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IN THE  
**Supreme Court of the United States**

OCTOBER TERM, 1969

No. 41 ORIGINAL

STATE OF OHIO, EX REL., PAUL W. BROWN, Attorney General of  
Ohio, State House Annex, Columbus, Ohio 43215, *Plaintiff*,

v.

WYANDOTTE CHEMICALS CORPORATION, a corporation existing under  
the laws of Michigan, located at 1609 Biddle Avenue, Wyandotte,  
Michigan,

and

DOW CHEMICAL COMPANY OF CANADA, LIMITED, a corporation existing  
under the laws of the Dominion of Canada, located at  
Sarnia, Ontario, Canada,

and

THE DOW CHEMICAL COMPANY, a corporation existing under the  
laws of Delaware, located at Midland, Michigan, *Defendants*.

**BRIEF OF DOW CHEMICAL OF CANADA, LIMITED  
IN REPLY**

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**BRIEF OF DOW CHEMICAL OF CANADA, LIMITED  
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**SUMMARY OF ARGUMENT**

1. The Supreme Court of the United States ought not exercise its discretion in assuming original jurisdiction over a claim for prohibitory injunctive relief over a foreign resident where the basis of the alleged nuisance has already been effectively eliminated and there has been responsible, realistic, effective and suf-

ficient steps taken and being taken by the foreign governmental authorities having direct jurisdiction and control over the alleged tortfeasors such as to ensure that the conduct complained of will not be resumed.

2. The Supreme Court of the United States in its discretion ought not to assume original jurisdiction over an action claiming a mandatory injunction where grave doubt exists on the indisputable merits whether any court in the result would make such an order because:

- (a) Such an order is manifestly beyond the practical limitations of the court's facilities both as to administration and supervision.
- (b) Scientific and technological uncertainty exists as to existence of a method of removing the mercury.
- (c) Scientific and technological uncertainty exists as to the sources of the mercury sought to be removed.
- (d) The plaintiff has not taken action against known mercury polluters within its immediate direction and control.
- (e) Lake Erie was severely damaged by a multitude of types and sources of pollution long before mercury was discovered in its waters.
- (f) This defendant is remote from the alleged contamination and uncertainty exists as to any causal relationship while at the same time mercury polluters of Lake Erie who have been identified and with respect to whom no doubt as to causation exists are not parties to the action.

- (g) There exists the 1909 Boundary Waters Treaty which was designed to prevent just this type of multiplicity of legal proceedings and chaos.
- (h) The relief claimed would be futile, if ordered, because the mercury pollution of Lake Erie is demonstrably continuing on a daily basis from sources within the State of Ohio itself and other riparian States.

3. A. The State of Ohio seeks compensatory damages only in its capacity as trustee on behalf of its citizens and such claim is constitutionally beyond the original jurisdiction of the Supreme Court of the United States.

B. There is no precedent to support a *parens patriae* action for compensatory damages nor is there any precedent to support a *parens patriae* action by one of the States of the United States against a foreign sovereign or a party resident outside of the United States and subject to a foreign sovereign.

4. While in no way conceding the correctness of the arguments raised by the Brief of the United States as to personal jurisdiction or service of process, Dow Chemical of Canada, Limited concedes that these issues may be raised in subsequent proceedings if leave to file complaint is granted to the State of Ohio.

## Argument Number 1

### THE CLAIM FOR A PROHIBITORY INJUNCTION

THE SUPREME COURT OF THE UNITED STATES OUGHT NOT EXERCISE ITS DISCRETION IN ASSUMING ORIGINAL JURISDICTION OVER A CLAIM FOR PROHIBITORY INJUNCTIVE RELIEF AGAINST A FOREIGN RESIDENT WHERE THE BASIS OF THE ALLEGED NUISANCE HAS ALREADY BEEN EFFECTIVELY ELIMINATED AND THERE HAS BEEN RESPONSIBLE, REALISTIC, EFFECTIVE AND SUFFICIENT STEPS TAKEN AND BEING TAKEN BY THE FOREIGN GOVERNMENTAL AUTHORITIES HAVING DIRECT JURISDICTION AND CONTROL OVER THE ALLEGED TORTFEASOR SUCH AS TO ENSURE THAT THE CONDUCT COMPLAINED OF WILL NOT BE RESUMED.

1. The Order issued by the Ontario Water Resources Commission on March 26th, 1970 <sup>1</sup> remains in force and will so remain indefinitely. Dow Chemical of Canada, Limited is continuing to comply fully with that Order, to the complete satisfaction and under the regular supervision of the Ontario Water Resources Commission. The measures taken by Dow Chemical of Canada, Limited to prevent any possible escape of metallic mercury from its plant are complete, comprehensive and permanent in nature.<sup>2</sup>

2. Where, as here, there has been "an overt and visible reversal of policy, carried out by extensive operations which have every appearance of being permanent," an injunction should be denied.<sup>3</sup>

3. The Ontario Water Resources Commission Amendment Act, 1970, was proclaimed in the Province of Ontario on November 13th, 1970. Under this statute,

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<sup>1</sup> Appendix VI of the Brief in Opposition filed by Dow Chemical of Canada, Limited.

<sup>2</sup> See p. 7, para. 6, Brief in Opposition Dow Chemical of Canada Limited.

<sup>3</sup> *U.S. v. Oregon State Medical Soc.*, 343 U.S. 326 (1952); *U.S. v. Uniroyal, Inc.*, 300 F. Supp. 84, 96 (S.D.N.Y. 1969).



finances may be imposed upon any person causing material to enter rivers, lakes or other waters which may impair the quality of the water.<sup>4</sup>

4. By Section 8 of that Act it was declared that:

“the quality of water shall be deemed to be impaired if, notwithstanding that the quality of the water is not or may not become impaired, the material deposited or discharged or caused or permitted to be deposited or discharged or any derivative of such material causes or may cause injury to any person, animal, bird or other living thing as a result of the use or consumption of any plant, fish or other living matter or thing in the water or in the soil in contact with the water.”

5. By Section 10 of the same statute there is provision, on first conviction of an offender, for a fine of not more than \$5,000.00; and, on each subsequent conviction, for a fine of not more than \$10,000.00. Each day that an offender contravenes the statute is deemed to be a separate offense.

6. There are technological limitations to the present ability of mankind to totally prevent the escape of mercury into the environment. That such technological limitations exist at the present time has been recognized by the Ontario Water Resources Commission in their official recognition that the effluent of chlor-alkali plants will have a residual mercury content of “less than one pound per day”.

7. The technological limitation is also recognized by the U.S. Government's acceptance pro tempore of a minimum acceptable daily standard of a continuing residual escape of mercury into the environment in the

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<sup>4</sup> See Appendix I.

two cases under the Refuse Act which have been settled on this point by stipulation.<sup>5</sup>

8. This limitation is recognized in the draft effluent regulations for the chlor-alkali industry regarding mercury under the Fisheries Act, prepared by the Environmental Quality Directorate, Department of Fisheries and Forestry, Government of Canada, dated December 15, 1970.<sup>6</sup>

9. In the release made by the Hon. Mr. J. Davis, Federal Minister of Fisheries, Government of Canada, of December 15, 1970, it is clear that the Government of Canada is proceeding towards the total elimination of mercury in the shortest possible time. It is stated in part:

“Swedish experts suggest that .01 pounds of mercury in liquid effluent per ton of chlorine produced is the best feasible with current technology. The successes of most chlor-alkali plants in Canada suggest that our technology has advanced beyond that of the Swedes. Canadian experience suggests effluent losses less than half those as cited by the Swedes, as being attainable.

### *Regulation*

Our interim regulation will require that by April 1, 1971, all chlor-alkali plants in Canada reduce their liquid effluent losses of mercury to 0.01 pounds per ton of chlorine produced with a further reduction to .005 pounds mercury per ton of chlorine by June 1, 1971. The regulation will come up again for review in January, 1972, at which

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<sup>5</sup> *United States v. Allied Chemical Corporation*, Civil Action No. 70-CU-256 N.D.N.Y. Sept. 15, 1970; and *United States v. Olin Corporation*, Civil Action No. 1970-338 W.D.N.Y. Sept. 21, 1970.

<sup>6</sup> See Appendix II.

time the next stage in reduction toward the goal as zero should be stipulated.”<sup>7</sup>

10. Applying this standard to Dow Chemical of Canada, Limited, whose plant has a capacity of 410 tons of chlorine per day, the maximum permissible loss under these regulations would be 4.1 pounds per day.

11. On March 23, 1970, an emergency arose when the Canadian Government, on that date, imposed a ban on fishing because of the discovery of mercury in fish. Within 4 days of the onset of this emergency, the content of the effluent from the plant of Dow Chemical of Canada, Limited, complied not only with the requirements of the Canadian Federal Department of Fisheries now about to come into force but thereafter so complied; and since that date it has always been acceptable to the Ontario Water Resources Commission.

12. No basis now exists for anticipating that at any time in the future mercury may escape from the plant of Dow Chemical of Canada, Limited as may impair the quality of the water of either the St. Clair River or Lake Erie. In the result, the basis of the issue of the injunctive relief sought by the State of Ohio has become academic.

13. There is no suggestion seriously and responsibly advanced that the steps already taken by the Ontario Water Resources Commission and the Canadian Federal Department of Fisheries and Forestry and the Government of the United States in the Refuse Act Cases are irresponsible, unrealistic, ineffective or insufficient. Nor is there any real suggestion that there is any order that this Court might reasonably make that would be more responsible, more realistic, more effective, or more sufficient than those steps already taken and being taken.

