# SUBMISSION <br> TO THE COMMISSION FOR ENVIRONMENTAL COOPERATION 

Pursuant to Article 14, North American Agreement on Environmental Cooperation

May 1, 2003

## SUBMITTED BY:

Eliot Spitzer, Attomey General of the State of New York, Richard Blumenthal, Attorney General of the State of Connecticut, Patrick C. Lynch, Attorney General of the State of Rhode Island, Adirondack Communities and Conservation Program, Adirondack Mountain Club, Inc., American Lung Association of the City of New York, American Lung Association of Connecticut, American Lung Association of Maine, American Lung Association of Massachusetts, Inc., American Lung Association of New Hampshire, American Lung Association of New Jersey, American Lung Association of Rhode Island, Appalachian Mountain Club, Audubon New York, Breast Cancer Coalition of Rochester, Citizen's Environmental Coalition, Connecticut Public Interest Research Group, Conservation Law Foundation, Delaware-Otsego Audubon Society, Inc., Environmental Advocates, Environment \& Society Institute, Finger Lakes Trail Conference, Fishkill Ridge Caretakers, Inc., Global Warming Action Network, Great Lakes United, Green Education and Legal Fund, Inc., Greenpeace Canada, Greenpeace USA, Hudson River Sloop Clearwater, Inc., Lake Clear Association, Massachusetts Public Interest Research Group, Natural Resources Defense Council,

# SUBMISSION <br> TO THE COMMISSION FOR ENVIRONMENTAL COOPERATION 

Pursuant to Article 14, North American Agreement on Environmental Cooperation

May 1, 2003

## SUBMITTED BY: ${ }^{1}$

Eliot Spitzer, Attorney General of the State of New York, Richard Blumenthal, Attorney General of the State of Connecticut, Patrick C. Lynch, Attorney General of the State of Rhode Island, Adirondack Communities and Conservation Program, Adirondack Mountain Club, Inc., American Lung Association of the City of New York, American Lung Association of Connecticut, American Lung Association of Maine, American Lung Association of Massachusetts, Inc., American Lung Association of New Hampshire, American Lung Association of New Jersey, American Lung Association of Rhode Island, Appalachian Mountain Club, Audubon New York, Breast Cancer Coalition of Rochester, Citizen's Environmental Coalition, Connecticut Public Interest Research Group, Conservation Law Foundation, Delaware-Otsego Audubon Society, Inc., Environmental Advocates, Environment \& Society Institute, Finger Lakes Trail Conference, Fishkill Ridge Caretakers, Inc., Global Warming Action Network, Great Lakes United, Green Education and Legal Fund, Inc., Greenpeace Canada, Greenpeace USA, Hudson River Sloop Clearwater, Inc., Lake Clear Association,
${ }^{1} \mathrm{~A}$ description of each submitting party is attached as Appendix A. The contact for each submitting party is listed on each signature page at the end of the Submission.

Massachusetts Public Interest Research Group, Natural Resources Defense Council, New Hampshire Public Interest Research Group, New Jersey Public Interest Research Group, New York Public Interest Research Group, New York State Community of Churches, Northeast Organic Farming Association of New York, Inc., Ohio Public Interest Research Group, Ontario Clean Air Alliance, PennEnvironment, Rainbow Lake Association, Inc., Resident's Committee to Protect the Adirondacks, Rhode Island Public Interest Research Group, Scenic Hudson, Inc., Sierra Club, including Sierra Club of Canada, Sierra Club of Canada, Eastern Canada Chapter, Toronto Environmental Alliance, Town of Chesterfield, Town of Wilmington, U.S. Public Interest Research Group, Vermont Public Interest Research Group, Waterkeeper Alliance, WNY Sustainable Energy Association.
I. SUMMARY OF THE SUBMISSION ..... 1
II. STATUTORY BACKGROUND ..... 1
A. North American Agreement on Environmental Cooperation ("NAAEC") ..... 1
B. Canadian Environmental Protection Act ..... 2
C. Canadian Fisheries Act ..... 3
III. POLLUTION FROM OPG'S PLANTS HARMS HUMAN HEALTH AND THE ENVIRONMENT IN THE NORTHEASTERN STATES AND IN EASTERN CANADA ..... 4
A. OPG's Coal-Fired Power Plants Emit Sulfur Dioxide (' $\mathrm{SO}_{2}$ "), Nitrogen Oxides (" $\mathrm{NO}_{x}$ ") And Mercury ("Hg") ..... 4
B. Transport Of Sulfur Dioxide And Nitrogen Oxides And Their Conversion and Deposition As Acidic Precipitation ..... 6
C. Adverse Environmental Impacts of Acidic Deposition ..... 7
D. Adverse Human Health Impacts of Acid Deposition ..... 9
E. Adverse Environmental and Human Health Impacts of Mercury Deposition ..... 12
F. OPG's Emissions Significantly Contribute to these Environmental and Human Health Harms ..... 12
IV. THE CANADIAN GOVERNMENT HAS BEEN NOTIFIED OF THE HARM TO HUMAN HEALTH AND THE ENVIRONMENT CAUSED BY OPG ..... 12
V. CANADA HAS FAILED TO EFFECTIVELY ENFORCE ITS LAWS AGAINST OPG TO CONTROL, OR PREVENT HARM FROM, OPG'S EMISSIONS ..... 14
INDEX PAGE
VI. CANADA'S FAILURE TO EFFECTIVELY ENFORCE ITS ENVIRONMENTAL LAWS HAS CAUSED INJURY TO THE SUBMITTING PARTIES ..... 14
VII. THIS SUBMISSION IS CONSISTENT WITH THE GOALS OF THE NAAEC ..... 14
VIII. THE SUBMITTING PARTIES REQUEST THE DEVELOPMENT OF A PUBLIC RECORD ..... 15
APPENDIX A
APPENDIX B

