

League of Women Voters LAKE ERIE BASIN COMMITTEE

NIAGARA FALLS, N.Y.

DECEMBER 10, 1981

COMMENTS TO THE NEW YORK STATE LEGISLATURE CONCERNING THE
NYPIRG REPORT THE RAVAGED RIVER TOXIC CHEMICAL IN THE NIAGARA

The Lake Erie Basin Committee of the League of Women Voters represents 7800 members in 65 local Leagues in the watershed areas of New York, Pennsylvania, Michigan, Indiana and Ohio. Since its inception in 1963 this ad hoc committee and its component Leagues have worked to protect and restore Lake Erie and its tributaries through pollution abatement and prevention and through improved planning and management of water and related land resources.

Over the years the LEBC has been active in promoting programs that are beneficial to the Lake Erie Region, such as limitation of phosphates in detergents, Tertiary treatment for municipal wastewater facilities, flood plain management programs through proper land use and planning and flood insurance, support of beverage container legislation and support for hazardous waste programs to control toxics at their source by reduction of these wastes first, recycling and reuse and proper disposal of those wastes that cannot be reused.

Members throughout the Basin have been active in 208 water quality programs, watershed studies, coastal zone management, shoreline erosion and dredging and filling studies. Lake Erie Basin Committee steering committee members were representatives to the International Joint Commission Pollution From Land Use Activities Reference Group public consultation panels and are well aware of the uses and abuses of the Lake Erie and Niagara River waters and adjoining lands. Many years of experience with water quality issues have proven that prevention of pollution is the best way to protect our water resource. Remedial measures after the damage has been done are always more costly and risk the health and safety of the public. Western New York has more than its share of hazardous and radioactive waste problems.

The quality of our life is directly related to the quality of our drinking water. The failure to recognize a common interest in the total water supply/waste treatment cycle creates a public health problem that grows more critical day by day as new hazards are discovered in our drinking water. What is known is that many organic chemicals are persistent in the environment, toxic at extremely low concentrations, may have synergistic effects or

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undergo metabolic changes increasing their threat to man and the aquatic community.

The Great Lakes are the primary source, in some instances, the only source of domestic water supply for over thirty million residents in the United States. This has been defined by the International Joint Commission as "the most sensitive use" of the Lakes waters. The majority of the residents from the Western New York, Erie-Niagara Region depend upon Lake Erie and the Niagara River as their prime source of drinking water. Groundwater usage in the bi-county area accounts for only ten percent of the total water used for domestic purposes supplied from individual and municipal wells. Groundwater contamination problems in the region are well-documented in the 208 water quality study done through the Erie Niagara Counties Regional Planning Board and the Hazardous Waste Task Force Report by NYSDEC.

Development of more chemicals and new uses for old substances add to the growing volume of possibly hazardous contaminants put into water that must be purified to drink.

The chlorinated hydrocarbons form a highly diverse group unified only by the established practise of consolidating effluent data under a single heading. Sources of waste streams are diversified since these materials are used as solvents, extractants and heat transfer agents. They are used as starting materials in the manufacture of resins and plastics and a wide range of substituted (but non-chlorinated) organics. In addition there is evidence that they are formed at the sewage treatment plant and the water supply facility by the action of chlorine gas on various organic contaminants. Many highly toxic materials are resistant to biodegradation. Many contain both polar and lipid soluble groups. These forms remain in solution in lakes and rivers until they enter the food chain. Within the animal these compounds are reconcentrated in the fat of higher forms. The bio-concentration in fish and water fowl are well-documented.

In addition to the problem of toxicity, (Source: USEPA) chlorinated hydrocarbons have potential carcinogenic, teratogenic and mutagenic properties. People, unlike laboratory animals, are exposed to more than one carcinogen in their everyday lives and through the interactions of body chemistry, exposure to a variety of carcinogens can be cumulative. No dose of a carcinogen, no matter how small, can be relied on to be safe for every individual. Contrary to what much of industry would have people believe, the concept of a "threshold" or "no effects" dose has no practical validity. Even what scientists call a "weak" carcinogen can lead to many thousands of cancers if hundreds of million of people are exposed. And the earlier the exposure begins and the longer it continues the greater will be the risk, whether doses are large or small.

The 1978 Great Lakes Water Quality Agreement between the United States and Canada Article 1 defines "Toxic substance means a substance which can cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological or reproductive malfunctions or deformities in any organism or its offspring or which can become poisonous after concentration in the food chain or in combination with other substances."

Under Annex 1 specific objectives have been set based on available information on cause/effect relationships between pollutants and receptors to protect the recognized most sensitive use in all waters. Objectives have been specified for organic chemicals: pesticides, aldrin/dieldrin, chlordane, DDT and metabolites, endrin, heptachlor/heptachlor

epoxide, lindane, methoxychlor, mirex and toxaphene and other compounds phthalic acid esters and PCB's. For other organic contaminants for which objectives ~~objectives~~ have not been defined but which can be demonstrated to be persistent and are likely to be toxic, the concentrations of such compounds should be substantially absent less than detection levels as determined by the best scientific methodology available. The intent of programs specified in Annex 12 "Persistent Toxic Substances" is to virtually eliminate the input of persistent toxic substances in order to protect human health and to insure continued health and productivity of living aquatic resources and man's use thereof; The philosophy adopted for control of inputs of persistent toxic substances shall be zero discharge.