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<sup>7</sup> Ibid.

## Argument Number 2

### THE CLAIM FOR A MANDATORY INJUNCTION

THE SUPREME COURT OF THE UNITED STATES IN ITS DISCRETION OUGHT NOT TO ASSUME ORIGINAL JURISDICTION OVER AN ACTION CLAIMING A MANDATORY INJUNCTION WHERE GRAVE DOUBT EXISTS ON THE INDISPUTABLE MERITS WHETHER ANY COURT IN THE RESULT WOULD MAKE SUCH AN ORDER BECAUSE:

- (A) Such an order is manifestly beyond the practical limitations of the Court's facilities both as to administration and supervision.
- (B) Scientific and technological uncertainty exists as to existence of a method of removing the mercury.
- (C) Scientific and technological uncertainty exists as to the sources of the mercury sought to be removed.
- (D) The Plaintiff has not taken action against known mercury polluters within its immediate direction and control.
- (E) Lake Erie was severely damaged by a multitude of types and sources of pollution long before mercury was discovered in its waters.
- (F) This Defendant is remote from the alleged contamination and uncertainty exists as to any causal relationship while at the same time mercury polluters of Lake Erie who have been identified and with respect to whom no doubt as to causation exists are not parties to the action.
- (G) There exists the 1909 Boundary Waters Treaty which was designed to prevent just this type of multiplicity of legal proceedings and chaos.
- (H) The relief claimed would be futile, if ordered, because the mercury pollution of Lake Erie is demonstrably continuing on a daily basis from sources within the State of Ohio itself and other riparian states.

1. This Court is asked to direct the removal of mercury and mercury compounds from Lake Erie, (or require the defendants to pay damages in lieu to be held in a trust fund for that purpose) and supervise

the implementation and progress of removal. Such an order would impose on the Court a tremendous administrative burden entirely beyond its limited facilities.<sup>8</sup> It would also lead the Court into a wilderness of new technology and scientific uncertainty. The technical and scientific experts themselves are in disagreement as to the best and most efficient means of removing mercury from lakes and rivers or neutralizing the effects of methylation. The Hon. Mr. Brunelle, Minister of Lands and Forests of the Province of Ontario has reported that some experts believe that dredging may help; while at the same time he acknowledges that others just as knowledgeable believe it will do more harm than good.<sup>9</sup>

2. The same difference of opinion exists in the United States. The Deputy Director of the Michigan Department of Natural Resources and Executive Secretary of the Michigan Water Resources Commission testified, as follows, before the Subcommittee on Energy, Natural Resources and the Environment of the U.S. Senate Committee at hearings held in Michigan on May 8, 1970:

“We are evaluating the feasibility of removing contaminated sediments through dredging. It has been estimated that to dredge a strip 150 feet wide, 3 feet deep and 1 mile long of the Detroit River would cost approximately one-half million dollars. The cost of dredging Lake Erie, due to the large area involved, would be enormously expensive. *Dredging, moreover, could conceivably cause significant environmental (sic) damage including pos-*

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<sup>8</sup> See para. 8, p. 45 Brief in Opposition Dow Chemical of Canada, Limited.

<sup>9</sup> Legislature of Ontario Debates, Oct. 8, 1970, the Hon. Mr. Brunelle, Minister of Lands and Forests, p. 4781—Appendix III.

*sible additional releases of mercury compounds to the aquatic environment.* No conclusion has been reached as yet on the possibility of any dredging. Efforts are also underway to determine whether there is any possible way to chemically neutralize or bind the mercury in bottom sediments within the affected area. Results to date do not indicate any practical method of chemical treatment of the contaminated bottom sediments.” (p. 11, testimony of Ralph Purdy.) (emphasis added)

3. Previously, in 1968, the Federal Water Pollution Control Administration in considering pollution of Lake Erie from sources other than mercury had reported:

*“Dredging Lake Erie.* A possible step to the immediate improvement of Lake Erie, in addition to the previous recommendations, is the dredging of the lake bottom. This would be the ultimate in refinement of water quality in the lake.

*“The cost to dredge the top three feet of sediments would be many billions of dollars and would take many decades to accomplish.* Because of the complete absence of knowledge about actual benefits of such an undertaking and the great expense, this is considered impractical. The FWPCA does not believe that it will be necessary to remove bottom sediments in order to restore Lake Erie water quality. Even if such a project were undertaken, the disposition of the dredged material would be a major problem.” (emphasis in original)<sup>10</sup>

4. Scientific studies now in progress are expected to point the way to realistic and effective solutions in the near future. In Sweden, where problems of absorption of mercury by fish in fresh water lakes were first rec-

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<sup>10</sup> U.S. Department of Interior, FWPCA, Lake Erie Report: A Plan for Water Pollution Control (Aug. 1968), at 82.



ognized, experiments are being conducted to test several new methods of rendering methylated mercury harmless or inactive.

5. In recent months, scientists have unanimously concluded that the mercury which is present in the environment comes from many sources, both natural and industrial. Mercury has now been discovered in the waters of lakes which are remote and which are isolated from any possible source of industrial contamination.<sup>11</sup> It has also been discovered recently that mercury, in significant amount, was present in fish which were caught about 40 years ago in remote areas of the Adirondaks. The water in these areas were free, at that time, from agricultural and industrial sources of mercury.<sup>11a</sup>

6. At the International Conference on Environmental Mercury Contamination held at the University of Michigan from September 30th to October 2, 1970, it was disclosed that fossilized fuels emit mercury when burned.

7. Many sources of mercury pollution are located in the City of Detroit which is situated more than 60 miles downstream from the plant in Sarnia of Dow Chemical of Canada, Limited. At the same Conference, a paper was read by Mr. Williams Turney as a representative of the Michigan Water Resources Commission. In particular, Mr. Turney informed the Conference that the plants of Detroit-Edison and Consumers Power, which are adjacent to the Detroit River, constantly

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<sup>11</sup> Legislature of Ontario Debates, Oct 8, 1970, the Hon. Mr. Brunelle, Minister of Lands & Forests, p. 4781—Appendix III.

<sup>11a</sup> "Mercury: Omnipresent Poison" Washington Post, December 28, 1970. App. IV.

emit large quantities of mercury. Calculations made by him showed that the amount of coal burned within the State of Michigan, for the purpose of generating electricity, should produce about 20,000 lbs. of mercury annually.<sup>12</sup>

8. In October 1970, Counsel for Dow Chemical of Canada, Limited requested the office in Ohio of the Federal Water Pollution Control Administration of the Department of the Interior of the United States to provide a list of all sources from which mercury is believed to enter the waters of Lake Erie. The reply to this request was a letter dated November 30th, 1970 to which was annexed a list of Companies known to discharge or to have discharged mercury to Lake Erie or its tributaries. Dow Chemical of Canada, Limited did not appear on this list. (This letter and list are reproduced in Appendix V hereto).<sup>13</sup> One of the sources appearing on this list is an agency of the Government of the United States.

9. Lake Erie was severely damaged by a multitude of types and sources of pollution long before mercury was discovered in its waters. In the issue of *Holiday* magazine for May, 1968, Mr. Justice Douglas wrote:

“Lake Erie, the recreational frontyard of Buffalo, Cleveland, Toledo and Detroit is gone. Though it supplies water for ten million people, even the heart of it has none of the dissolved oxygen necessary for the fish, plants and insects on which lakes thrive. Erie now supports little aquatic life except trash fish, bloodworms, sludgeworms and bloodsuckers. A monstrous cancerlike growth of

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<sup>12</sup> “Coal Burning Generators, Mercury Pollution Linked”, Detroit Free Press, October 1, 1970.

<sup>13</sup> See Appendix V.

algae, nourished by phosphates from industrial wastes, possesses this body of water.

Lake Erie is shallow, and some think that at the present rate it will be completely polluted with sludge, algae and other deposits within twenty-five years.”<sup>14</sup>

In August 1968, *Life* magazine reported:

“At the present rate of weed growth, Lake Erie will become a Sargasso Sea within the lives of our children; already a foot-deep mat of algae covers several hundred miles of Erie.”<sup>15</sup>

10. On August 23, 1968, *Life* magazine reported, as a caption to a picture:

“Erie’s curse is the Cuyahoga, which snakes through Cleveland . . . carrying a load of detergents, sewage and chemicals to the lake. Eyesores abound at river’s edge . . . and in the Cleveland port itself, where left-over litter is used to build unsightly breakwaters . . . The big port has only one commercial fisherman . . . and Fred Wital, shown at far right cleaning a meager perch catch, is leaving too.”

11. If mercury were the only potential source of harm to the economy or citizens of Ohio, the fact is that the plant of Dow Chemical of Canada, Limited is at Sarnia where Lake Huron empties into the St. Clair River. Sarnia is more than 60 miles from Lake Erie. It is upstream from the Detroit River, which flows into Lake Erie. It is upstream from Lake St.

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<sup>14</sup> Douglas, “Their Glory Is In Danger”, *Holiday* (May 1968), p. 65.

<sup>15</sup> Woodbury, “Sewage Gushes On, But Something Is Being Done”, *Life*, (Aug. 23, 1968), p. 46.

