ontario Environment and on Humans. Past professional affiliations of relevance in the present case include: (1) Chairman, Department of Biological Control, University of California; (2) Chairman, Department of Zoology, University of Toronto; (3) Vice President and Provost, University of Toronto; (4) Subcommittee on Environmental Quality of the President's Advisory Committee, Washington, D.C.; (5) Chairman, Canadian Environmental Advisory Council, federal Department of the Environment.

Dr. Peter Victor
Victor and Burrell Research and Consulting
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Dr. Victor is an economist with special expertise in environmental economics and environmental impact assessment. He teaches at York University and the University of Toronto. His professional affiliations include the Association of Environmental and Resource Economists, the Institute of Environmental Sciences, the Canadian Economics Association, and the Human Economy Centre. His economic activities have included: (1) studies on the economic feasibility of pollution abatement in the Ontario pulp and paper industry; (2) studies on the economic feasibility of pollution abatement for those industries and other processes that generate acid rain; (3) impact of the 1979 train derailment in Mississauga, Ontario with subsequent chemical spill and evacuation; (4) environmental assessment work for the United Nations Environment Program; (5) expert witness for the Ontario Ministry of the Environment regarding Ontario Hydro's proposed power transmission line under Lake Erie.

Dr. Harold H. Harvey
Department of Zoology
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Dr. Harvey is Professor of Zoology at the University of Toronto with expertise in lake acidification and the resultant changes in living systems. His professional affiliations include: (1) Chairman, Water Subcommittee, National Research Council of Canada Associate Committee on

Environmental Quality; (2) Scientific Advisor, Fisheries Research Board of Canada; (3) President, Canadian Conference on Freshwater and Fisheries Research; (4) International Society of Limnologists; (5) Canadian Society of Environmental Biologists; (6) American Fisheries Society; (7) Ad Hoc Committee on the Activities of the Canada Centre for Inland Waters, Burlington, Ontario.

Dr. Douglas Hallett
Environment Canada
25 St. Clair Avenue East, 7th. Floor
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Dr. Hallett is a chemist and physiologist with special expertise on the presence and effects of the dioxin isomer TCDD, a highly toxic chemical in the Great Lakes ecosystem. His professional affiliations include: (1) Chairman, Federal Interagency Committee on TCDD, Chlorinated Dioxins and Chlorinated Dibenzofurans; (2) Toxic Substances Committee, International Joint Commission, Great Lakes Science Advisory Board; (3) Aquatic Ecosystems Objectives Committee, International Joint Commission, Great Lakes Science Advisory Board; (4) Analytical Capability Committee, Ontario Region, Environment Canada; (5) Society for Environmental Chemistry and Toxicology; (6) International Association of Great Lakes Research; (7) Chairman, Environmental Contaminants Committee.

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33. Analysis of Sixteen Soil Samples from Pacell 14 (April 22, 1981).
34. Analysis of N.F.W.T.P. Samples - Memo - Health Department, October 8, 1981.
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