The International Joint Commission has jurisdiction over boundary waters and Great Lakes pollution embodied in two treaties and special expertise in the management of boundary waters by its investigatory function. The signing November 22, 1978 of the Great Lakes Water Quality Agreement reaffirmed the U.S.-Canada determination to restore and enhance water quality in the Great Lakes System under the rights and obligations of both countries under the Boundary Waters Treaty of 1909 particularly the second part of Article IV of that Treaty which prohibits the pollution of boundary waters and water flowing across the boundary on either side to the injury of health or property on the other. The prohibition is absolute, contingent upon no additional circumstances to make it obligatory; the provision is therefore self-executing. The Treaty does not require a Canadian citizen to press any claims under Article II or Article IV before the ICJ prior to bringing an action in a United States court. Under Article VI of the U.S. Constitution treaties are the supreme law of the land.

The Lake Erie Basin Committee has long respected the international jurisdiction in Great Lakes water quality decisions as important to the health and safety of citizens on both sides of the United States-Canada boundary and place the highest priority to preserve this irreplaceable water resource from further degradation and support remedial measures for critical problem areas such as the Niagara River. This region has been designated a critical problem area by the IJC since 1973.

The declared purpose of the NYS Environmental Conservation Law is to "conserve, improve and protect" the natural resources and environment of New York "in cooperation with the federal government. NYSECL further declares that the state foster "Conditions under which man and nature can achieve, social, economic and technological programs...by...providing that care is taken for the air, water and other resources that are shared with the other states of the United States and with Canada in the manner of a good neighbor.

The NYPERG report on the Niagara River raises some very serious questions about the effectiveness of ongoing programs as presently administered to control toxic pollution of the river. The Lake Erie Basin Committee concurs with the essence and intent of the report. We have long pointed out the inadequacies of present programs. Over the years we have reiterated the problems of laws without enough funds for proper implementation and enforcement. The laws on the books were produced because of public outcry against the erroneous idea that air and water were free commodities to be used at will for the disposal of wastes. What a large portion of the public do not realize is that passing a law, a political process, does not automatically solve the problem.

"The degree to which government control is exercised depends in large

measure upon the manner in which responsibilities are met. An industrialist being interviewed on television recently offered as a reason for disposing of toxic wastes in a clay mountain above a potable groundwater stratum the contention that he had to make a profit. All business must make a profit; that is the motivating force in free enterprise. But no business should make a profit at the risk of destroying potable water resources and possibly causing injury or death to users of that water. If the processes are such that the product is successful only if hidden subsidies have to be paid in the form of cost to governments to clean up, or the cost of damaged ecosystems or ill health or death for humans, then the business is not in free competition and does not belong in the marketplace. In effect what that industrialist said is that the company had not done sufficient research on the reason for toxic waste production or on the disposal of those wastes. They had not taxed their ingenuity or resourcefulness. They simply took their problem and transferred it to the community at large by burying it, literally and figuratively."

(Quote source; Dr. Gerald J. McLinden Environment the Big Picture)
Water Spectrum fall 1981

The NYPIRG report is a result of the erroneous idea on the part of federal and state officials that the "assimulative capacities of the Niagara River are great." (Quote from the USEPA -NYS agreement between the federal and state government which gives NYS the authority to enforce federal environmental law.)

Both air and water are subject to natural contaminants and up to a point, can also cope with some man-made wastes and still recover. The danger comes when the magnitude and compositions of wastes exceed the recuperative capacities of nature. Fault finding even if factual, we feel would be counter productive at this time. Therefore, we will make comments on the recommendations in the report.

Chapter III

An Evaluation of Wastewaters into the Niagara River Regulated by the State Pollution Discharge Elimination System

1. If such a review is undertaken the results should also be submitted to the International Joint Commission, especially in light of the recommendations made by the IJC in "Special Report under the 1978 Great Lakes Water Quality Agreement on Pollution in the Niagara River" dated Jan. 20, 1981.
2. We agree.
3. We agree.
4. We agree. There will be no solution for water contamination as long as it is less costly to continue to pollute than to clean-up.
5. We suggest more effective use of existing laboratory facilities.
6. We agree.
7. We agree. The fish and wildlife monitoring although helpful will not be effective enough in determining water quality. The key to effective water quality control is pretreatment of discharges by every industry discharging either into the river directly or into the municipal sewage treatment plant. An effective pretreatment

the results of which would be monitored by NYSDEC would be essential to protect water quality.

One very effective test for the discharge after pretreatment would be the "96 hour flow-through acute toxicity test" as is being done at SCA by NYSDEC recommendation to test the discharge of its newly built pipeline to the river. This time and dosage dependent test shows immediately any toxic effects of the discharge on aquatic life. Other area industries discharges should be monitored at least as effectively as the Sca pipeline discharge. Chronic toxicity testing to determine longterm effects could be done also although not as often.