Clair which empties into the Detroit River. It is at the head of the St. Clair River which flows into Lake St. Clair.

12. It is submitted that there is no evidence at all to show that mercury from the plant of Dow Chemical of Canada, Limited ever reached beyond the St. Clair River or, at most, the northern portions of Lake St. Clair. Certainly there is no evidence that mercury from the Sarnia plant ever reached Lake Erie. Indeed the evidence is to the contrary. Sampling of the bottom sediments conducted by Dow Chemical of Canada, Limited indicates that mercury from the Sarnia plant may not have reached even as far as Lake St. Clair, which is downstream of the Sarnia plant.

13. R. W. Purdy, Deputy Director of the Michigan Department of Natural Resources, testified before the Senate Subcommittee on Energy, Natural Resources and the Environment as follows:

“The Federal Water Pollution Control Administration has completed extensive tests of bottom sediment samples from Lake St. Clair, the Detroit River, and Lake Erie. Their results show no significant amounts of mercury in the sediments of the Michigan portion of Lake St. Clair.”

14. To the extent that there is mercury in the Detroit River or Lake Erie, there is no reason why it should be assumed to come from the plant of Dow Chemical of Canada, Limited which is located in Ontario on the St. Clair River and near Lake Huron, rather than from recognized sources of mercury located along the Detroit River and Lake Erie. Indeed,

as reported by the Federal Water Quality Administration in May 1970:

“The Detroit River area is the primary source of mercury in the *western* end of Lake Erie. This is revealed by the distribution pattern established through sediment samples . . .” (emphasis added)<sup>16</sup>

15. Even more important perhaps are those other sources of mercury pollution of Lake Erie actually located within the plaintiff State of Ohio to which the State of Ohio chooses to make no reference in its complaint. Injunctive relief is equitable relief and he who would seek equity must do equity. The person seeking equity must come with clean hands. The State of Ohio, in failing to take action against those mercury polluters within its direct control, is in breach of this fundamental equitable doctrine.

16. Under all these circumstances, it would be patently unjust to require merely one potential and relatively remote and unproven source of pollution of Lake Erie to assume financial responsibility for removing all the mercury from the whole lake and its tributaries. Whatever action is taken to this end should involve and be binding upon all of the agencies, corporations, persons and communities responsible for contributing to the problem and all of the states and provinces abutting on the lake.<sup>17</sup>

17. If the State of Ohio is permitted to bring this suit, there is no reason why all the other states and

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<sup>16</sup> Federal Water Quality Administration, “Investigation of Mercury in the St. Clair River—Lake Erie Systems”, May 1970.

<sup>17</sup> See para. 5, pp. 40-41 Brief in Opposition Dow Chemical of Canada, Limited.

all the Canadian provinces on the Great Lakes system should not have a similar right. If the State of Ohio can sue a Canadian citizen in the Supreme Court of the United States for alleged pollution of Lake Erie, the States of Michigan, Pennsylvania, and New York would have the same right to sue Canadians; and the Governments of Canada and of the Province of Ontario would likewise be entitled to sue agencies, corporations, persons and communities resident in the United States of America.

18. Such a multiplicity of suits would create chaos and bring about the very type of situation the 1909 Boundary Water Treaty was designed to prevent.<sup>18</sup>

19. But even apart from the Treaty, principles of comity would suggest that the State of Ohio not be permitted to sue a Canadian citizen which has done everything required by both Canadian Federal and Provincial authorities and is making every effort to co-operate and to comply with its own governmental agencies.

Similarly, comity would not be advanced if either or both the Government of Canada or of the Province of Ontario could sue citizens of the State of Ohio or communities within the State of Ohio or the Governmental agencies which are the most serious contributors to the pollution of Lake Erie and all of whom are subject to the jurisdiction of the State of Ohio.

20. Mercury is only one of the many and complex problems affecting the waters of Lake Erie and the fish therein. It is submitted that, having regard to all the foregoing facts a gross injustice would be per-

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<sup>18</sup> See pp. 39-44 Brief in Opposition of Dow Chemical of Canada, Limited, esp. para. 4 at p. 42.



petrated if Dow Chemical of Canada, Limited were required to bear the financial burden of attempting to remove all mercury in Lake Erie—and especially when scientists are not in agreement as to the means of removing or neutralizing the mercury.

21. For this Court to make an Order requiring Dow Chemical of Canada, Limited to remove all mercury from Lake Erie would be tantamount to imposing the Herculean labour of cleansing the Augean stables.

22. Any attempt by Dow Chemical of Canada, Limited to remove mercury from Lake Erie would be defeated and rendered futile, and would necessarily extend into perpetuity while substantial quantities of mercury continue to escape into the waters of Lake Erie from many sources, including those already named.<sup>19</sup>

23. The magnitude and complexity of the contributing causes and their effects suggest that a truly effective solution must lie in the area of co-operative administrative action by all the governmental entities affected and not through piecemeal judicial action against only a few alleged offenders or benefiting only one of the states or governments involved.<sup>20</sup>

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<sup>19</sup> Sir James Frazer in his commentary on Pausanias (v.10.9) quotes a Norse tale, "The Mastermaid" in which a prince who wishes to win a giant's daughter must first clean three stables. For each pitch-fork of dung which he tosses out, ten return. It is only upon the princess' advice to turn the pitch-fork upside down that his labour is attendant with any success. Frazer suggests that in the original version Hercules may have received the same advice from Athene: Robert Graves suggests that it is more likely that this Norse tale is a variant of this Fifth Labour of Hercules. Robert Graves *Greek Myths*, Vol. II, Penguin Edition, p. 118.

<sup>20</sup> See also para. 5, p. 41 Brief in Opposition Dow Chemical of Canada, Limited.

24. The task of unravelling the facts and determining a course of remedial action with respect to one of the most complex ecological problems facing the United States and Canada today is a formidable one. Where alternative methods of resolving the problems exist, which alternative methods, it is submitted, provide greater flexibility and facility of supervision than that attainable through court procedure, it is submitted that it then becomes undesirable for this court to assume original jurisdiction.<sup>21</sup>

25. In an original suit, unlike a case on appellate review, "even when the case is first referred to a master, [the] . . . Court has the duty of making an independent examination of the evidence, a time-consuming process . . ." <sup>22</sup> Such cases "consume a disproportionate amount of the Court's time." <sup>23</sup>

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<sup>21</sup> For legal authorities please refer to those already cited p. 40 and p. 45 Brief in Opposition of Dow Chemical of Canada Limited; *Dyer v. Simms*, 341 U.S. 22, Justice Holmes at 27 (1951).

<sup>22</sup> *Georgia v. Pennsylvania R.R.*, 324 U.S. 439, 470 (1945).

<sup>23</sup> 11 Stan. 1 Rev. 665, 695 (1959).

### Argument Number 3

#### THE CLAIM FOR COMPENSATORY DAMAGES

##### A. The Constitutional Issue as to Jurisdiction

THE STATE OF OHIO SEEKS COMPENSATORY DAMAGES ONLY IN ITS CAPACITY AS TRUSTEE ON BEHALF OF ITS CITIZENS AND SUCH CLAIM IS CONSTITUTIONALLY BEYOND THE ORIGINAL JURISDICTION OF THE SUPREME COURT OF THE UNITED STATES.

1. The claim for compensatory damages must be distinguished from the claim for damages in lieu of a mandatory injunction. They are separate and distinct types of relief. A right to one may exist in the absence of any right to the other.

2. The Solicitor-General seeks to explain the claim for compensatory damages as a “reclamation trust fund” claim. This is to characterize it as damages in lieu of the mandatory injunction.<sup>24</sup> That this is a misapprehension on the part of the Solicitor-General is clear from the prayer from the complaint of the State of Ohio itself:

“WHEREFORE, Plaintiff prays:

1. That *a decree* be entered adjudging that the conduct of Defendants in introducing poisonous mercury or compounds thereof into Lake Erie or tributaries thereto *constitutes a public nuisance and that such nuisance be abated.*

2. That *a decree* be entered perpetually *enjoining* the Defendants and each of them *from introducing poisonous mercury* or compounds thereof into Lake Erie or any tributary thereto.

3. That *a decree* be entered requiring the Defendants and each of them *to remove* from Lake Erie and tributaries thereto the poisonous mercury and

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<sup>24</sup> Pp. 11 and 12, Brief of United States as Amicus Curiae.

compounds thereof or, *in the alternative*, requiring Defendants to pay to Plaintiff as *damages* an amount not yet determined but to be determined in this cause *sufficient to enable Plaintiff to remove said mercury and compounds thereof from Lake Erie* and any tributaries thereto, said sum to be held in trust for and expended only for this purpose by Plaintiff; such decree to contain appropriate provisions for reporting to the Court on progress of removal so that appropriate enforcement of said decree can be implemented.

4. That *a decree* be entered adjudging that the Plaintiff recover from the Defendants *damages* in an amount not yet determined but to be determined in that cause *compensating for the existing and future damages to Lake Erie*, the fish and other wildlife, the vegetation and the citizens and inhabitants of Ohio.” (emphasis added)

3. While there exists some precedent to support a *parens patriae* claim for injunctive relief, there exists no precedent for a *parens patriae* action for pure compensatory damages. The attempt to characterize the claim as a “reclamation trust fund” misconceives the true character of the claim asserted by the State of Ohio. It is simply an attempt to provide a foundation for such a claim *parens patriae*.

4. Inasmuch as there already is a claim *parens patriae* for a mandatory injunction and a further claim for damages in lieu thereof, this characterization as suggested by the Solicitor-General implies a redundancy in the claim of the State of Ohio.

5. If one were to presume against such redundancy, one is left with a pure damages claim. Such a claim is not an alternative to the damages in lieu of a mandatory injunction but in addition thereto.

6. Insofar as the proposed action of the State of Ohio is a common law nuisance action merely for damages alone, Dow Chemical of Canada, Limited does *not* dispute the right of the State of Ohio to commence, in the *proper forum*, an action for compensatory damages on behalf of its citizens for injuries allegedly done to their beneficially held property or interference with their rights of user.

7. Dow Chemical of Canada, Limited *does* dispute however that this Court has *original jurisdiction* to entertain such an action because in such an action for compensatory damages the State of Ohio would not be a party plaintiff in its own behalf, as is required by Article 3, Section 2 of the Constitution as construed by this Court.<sup>25</sup> Instead it would be bringing the action for the benefit of other persons.

8. The issue is, therefore, one concerning the nature of the rights which the State of Ohio may properly assert in the proposed action.

9. It is submitted that the State of Ohio does not beneficially possess any property or usufructuary rights in the subject matter alleged to have been injured by Dow Chemical of Canada, Limited.

10. The only proprietary rights of anyone alleged to have been adversely affected so as to give rise to an action at common law for nuisance are proprietary rights to the waters, soil and contents of Lake Erie.<sup>26</sup>

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<sup>25</sup> For legal authorities please refer to those already cited pp. 30, 31 and 32 Brief in Opposition of Dow Chemical of Canada, Limited.

<sup>26</sup> Presumably "contents" is exclusive of "water" as used in the wording of the section, and therefore must be construed as vesting rights to the fish insofar as the same are capable of being owned by anyone.

11. In this instance the State of Ohio, by declaration in its revised Code 123-03 has declared that it holds the waters, soil and contents of Lake Erie as "proprietor in trust".

12. A legal entity may hold property either as a trustee or as a beneficial owner. No other form of vesting of property is known to the law.

13. A "proprietor in trust", it is submitted, is one in whom property is vested as a trustee rather than as beneficial owner.

14. Because Revised Code 123-03 is legislation of the State of Ohio itself, it is submitted that it is not open to the State of Ohio to adopt in this action a position inconsistent with its own declaration. It is precluded from doing so by the principles embodied in the doctrines of estoppel and election.

15. Distinction must be made between rights of user and rights as a proprietor.

16. The public trust doctrine envisages the State as holding in trust for its citizens certain rights to the use of natural resources the legal title to which is vested in the State.<sup>27</sup>

17. The doctrine is, therefore, similar to the effect sought to be achieved by the State of Ohio's statutory declaration *supra*, but the public trust doctrine is expressed in terms of rights of user as distinct from beneficial rights to the property of which use is to be made. Thus the word "proprietor" is defined by

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<sup>27</sup> Sax, *The Public Trust Doctrine in National Resource Law*, 68 Mich. L. Rev. 471 (1970), esp. at pages 478-491.



the Shorter Oxford English Dictionary (3rd Edition) in terms of ownership:

“One who holds something as property, one who has the exclusive right or title to the use or disposal of a thing—an owner”.

18. The rights of user of the waters of Lake Erie for fishing, drinking, navigation and swimming are inalienable rights of the citizens of the State and of the State itself. If any interference be created to the exercise of these rights, then a damages claim, as distinct from injunctive relief, could not be asserted by the State of Ohio in an action within the original jurisdiction of this Court, because this would violate the constitutional limitation. This is so inasmuch as the measure of damages is the injury to the citizen and the action is on behalf of the citizen and not on behalf of the state.<sup>28</sup>

#### **B. Claims for Damages in *Parens Patriae* Actions**

**THERE IS NO PRECEDENT TO SUPPORT A PARENS PATRIAE ACTION FOR COMPENSATORY DAMAGES NOR IS THERE ANY PRECEDENT TO SUPPORT A PARENS PATRIAE ACTION BY ONE OF THE STATES OF THE UNITED STATES AGAINST A FOREIGN SOVEREIGN OR A PARTY RESIDENT OUTSIDE OF THE UNITED STATES AND SUBJECT TO A FOREIGN SOVEREIGN.**

19. A State possesses the right to bring a *parens patriae* action to enjoin another State or the citizen of another State from interfering with the State's own quasi-sovereign right to the integrity and inviolability of its human and other resources and natural environment.<sup>29</sup> It is submitted, however, that there is

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<sup>28</sup> See *supra* footnote 25 at page 21.

<sup>29</sup> *Georgia v. Tennessee Copper Company*, 206 U.S. 230.

no authority which would extend to the State, as distinct from the Government of the United States, a right to bring such an action against a citizen of a foreign country or against the foreign country itself.<sup>30</sup>

20. Quite apart from the question of the original jurisdiction of this Court, a *parens patriae* action is not available to a State to protect either its own rights of property or the property rights of its citizens. This is so whether these rights are held beneficially or whether they are held by the State in trust for its citizens.<sup>31</sup>

21. It is submitted that damages are inappropriate to a *parens patriae* action. If the measure of damages is to be determined by the damage inflicted upon rights of the citizens of the State, the inevitable result would be a clear probability of exposure of a defendant to payment of double compensation. This result follows from the fact that, regardless of the action taken by the State, the citizens thereof would still retain their independent rights to sue for the damage done to them individually.<sup>32</sup>

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<sup>30</sup> *United States v. Curtis-Wright Export Corp.*, 299 U.S. 304, 316 (1936).

<sup>31</sup> *Ibid*; See also *State of Hawaii v. Standard Oil Company of California*, 439 F. 2d 1282, 1285 (9th Cir. 1970):

“An injury to the general economy of the state is not an injury to the business or property of the state or its people. Unless the concepts of business or property are expanded well beyond traditional usage, the general economy of a region cannot be regarded as property in possession of the residents individually or publicly.”

<sup>32</sup> *Hawaii v. Standard Oil Company of California*, 1970 Trade Cases Section 73, 340 (September 25, 1970); 431 F. 2d 1282 (9th Cir. 1970).

22. At p. 32 of the Brief in Opposition of Dow Chemical of Canada, Limited, the statement is made, "There is no precedent in this Court for the recovery of monetary damages in a *parens patriae* suit". The case cited in support of that proposition was *State of Hawaii v. Standard Oil Company of California* (1969) 301 F. Supp. 982 (D. Hawaii 1969).

23. In that case, Pence C. J. had conceded that a State had standing to sue for damages in a *parens patriae* capacity insofar as the acts of the defendant had "a deleterious impact upon the general welfare of economy of the State."<sup>33</sup>

24. But even this aspect of the case was overturned on appeal to the 9th Circuit Court of Appeals as reported in 1970 Trade Cases, Section 73, 340 (September 25, 1970) where the Court stated:

"The general economy is an abstraction. It has no value in itself, save as it may (in a representational capacity on behalf of business and property generally) serve to confer value on the specific items of business or property it affects. It exists only as a reflection of the business or property values it represents."<sup>34</sup>

25. It is submitted that the Court is incapable of assessing compensatory damages to the "general economy" without making an assessment of the damages suffered by the citizens of the State in their individual capacities. To permit both the State and also its citizens to maintain separate actions arising out of

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<sup>33</sup> Ibid; at page 987.

<sup>34</sup> Subsequently reported in 431 F. 2d 1282 (9th Cir. 1970).

the same tort is to make it inevitable that double recovery be realized against a defendant tortfeasor.<sup>35</sup>

#### **Argument Number 4**

##### **PERSONAL JURISDICTION**

1. While in no way conceding the correctness of the arguments raised by the Brief of the United States as to personal jurisdiction or service of process, Dow Chemical of Canada, Limited concedes that these issues may be raised in subsequent proceedings if leave to file complaint is granted to the State of Ohio.

##### **CONCLUSION**

It is respectfully submitted that the application by the State of Ohio for leave to file a complaint ought to be denied.

ALL OF WHICH IS

RESPECTFULLY SUBMITTED,

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<sup>35</sup> See also *Philadelphia Housing Authority v. American Radiator and Standard Sanitary Corporation*, 309 F. Supp. 1057 (E.D. Pa. 1969).

## **APPENDIX**





## APPENDIX I

**An Act To Amend the Ontario Water Resources  
Commission Act**

HER MAJESTY, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

1. Clause *p* of section 1 of *The Ontario Water Resources Commission Act* is amended by adding at the end thereof “and such other matter or substance as is specified by regulations made under clause *ga* of subsection 1 of section 47”, so that the clause shall read as follows:

- (*p*) “sewage” includes drainage, storm water, commercial wastes and industrial wastes and such other matter or substance as is specified by regulations made under clause *ga* of subsection 1 of section 47.

2.—(1) Subsection 1 of section 3 of *The Ontario Water Resources Commission Act* is amended by striking out “three” in the fifth line and inserting in lieu thereof “five” and by striking out “seven” in the fifth line and inserting in lieu thereof “eleven”, so that the subsection shall read as follows:

- (1) The Ontario Water Resources Commission constituted a corporation without share capital on behalf of Her Majesty in right of Ontario by *The Ontario Water Resources Commission Act, 1956* is continued and shall be composed of not fewer than five and not more than eleven persons as the Lieutenant Governor in Council from time to time determines.