The present program of monitoring is ineffective in determining the synergistic effects of all the discharges on water quality. One discharge might not be considered toxic, however, in combination with another in the river could become so. A bioassay monitoring system of the Buffalo and the Niagara River and other tributaries would be a reasonable method to collect the data needed and to help determine the effectiveness of water quality programs. It could also serve as an early warning system for water filtration plant operators downstream.

8. We agree, especially for the 129 priority pollutants and should be required for future additions to that list.
9. We agree. The state seems to be able to computerize information for income tax purposes so we can't imagine that this would be a great hardship. The Hazardous Waste Inventory must have been done that way.

Chapter IV

An Evaluation of industries Discharging into Municipal Wastewater Treatment Systems

1. We agree.
2. We agree. Bioassay tests of discharge could be used as a preliminary test to indicate toxicity in a wastestream and to indicate need for further analysis.
3. We agree.
4. We agree. The Chaffee- Sardinia landfill problem in the Southtowns is a prime example of inappropriate disposal of sludge.

Chapter V.

Hazardous Waste Contamination in the Niagara Frontier.

1. We agree.
2. We agree.
3. We agree. Michigan, Indiana, Ohio and Massachusetts to name a few have gone ahead with state legislation to deal with hazardous/toxic wastes. Pollution does not stand still. The longer we hesitate on these problems the more damage is being done and the damage will be irreversible.

4. Fees collected from industries should reflect not just the amount of waste produced, but the toxicity and persistence of the waste. The fee would then more accurately determine costs of cleanup which could be complex. A much clearer system of establishing liability must be developed.
5. We agree. We support the strongest enforcement measures against all participants in indiscriminate dumping. There should be penalties against agency officials for lack of proper enforcement.
6. This insensitive thinking is exactly how the problems at West Valley were created. Dump on some rural area that doesn't have the political clout to oppose the action! West Valley should have taught us something. Don't we ever learn?
7. We agree.
8. We agree. The League of Women has long supported mandatory deposit legislation. The LESC refers to the position taken by the LWV of NYS.
9. We agree.
10. We agree.

Chapter VII

An Evaluation of Niagara River Drinking Water Supplies and their Regulation

1. We believe that selection of a granular activated carbon system treatment method should be made only after pilot studies are performed to determine the efficiency of removal and precise cost estimates are calculated. It is our understanding from the literature all toxics are not removed with such a system.
2. We agree. Equally important is to identify the originator of these pollutants.
3. It is our understanding that this is already being done to some degree. Certainly such assistance should continue undiminished.
4. The LESC supports the objectives of the 1978 Great Lakes Water Quality Agreement and Annex 1 p.2(b) Unspecified organic compounds, For other organic contaminants for which Specific Objectives have not been defined, but which can be demonstrated to be persistent and are likely to be toxic, the concentrations of such compounds in water or aquatic organisms should be substantially absent, i.e., less than detection levels as determined by the best scientific methodology available.
5. Hearings would be helpful in focusing public attention on the problem. However, hearings without a positive result afterward are disheartening to citizens who want action instead of words.
6. A citizen oversight committee merits qualified approval if "packing" by conflict of interest groups can be avoided. The West Valley Program Committee is functioning very well.
7. The Great Lakes Water Quality Agreement of 1978 is a blue print for a comprehensive water quality program. The agreement was the result

of many years of many years of studies of water quality problems in the Great Lakes ecosystem.

Chapter VIII

1. We agree that epidemiological studies should be done .

The Lake Erie Basin Committee supports;

1. The Great Lakes Water Quality Agreement of 1978
2. Control of toxics at their source.
3. Closer cooperation between Canada and the United States in the implementation of toxic substances control legislation and programs.
4. Proper management and ultimate disposal of toxics presently in use.
5. Identification and monitoring of historic and existing solid waste disposal sites where there is an existing or potential discharge of toxic substances and implementation of control programs at those sites as needed.
6. Joint expansion of efforts to assess the cumulative and synergistic effects of these contaminants on environmental health.
7. Funding for implementation of these programs.

The Lake Erie Basin Committee is frankly appalled by the federal budget cuts of the regulatory functions of U.S.EPA and the 36% cuts in Great Lakes programs. NYSDEC depends on federal funding for programs under the USEPA- NYS agreement. Even more appalling is the cuts in educational and toxic substance information programs. The attitude towards citizens seems to be, what they don't know won't hurt them. The credibility of industry and government is very low and for very good reason.

(Quote Dr. Gerald J. McLinden)

"An examination of the National Environmental Policy Act will reveal that none of the regulations would have been needed had we, as individuals and corporations, done our work in a practical and ethical manner. At most an educational program should have sufficed to alert us to our responsibilities and, in keeping with our stated values, we should have responded.. Before decrying any piece of legislation or regulation we should ask ourselves what we did or did not do, to require government to step in as the national conscience. "

Thank you,

Frances Arcara
Frances Arcara

Lake Erie Basin Committee LWV

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