(2) Subsections 2 and 3 of the said section 3 are repealed and the following substituted therefor:

- (2) The Lieutenant Governor in Council shall appoint the members of the Commission and shall desig-

nate one member as chairman and one or more members as vice-chairmen.

- (3) In the case of the absence or illness of the chairman or of there being a vacancy in the office of chairman, a vice-chairman designated by the chairman or, failing such designation, a vice-chairman designated by the Commission shall act as and have all the powers of the chairman and, in the event of the absence of the chairman and vice-chairman from any meeting of the Commission, the members present shall appoint an acting chairman, who, for the purposes of the meeting shall act as and have all the powers of the chairman.

3. Section 4 of *The Ontario Water Resources Commission Act* is amended by inserting after "minute" in the first line "of the Commission or of any direction, order, report, approval, notice, permit or licence made or issued by the Commission", so that the section shall read as follows:

4. A copy of any by-law, resolution or minute of the Commission or of any direction, order, report, approval, notice, permit or licence made or issued by the Commission certified by the secretary or assistant secretary under the seal of the Commission to be a true copy shall be received as *prima facie* evidence in any court without further proof.

4.—(1) Subsection 1 of section 8 of *The Ontario Water Resources Commission Act*, as re-enacted by section 1 of *The Ontario Water Resources Commission Amendment Act, 1965*, is repealed and the following substituted therefor:

- (1) Except as provided in subsection 2, three members of the Commission constitute a quorum.
- (2) Clauses *a, b, c, d, e* and *f* of subsection 2 of the said section 8 are repealed.

5. *The Ontario Water Resources Commission Act* is amended by adding thereto the following section:

8a. The Commission may by resolution authorize on such terms and conditions as it considers proper, any officer or officers of the Commission to exercise any of the powers conferred upon the Commission under,

- (a) subsections 2, 2a, 4 and 5 of section 28a;
- (b) subsections 1 and 3 of section 28b;
- (c) subsections 1 and 2 of section 28c;
- (d) subsections 1, 2 and 4 of section 29;
- (e) subsections 1 and 3 of section 30;
- (f) subsections 1 and 3 of section 31;
- (g) subsections 1, 4 and 10 of section 32 and subsections 1 and 3 of section 32a respecting the holding of a hearing and the giving of notice thereof; or
- (h) subsections 1 and 1a of section 43.

6. Subsection 2 of section 10 of *The Ontario Water Resources Commission Act*, as re-enacted by section 1 of *The Ontario Water Resources Commission Amendment Act, 1962-63*, is amended by inserting after "permanent" in the second line "an full-time probationary", so that the subsection shall read as follows:

- (2) *The Public Service Superannuation Act* applies to the permanent and full-time probationary staff of the Commission, except members of the staff who are members of the Ontario Municipal Employees Retirement System, as though the Commission had been designated by the Lieutenant Governor in Council under section 27 of that Act.

7. Section 18 of *The Ontario Water Resources Commission Act*, as amended by section 2 of *The Ontario Water Resources Commission Amendment Act, 1964* and section 1 of *The Ontario Water Resources Commission Amendment Act, 1966*, is further amended by adding thereto the following subsection:

- (4) Every person who hinders or obstructs any employee or agent of the Commission in the exercise of his powers or the performance of his duties under subsection 1 is guilty of an offence and on summary conviction is liable to a fine of not more than \$200 for every day upon which the offence is committed or continues.

8. *The Ontario Water Resources Commission Act* is amended by adding thereto the following section:

25a. Under sections 26, 27, 27b and 28 the quality of water shall be deemed to be impaired if, notwithstanding that the quality of the water is not or may not become impaired, the material deposited or discharged or caused or permitted to be deposited or discharged or any derivative of such material causes or may cause injury to any person, animal, bird or other living thing as a result of the use or consumption of any plant, fish or other living matter or thing in the water or in the soil in contact with the water.

9. Subsection 1 of section 26 of *The Ontario Water Resources Commission Act* is repealed and the following substituted therefor:

- (1) For the purposes of this Act, the Commission has the supervision of all surface waters and ground waters in Ontario.

10.—(1) Subsection 1 of section 27 of *The Ontario Water Resources Commission Act*, as re-enacted by section 5 of *The Ontario Water Resources Commission Amendment Act, 1961-62*, is amended by striking out “to a fine of not more than \$1,000 or to imprisonment for a term of not more than one year, or to both” in the tenth, eleventh and twelfth lines and inserting in lieu thereof “on first conviction to a fine of not more than \$5,000 and on each subsequent conviction to a fine of not more than \$10,000 or to imprisonment for a term of not more than one year, or to both such fine and imprisonment”, so that the subsection shall read as follows:

- (1) Every municipality or person that discharges or deposits or causes or permits the discharge or deposit of any material of any kind into or in any well, lake, river, pond, spring, stream, reservoir or other water or watercourse or on any shore or bank thereof or into or in any place that may impair the quality of the water of any well, lake, river, pond, spring, stream, reservoir or other water or watercourse is guilty of an offence and on summary conviction is liable on first conviction to a fine of not more than \$5,000 and on each subsequent conviction to a fine of not more than \$10,000 or to imprisonment for a term of not more than one year, or to both such fine and imprisonment.
- (2) The said section 27 is amended by adding thereto the following subsections:
  - (1a) Each day that a municipality or person contravenes subsection 1 constitutes a separate offence.
  - (1b) Every municipality or person that discharges or deposits or causes or permits the discharge or deposit of any material of any kind, and such discharge or deposit is not in the normal course of

events, or from whose control material of any kind escapes into or in any well, lake, river, pond, spring, stream, reservoir or other water or watercourse or on any shore or bank thereof or into or in any place that may impair the quality of the water of any well, lake, river, pond, spring, stream, reservoir or other water or watercourse, shall forthwith notify the Commission of the discharge, deposit or escape, as the case may be.

- (1c) Every municipality or person that fails to notify the Commission as provided in subsection 1b is guilty of an offence and on summary conviction is liable to a fine of not more than \$5,000.

11. *The Ontario Water Resources Commission Act* is amended by adding thereto the following sections:

27a. —(1) With the approval of the Minister, the Commission may by order prohibit or regulate the discharge or deposit by any municipality or person of any sewage into or in any well, lake, river, pond, spring, stream, reservoir or other water or watercourse, and any such order may, with the approval of the Minister, be amended, varied or revoked by the Commission as it considers desirable.

- (2) Every municipality or person that contravenes an order made under subsection 1 is guilty of an offence and on summary conviction is liable on first conviction to a fine of not more than \$5,000 and on each subsequent conviction to a fine of not more than \$10,000.

- (3) Each day that a municipality or person contravenes an order made under subsection 1 constitutes a separate offence.

27b. —(1) Where, in the opinion of the Commission it is in the public interest to do so, the Commis-

sion may by order require any municipality or industrial or commercial enterprise to have on hand and available at all times such equipment, chemicals and other materials as the order specifies to alleviate the effects of any impairment of the quality of water that may be caused by the municipality or industrial or commercial enterprise.

- (2) Every municipality or industrial or commercial enterprise that contravenes an order of the Commission made under subsection 1 is guilty of an offence and on summary conviction is liable to a fine of not more than \$500 for every day the contravention continues.

27c. Before making an order under section 27a, 27b, subsection 2a of section 28a or section 50, the Commission shall afford a reasonable opportunity to be heard to the municipality or person to whom the order is proposed to be directed.

12. Subsection 2 of section 30 of *The Ontario Water Resources Commission Act* is amended by inserting after "person" in the fifth line and in the eleventh line "or his successor or assignee", so that the subsection shall read as follows:

- (2) Where any person undertakes or proceeds with the establishment of any water works, or the extension of or change in any existing water works, without having first obtained the approval of the Commission, the Commission may order the person or his successor or assignee to afford at his own expense such facilities as the Commission may deem necessary for the investigation of the works and the source of water supply and may direct such changes to be made in the source of water supply and in the works as the Commission may deem necessary, and any changes directed

by the Commission to be made in the works shall be carried out by the person or his successor or assignee at his own expense.

13. Subsection 2 of section 31 of *The Ontario Water Resources Commission Act* is amended by inserting after "person" in the fifth line and in the twelfth line "or his successor or assignee", so that the subsection shall read as follows:

- (2) Where any person undertakes or proceeds with the establishment of any sewage works, or the extension of or any change in any existing sewage works, without having first obtained the approval of the Commission, the Commission may order the person or his successor or assignee to afford at his own expense such facilities as the Commission may deem necessary for the investigation of the works and the location of the discharge of effluent and may direct such changes to be made in the location of the discharge of effluent and in the works as the Commission may deem necessary, and any changes directed by the Commission to be made in the works shall be carried out by the person or his successor or assignee at his own expense.

14.—(1) Subsection 1 of section 32 of *The Ontario Water Resources Commission Act*, as re-enacted by section 5 of *The Ontario Water Resources Commission Amendment Act, 1966*, is amended by striking out "each other municipality concerned" in the seventh line and inserting in lieu thereof "the municipality in or into which the sewage works are being established or extended and to the clerks of such other municipalities", so that the subsection shall read as follows:

- (1) Where any municipality contemplates establishing or extending its sewage works in or into another



municipality or territory without municipal organization, the Commission shall, before giving its approval under section 31, hold a public hearing and give at least ten days notice of the hearing to the clerk of the municipality in or into which the sewage works are being established or extended and to the clerks of such other municipalities and to such other persons and in such manner as the Commission may direct.

(2) Subsection 5 of the said section 32 is amended by striking out "each other municipality concerned" in the thirty-first and thirty-second lines and inserting in lieu thereof "the municipality in or into which the sewage works are being established or extended and to the clerks of such other municipalities", so that the last four lines of the subsection shall read as follows:

and notice of the application shall be given to the clerk of the municipality in or into which the sewage works are being established or extended and to the clerks of such other municipalities and to such other persons and in such manner as the Board may direct.

(3) The said section 32 is amended by adding thereto the following subsections:

(11) Where the Commission has given its approval under section 31 to an extension by a person of his sewage works from one municipality into another municipality or into territory without municipal organization the Board may, on application made by the person undertaking the extension, order the amendment of any by-law passed under paragraph 112 of subsection 1 of section 379 of *The Municipal Act* or any by-law passed under section 30 of *The Planning Act* or any official plan to permit the use of the land for the extension.

- (12) The Board, as a condition of making an order under subsection 11, may impose such restrictions, limitations and conditions respecting the use of land for the extension of the sewage works, not inconsistent with the terms and conditions of the approval of the Commission given under section 31, as to the Board may appear necessary or expedient.

15. Section 32a of *The Ontario Water Resources Commission Act*, as enacted by section 6 of *The Ontario Water Resources Commission Amendment Act, 1966*, is amended by adding thereto the following subsections:

- (4) Where the Commission has given its approval under section 31 to an establishment or extension by a person of sewage treatment works within a municipality the Board may, on application by the person undertaking the establishment or extension, order the amendment of any by-law passed under paragraph 112 of subsection 1 of section 379 of *The Municipal Act* or any by-law passed under section 30 of *The Planning Act* or any official plan to permit the use of land for the establishment or extension.
- (5) The Board, as a condition of making an order under subsection 4, may impose such restrictions, limitations and conditions respecting the use of land for the establishment or extension of the sewage treatment works not inconsistent with the terms and conditions of the approval of the Commission given under section 31, as to the Board may appear necessary or expedient.

16. *The Ontario Water Resources Commission Act* is amended by adding thereto the following section:

- 32b. Subsections 11 and 12 of section 32 and subsections 4 and 5 of section 32a apply *mutatis mutandis* to a

municipality that has obtained the approval of the Commission to the establishment or extension of its sewage works or to the establishment or extension of sewage treatment works.

17. Paragraph 2 of subsection 1 of section 40 of *The Ontario Water Resources Commission Act* is amended by striking out “the rate of 3¼ per cent per annum” in the sixth and seventh lines and inserting in lieu thereof “such rate as is prescribed by regulation by the Commission”, so that the paragraph shall read as follows:

2. In each calendar year for such period of years as may be prescribed by such agreement, commencing not later than the fifth calendar year next following the date of completion of such project, such sum as would be necessary with interest compounded annually thereon at such rate as is prescribed by regulation by the Commission to form at the expiry of such period of years a fund equal to the cost of such project.

18. *The Ontario Water Resources Commission Act* is amended by adding thereto the following section:

41a. Where an agreement is made with a municipality for the provision of sewers under clause *d* of subsection 1 of section 16 or under section 39, the municipality may charge the owner of the premises for which a service drain is constructed the cost of construction of the service drain from the sewer to the line of the highway, together with interest thereon at a rate to be determined by the municipality, over such period of years as the municipality determines.

19. Subsection 5 of section 42 of *The Ontario Water Resources Commission Act* is repealed.

20. Section 43 of *The Ontario Water Resources Commission Act*, as amended by section 12 of *The Ontario Water*

*Resources Commission Amendment Act, 1961-62* and section 6 of *The Ontario Water Resources Commission Amendment Act, 1965*, is further amended by adding thereto the following subsection:

- (1a) Notwithstanding subsection 1, where a reserve account has been established in respect of a project, the Commission may, in respect of any other project for the same municipality, expend, use, apply, utilize and appropriate therefrom such amounts as in the opinion of the Commission may be sufficient therefor for any of the purposes mentioned in clauses *a*, *b* and *c* of subsection 1.

21.—(1) Subsection 1 of section 47 of *The Ontario Water Resources Commission Act*, as amended by section 14 of *The Ontario Water Resources Commission Amendment Act, 1961-62*, subsection 1 of section 7 of *The Ontario Water Resources Commission Amendment Act, 1962-63*, subsection 1 of section 10 of *The Ontario Water Resources Commission Amendment Act, 1964* and section 11 of *The Ontario Water Resources Commission Amendment Act, 1966*, is further amended by adding thereto the following clauses:

- (da) prescribing the rate of interest for the purpose of paragraph 2 of subsection 1 of section 40;

. . . . .

- (fa) classifying persons who operate sewage works and requiring and providing for the licensing of sewage work operators or any class or classes thereof, and prescribing the qualifications of persons to whom licences may be issued, and prescribing and charging fees for such licences, and providing for the revocation and suspension of licences;

. . . . .

- (ga) specifying any matter or substance as sewage for the purposes of any section or sections of this Act or of any regulation made thereunder.

(2) Subsection 3 of the said section 47 is repealed and the following substituted therefor:

- (3) Every municipality or person who contravenes any regulation made under this section is guilty of an offence and on summary conviction is liable to a fine of not less than \$25 and not more than \$1,000.

22. Subsection 2 of section 47*b* of *The Ontario Water Resources Commission Act*, as enacted by section 15 of *The Ontario Water Resources Commission Amendment Act, 1961-62*, is amended by inserting at the commencement thereof "Subject to section 52", so that the subsection shall read as follows:

(2) Subject to section 52, Part XXI of *The Municipal Act* applies *mutatis mutandis* to by-laws passed under this section.

23. Section 51 of *The Ontario Water Resources Commission Act*, as enacted by section 7 of *The Ontario Water Resources Commission Amendment Act, 1960-61*, is amended by adding thereto the following subsection:

- (2) Subsection 1 does not apply in respect of any of such sewage works constructed under an agreement entered into after the 1st day of September, 1964.

24. Section 52 of *The Ontario Water Resources Commission Act*, as enacted by section 11 of *The Ontario Water Resources Commission Amendment Act, 1964*, is amended by inserting after "Act" in the second line "or of any by-law passed under clause *c* or *d* of subsection 1 of section 47*b*", so that the section shall read as follows:

52. Proceedings to enforce any provision of this Act or of any regulation made under this Act or of any by-law passed under clause *c* or *d* of subsection 1 of section 47*b* may be instituted within one year after the time when the subject-matter of the proceedings arose.

25. Section 53 of *The Ontario Water Resources Commission Act*, as enacted by section 11 of *The Ontario Water Resources Commission Amendment Act, 1964*, is amended by inserting after "Commission" in the first line "or an officer to whom power has been delegated by the Commission under section 8a" and by inserting after "Commission" in the second and third lines "or such officer", so that the section shall read as follows:

53. Where the Commission or an officer to whom power has been delegated by the Commission under section 8a has authority to direct or require that any matter or thing be done, the Commission or such officer may direct that, in default of its being done by the municipality or person directed or required to do it, such matter or thing shall be done at the expense of such municipality or person, and the Commission may recover the expense incurred in doing it, with costs, by action in a court of competent jurisdiction as a debt due to the Commission by such municipality or person.

26. *The Ontario Water Resources Commission Act* is amended by adding thereto the following section:

58. Any amount due and payable by a municipality or a person to the Commission under any agreement or otherwise, together with all interest and expenses of debt service, if any, payable by the Commission to the Treasurer of Ontario with respect to such amount may be recovered with costs in a court of competent jurisdiction as a debt due to the Commission by the municipality or person.

27. This Act comes into force on the day it receives Royal Assent.

28. This Act may be cited as *The Ontario Water Resources Commission Amendment Act, 1970*.

## APPENDIX II

### *RESTRICTED*

**Draft Effluent Regulations for the Chlor-Alkali Industry  
Regarding Mercury Under the Fisheries Act  
December 15, 1970**

Environmental Quality Directorate  
Department of Fisheries and Forestry  
Ottawa, Canada

### EFFLUENT REGULATIONS UNDER THE FISHERIES ACT

Regulations are being developed under the authority of Section 33, Subsection 12 of the Fisheries Act as amended on 26 June, 1970.

The Fisheries Act was amended to provide strengthened powers for the Minister to control water pollution as it affects the plant and animal life of waters.

#### *Rationale*

The philosophy reflected in these regulations is that the highest practicable degree of treatment should be required consistent with current technology. An overriding condition necessary to provide adequate protection to our aquatic environment will be the total restriction on certain substances.

Regarding an effluent regulation for the chlor-alkali industry the following is proposed, based on several considerations:

Because of gaps in scientific knowledge regarding such things as the sublethal effects of low levels of mercury on the environment and the extent of natural contamination both necessitating further research in these areas, it will only be possible to draft an *interim* regulation.

Further, because of the seriousness of mercury poisoning (Minimata and Swedish experiences), and the widespread observation on this continent of the dramatic biological magnification of mercury in aquatic life forms, our present judgment is that our goal should be the complete elimination of contributions of mercury to the environment by activities of man. This should be achieved in a staged program. The first stage, to be covered by our *interim* regulation should require the highest degree of abatement, in both air and water, practicable with current technology.

Swedish experts suggest that .01 pounds of mercury in liquid effluent per ton of chlorine produced is the best feasible with current technology. The successes of most chlor-alkali plants in Canada suggest that our technology has advanced beyond that of the Swedes. Canadian experience suggests effluent losses less than half those as cited by the Swedes, as being attainable.

### *Regulation*

Our interim regulation will require that by April 1, 1971, all chlor-alkali plants in Canada reduce their liquid effluent losses of mercury to 0.01 pounds per ton of chlorine produced with a further reduction to, .005 pounds mercury per ton of chlorine by June 1, 1971. The regulation will come up again for review in January 1972, at which time the next stage in reduction toward the goal of zero should be stipulated.



**APPENDIX III****ONTARIO LEGISLATURE****(October 8, 1970)****STATEMENTS BY THE MINISTRY.****The Hon. Minister of Lands and Forests.**

Hon. R. Brunelle (Minister of Lands and Forests): Mr. Speaker, I have a statement to make with reference to mercury levels in Ontario fish.

Health authorities have recommended since last May that fish with levels of mercury higher than 0.5 parts per million should not be eaten, especially on a regular basis. The Department of Lands and Forests, in co-operation with the Ontario Water Resources Commission and the federal Department of Fisheries and Forestry and their Fisheries Research Board, began collecting fish in Ontario and analysing them for mercury levels almost a year ago.

Today two federal fisheries laboratories in Winnipeg and one in Toronto as well as one provincial laboratory in OWRC, are analysing fish from Ontario supplied by The Department of Lands and Forests or by the federal Fish Inspection Service. Ontario's Departments of Lands and Forests and Agriculture and Food are in the process of establishing analytical facilities for further studies.

Fish of a variety of species from well over 105 distinct water areas amounting to thousands of samples have been analysed. As a result of the earliest testing which was directed toward areas which were suspected to be critical because of industrial activity, a number of waters were officially closed to commercial fishing by regulation, and anglers were issued warnings to "fish for fun." In some areas all commercial fishing was prohibited but in others the prohibition applied only to one or a few critical species.

I am tabling a list of waters, beginning in northwestern Ontario, moving eastward to the Ottawa River, including the Great Lakes, from which fish have been tested to date.

In some cases, samples were taken from commercial shipments of thousands of pounds of fish. In other waters, only individual fish may have been analysed.

This report records for the direction of the public, all areas and species analysed. "Above" means that levels of mercury are 0.5 parts per million or more, which is the recommended upper level for human consumption. "Below" means that the levels are below this limit and are considered acceptable.

Some of the levels discovered are in areas where there are no industrial activities, and further investigation of such waters is necessary to understand the source of these "background" levels. They may be as a result of mercury in the atmosphere or mercury in rock formations.

It is planned to revise this list at two-month intervals or depending on the significance of the change detected as a result of our continuing programme. Commercial fishermen are being warned to move out of areas where levels are above the 0.5 parts per million, or to change their gear to catch species which are not affected. Anglers, through this statement and by means of posted signs, are being warned to "fish for fun".

Further sampling will continue of species not listed; of different age classes of some species; and of waters not yet tested. We suspect that seasonal variations in levels may exist and plan to develop year-round monitoring of some species.

Those areas previously closed to commercial fishing for all fish are marked with an asterisk and those species closed in a few special areas are marked also.

I will have copies of this statement, Mr. Speaker, for all members of the Legislature.

Mr. Speaker: Oral questions.

## MERCURY CONTAMINATION OF WATERS

Mr. Nixon: Sir, questions rising from the statement.

Will the minister make clear whether or not new lakes have had fishing banned in them as a result of this announcement?

Hon. Mr. Brunelle: This announcement, Mr. Speaker, is a warning. No new lakes have been closed. However, if, from additional information gained through sampling analysis, we find that it is necessary to close certain lakes, we will do so. At the moment we feel that we have no conclusive results and therefore we are issuing warnings only.

Mr. T. P. Reid (Rainy River): A supplementary, Mr. Speaker: Could the minister indicate—

Mr. Speaker: Order! I must say that we are not entering into the oral question period yet. This was a question of clarification of the minister's statement.

Mr. Nixon: Yes, but we are in the question period.

Mr. Speaker: And it was to be part of the oral question period? Very good.

Mr. T. P. Reid: Can the minister indicate who has the final authority to ban commercial fishing? Is it the provincial government or the federal government or the two governments acting in concert?

Hon. Mr. Brunelle: Mr. Speaker, we work very closely with the federal authorities. I have communicated with the minister. My officials have also communicated with his officials and I would say that the authority rests with ourselves, the Ontario government, to ban commercial fishing.

Mr. Nixon: Mr. Speaker, a further supplementary: The minister has announced previously that efforts will be made to remove the sources of pollution, particularly in the cases of mercury lying in some form or another at the bottom of certain waterways. There is nothing said about that either in this statement or in the minister's comments recently. Can he report on the efforts to remove the polluting mercury? I think he indicated that they were going

to try to dredge the bottom of some of these lakes and that this has been abandoned.

Hon. Mr. Brunelle: On this question, my colleague, the Minister of Energy and Resources Management (Mr. Kerr), is much more knowledgeable, but I would say that there are various types of mercury. There is organic and inorganic; there is metal. At one time—and this is still being considered—thought was given to removing mercury from, for instance, Lake St. Clair, where it is known to be in certain parts of the lake. There are some authorities, who are very knowledgeable and who have the results of what has happened in Sweden and other countries, who feel that this is not advisable. Trying to remove the mercury only aggravates the situation. That is why, at this time, we are considering and trying to base our plans according to experience available in other jurisdictions.

The Minister of Energy and Resources Management has just returned from Sweden and other countries where he consulted with those officials on this very matter.

Mr. Nixon: Are we to understand that no cleanup activities are presently underway?

Hon. Mr. Brunelle: Again, Mr. Speaker, this rests with the Ontario Water Resources Commission and I do not know what they have or have not undertaken. I know they have been in consultation with the industries concerned but I cannot say what they have or have not done.

Mr. Speaker: The hon. member for Thunder Bay.

Mr. J. E. Stokes (Thunder Bay): Thank you, Mr. Speaker. Can the minister assure commercial fishermen who have been adversely affected by the mercury contamination that they will be compensated for any losses by those responsible for the pollution, since the federal Department of Fisheries announced that there will be no assistance through that agency after September 25?

Hon. Mr. Brunelle: What we are doing, Mr. Speaker, is working very closely with the commercial fishermen. We will try and direct those fishermen to those areas where

there is no mercury contamination and to fish for certain species that are not affected. Now that we know from our studies that many, many lakes are suffering—I say suffering—that the fish are contaminated with mercury, not through industrial deposits but through natural backgrounds of the rock formations, or the soil, or the atmosphere.

This throws an entirely different light on the situation, and it may well be—and we do not know, for instance, we need more information—we do not know how long this will last or if this is going to last for a considerable length of time. It may be that in certain areas where it is a natural level of mercury we cannot do anything about this; it may be that we may have to have some retraining programmes. This would be, I would hope, a federal-provincial participation. So at this stage we are still in this exploratory stage, and we certainly do not want to see commercial fishermen deprived of their livelihood without compensation.

Mr. Speaker: The hon. member for Rainy River was going to ask for a supplementary?

The hon. member for Sandwich-Riverside on a supplementary.

Mr. F. A. Burr (Sandwich-Riverside): Yes. Mr. Speaker, a supplementary: The minister mentioned the industrial pollution and the non-industrial pollution or the background pollution. Could the minister tell us whether any of the levels exceed 0.5 parts per million where there is no industrial pollution?

Hon. Mr. Brunelle: Yes. On this list, Mr. Speaker, as I mentioned earlier and there will be a copy for every member—there are many, many lakes in northwestern Ontario, for instance, where there are no known sources of industrial pollution—it must be from background level—but which have rates that are much higher than 0.5 parts per million.

Mr. Speaker: Does the hon. member for Kenora have a supplementary?

Mr. L. Bernier (Kenora): Yes, Mr. Speaker, I have a supplementary to the minister's statement:

In view of the fact that Sweden is presently considering raising its standard from 0.5 parts per million to 1 part per million, and in view of the many lakes that are listed in the minister's statement today, are there discussions going on in this country, or with other authorities, on the possibility of raising that standard?

Hon. Mr. Brunelle: That is a very good question, Mr. Speaker. There are many who question whether 0.5 parts per million is a realistic figure. That is why our counterparts in the United States, in other jurisdictions, and in other provinces in Canada are continually looking further into this, because it could well be that that level may be changed.

From the information that I have been given, health authorities have been in northwestern Ontario and apparently at the moment it does not appear that persons who have been eating fish contaminated with mercury have suffered any ill-effects, though this is being looked into seriously.

## APPENDIX IV

(*The Washington Post* Monday, Dec. 28, 1970)

*Even Batteries, Fillings Add to Pollution*

## MERCURY: OMNIPRESENT POISON

By VICTOR COHN  
Washington Post Staff Writer

The silvery poison called mercury has long been an accidental part of man's diet. But now, suddenly, it has become a prominent health concern.

Fish with more than .5 parts of mercury per million—the federal safety guideline—have been found this year in most states. Much fishing was banned and fish from suspect areas are now inspected before sale. The levels of mercury found in swordfish and canned tuna brought government action to get contaminated stocks removed from the market.

Where has the mercury come from? Industrial uses of mercury have increased 20-fold since 1945, and many people assume that the increased burden of mercury comes directly from industrial water pollution. But the findings of scientists indicate that the answer is not so simple:

- There is evidence from New York state, not yet officially released, that there was almost as much mercury in some U.S. fish and waters 40 years ago as there is today—though nothing like the peaks caused since by far greater pollution.

- By no means all of today's mercury pollution—probably no more than half—has come from industrial waste discharges into waters, the cause that has had almost all the blame so far.

- Huge amounts, probably tons, are being poured into the atmosphere from the smokestacks of every coal-burning furnace. Electric power generation for Detroit alone may be putting more mercury into the air than were two big

Michigan chemical firms tagged as polluters: Dow and Wyandotte. If all the mercury naturally contained in coal is vaporized on burning, U.S. power plants may be putting as much as 150 tons into the skies every year.

- Many so-called “minor” uses of mercury add up to a huge share of total use, and much of it ends up in the environment. Thus users may toss away transistor radio batteries and dozens of other modern products all unaware that they contain mercury; dental patients may spit out little bits of excess filling in which mercury has been used to dissolve and bind the other materials. (Dental assistants, by recent Canadian figures, have 12 to 45 parts per million in their hair—which concentrates mercury—compared to .2 to .6 parts per million for people in other occupations.)

- Roughly half of all the mercury now being found in food may come from natural sources, and only half from pollution by man.

#### POTENTIAL DANGER

All mercury is potentially dangerous, in sufficient amounts. These are amounts, it is hoped, several times greater than those now being allowed in swordfish, tuna and other foods.

Doctors know mercury compounds can kill brain and nerve cells, cause liver and kidney damage and—when a pregnant woman consumes it—concentrate in the sensitive fetus.

Still, there has been mercury on the earth for 4.5 billion years, since creation. It is particularly concentrated in certain kinds of rocks, in areas that were once volcanic and where there are deposits of cinnabar (mercury and sulphur ore).

These exist both on the continents and in the oceans. Mercury is also associated with other areas, for example, the manganese nodules on the ocean bottom.



#### INTAKE INCREASED

Some mercury is being leached or washed out of these sources all the time. Some naturally vaporizes and enters the air. It is highly probable that some is eventually turned into the chemical form—methylmercury—that is most harmful to human beings.

Only in 1934, a German chemist found that his average countryman's mercury intake was 35 micrograms a week—just a trace, mostly, it was assumed, from natural sources.

Today, estimates Dr. David H. Klein, chemistry professor at Hope College in Holland, Mich., an average American's mercury intake would be 300 micrograms a week if he eats no meat, 350 if he eats "a little meat" and 750 if he depends almost entirely on the contaminated fish—fresh or salt water—now banned from commerce.

Serious concern over mercury in the environment started in the '50s and '60s. The Swedes found it in wild fowl, the result of their eating farm seed treated (to kill fungus disease) with methylmercury.

The Japanese counted 50 deaths and nearly 200 more cases as the result of massive discharges by plastics plants of the dangerous methylmercury.

#### CONVERTED BY BACTERIA

But mercury-using industry generally was discharging not methylmercury but the metallic form, which everyone assumed just sank to stream bottoms. Then scientists learned that bacteria in water or fish could convert metallic mercury to methylmercury.

Earl J. Harris, associate analytical chemist in New York State's Rome Pollution Laboratory—part of its Department of Environmental Conservation—recently examined "in the neighborhood of a dozen" fish, mature walleyed pike and small mouth bass caught in various New York waters from

1927 onward, then preserved in alcohol as biological specimens.

All but two, he discovered, contained more than .5 parts of mercury per million, in amounts up to 1.5 parts. But none contained levels as high as 8 parts, the high so far in fish caught this year in badly affected Lake Onondaga, site of a chlor-alkali plant that was long a Class A mercury polluter.

Some of Harris' fish, reports Dr. Roger Herdman, a New York state toxicologist, came from remote areas in the Adirondacks with no agricultural or industrial mercury sources—and downwind of no major cities.

#### NATURAL SOURCES

"I can't think of any way that mercury got there except from natural sources," Herdman states. "But there is also absolutely no question but there have been additions to mercury levels from pollution."

Chemists in Michigan, where Lake Erie was badly affected, began analyzing coal samples. One from southeastern Ohio, they found, contained .4 to .5 parts per million of mercury.

Much other coal is rated far lower. But even .1 part per billion adds up—the Western world has burned coal since the Industrial Revolution, and the vapor is blown by winds all over the globe, then rained down on land and seas, to end up in water filtered by plankton which are eaten by fish which, after many such concentrations, are eaten by the largest fish at the top of the food chain—like swordfish and tuna.

#### *In Crude Oil*

Kevin Shea, scientific director of the Committee for Environmental Information in St. Louis, reports finding that some crude oil—also burned by electric power plants—con-

tains as much as 20 parts of mercury per million. But the amount in most oil may be far lower, in parts per billion.

“For the real information on where we’re mainly using mercury,” and how much we may be throwing away sooner or later, “just look at the annual Minerals Yearbook of the Bureau of Mines,” says Dr. Frank D’Itri of Michigan State University’s Institute of Water Research.

A look shows that the United States “consumed” 6,011,094 pounds of mercury in 1969. The chemical industry (including relatively minor chemical users like paper and pulp mills and drug-makers) used 1,914,060 pounds or 32 per cent.

The industry is probably still using as much, but with far stricter antipollution measures. The Interior Department in September said mercury discharged into waters had been reduced by 86 per cent.

The pharmaceutical industry uses mercury in diuretics (antiwaterlogging drugs) and as a bacteria-killer in salves and antispectics (like mercurochrome, named for its mercury).

“How much of this,” asks D’Itri, “do you suppose we wash down the sink?”

A full 24 per cent of the entire mercury output is used to make electrical apparatus. It goes into mercury batteries, energy cells, scientific instruments, flashlight, toys, radios, mercury vapor lights for street lighting and fluorescent, germicidal and photocopying lamps.

“We’re obviously throwing away a lot,” D’Itri says, “and mercury for a metal is tremendously volatile.”

### *In Control Instruments*

Another 9 per cent is used in industrial and control instruments, a separate category. Dentistry uses 4 per cent, 9.7 per cent is used in making paint long-lasting and fungus-

resistant—until it eventually deteriorates to be washed away someplace.

“General laboratory use” accounts for 3 per cent. “A lot is used in hospitals,” D’Itri says. “Pathologists use it as a fixative for tissues. Then the tissues are incinerated—and the mercury goes into the air—or they’re ground up in the ‘Dispose-all,’ and they and any excess solution go down the drain.

“Many of these uses are very minor. But they add up.”

Agricultural uses—mainly seed-treating—took 3 per cent of 1969’s mercury output. Most uses of the most dangerous forms have now been halted, the Agriculture Department reports. It was treated seed, painted red as a warning, which a New Mexico family fed its pigs—to live on the pork until sickness began.

No medical symptoms attributable to mercury have yet been seen in any moderate eaters of tuna or swordfish or other fish-eaters.

“The fact that we can’t identify an actually sick person is a happy one,” says Herdman. “It would be insane to wait until someone is sick before we start to worry about this.”

And St. Louis’ Dr. Neville Grant, specialist in internal medicine, and a teacher at Washington University, worries about “what really cause some of our funny neurological diseases.”

“I think we have to look very closely at many more fetuses,” he says. “I think we have a great deal to learn yet about very low-level mercury poisoning.”

**APPENDIX V**

UNITED STATES DEPARTMENT OF THE INTERIOR  
FEDERAL WATER POLLUTION CONTROL ADMINISTRATION  
5555 Ridge Ave., Cincinnati, Ohio 45213

November 30, 1970

Mr. V. K. McEwan  
Thomson, Rogers Barristers & Solicitors  
200 Richmond-Adelaide Centre  
120 Adelaide St., W.  
Toronto 110, Ontario

Dear Mr. McEwan:

Enclosed is a list of companies known to discharge or to have discharged mercury to the water of Lake Erie or its tributaries. Also attached is a copy of the report on mercury that was prepared for and presented at the June 3, 1970, conference on Lake Erie at Detroit, Michigan.

Sincerely yours,

/s/ LOWELL A. VAN DEN BERG  
L. A. Van Den Berg  
Assistant to Director  
Division of Field  
Investigations, Cinti.  
Office of Enforcement &  
Standards Compliance  
FWQA

Enclosures  
List of mercury discharges  
Report—"Investigation of Mercury  
in the St. Clair River-Lake Erie Systems"

LIST OF COMPANIES KNOWN TO DISCHARGE OR  
TO HAVE DISCHARGED MERCURY TO  
LAKE ERIE OR ITS TRIBUTARIES

Wyandotte Chemical Co.

Wyandotte, Mich.

Detrex Chemical Industries

Ashtabula, Ohio

General Electric Chemical Products Plant

Cleveland, Ohio

Harshaw Chemical Co.

Div. of Kewanee Oil Co.

Elyria, Ohio

Mallinckrodt Chemical Works

Calsical Division

Erie, Penna.

Nosco Plastics

Erie, Penna.

Allied Chemical Co.

Buffalo Dye Div.

Buffalo, New York

National Aeronautics & Space Administration

Lewis Research Center

Cleveland, Ohio

11-30-70