## I. SUMMARY OF THE SUBMISSION

1. The Submitting Parties present this submission pursuant to Article 14 of the North American Agreement on Environmental Cooperation ("NAAEC") requesting the Commission on Environmental Cooperation ("CEC") to develop a factual record pursuant to Article 15 of NAAEC demonstrating that the federal government of Canada has failed to enforce its environmental laws against Ontario Power Generation ("OPG"). OPG owns and operates coalpowered electricity generating facilities in Ontario, including one of the largest coal-fired power plants in North America. Most of these plants have few, if any, controls to reduce emissions of pollutants. OPG has caused the release into the atmosphere of mercury, a substance that is toxic to humans and fish, and nitrogen oxides and sulfur dioxide, substances that contribute to harmful air and water pollution, smog and are destructive of fish, fish habitat and terrestrial systems, such as forests and some forms of agriculture. These deleterious substances contribute significantly to air and water pollution in areas downwind of the OPG facilities including Ontario, Quebec and the Maritime Provinces of Canada, Connecticut, Rhode Island and other New England States, and New York State in the United States. OPG is one of the most significant contributors of these deleterious substances that is subject to Canadian Law.
2. Canada has failed to enforce its laws to prevent this pollution as mandated by the Canadian Environmental Protection Act §§ 166, 176. In addition, Canada has failed to enforce the prohibition contained in the Canadian Fisheries Act against the deposition of substances deleterious to fish or fish habitat into water frequented by fish.

## II. STATUTORY BACKGROUND

## A. North American Agreement on Environmental Cooperation ("NAAEC")

3. In 1993, in an effort to allay public concern that the promotion of international trade could undermine environmental protection and public health and safety, Canada, the United States and Mexico (the "signatory countries") entered into the NAAEC as an ancillary agreement to the North American Free Trade Agreement ("NAFTA"). NAAEC, in part, establishes a citizen submission process by which residents of any signatory country, who believe that a signatory country is not effectively enforcing its environmental laws, can seek to have that failure formally documented in a public record with the expectation that public scrutiny and the attendant public comment will have a salutary effect.
4. The NAAEC Preamble reaffirms the "importance" of "enhanced levels of environmental protection" called for under NAFTA, and the signatories' "responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction." See also NAAEC, Article 1 (objectives of the Agreement include "protection and improvement of the environment in the territories of the Parties" and "enhanc[ing] compliance with, and enforcement of, environmental laws, regulations and policies").
5. To achieve these ends, NAAEC established the CEC. NAAEC, Part Three, Articles 813. The CEC is comprised of the: (a) Council, which is the governing body of the CEC and is composed of the environmental ministers of each signatory country; (b) Secretariat, composed of professional staff under the direction of an executive director, which provides technical, administrative and operational support to the Council; and (c) Joint Public Advisory Committee, composed of fifteen members, five appointed by the government of each country, to provide independent advice to the Council on all matters within the scope of the NAAEC.
6. Pursuant to NAAEC Article 14, any person or non-governmental organization may submit to the Secretariat information demonstrating that one of the signatory countries is failing to effectively enforce its environmental laws. After considering the factors identified in Article 14(2), and after considering any response from the country should the Secretariat request such a response, the Secretariat may recommend to the Council that a factual record be prepared. The Secretariat prepares a factual record if the Council by a two-thirds vote directs it to do so. The Council by a two-thirds vote may make the factual record available to the public.

## B. Canadian Environmental Protection Act

7. Although Canada lacks a national clean air statute, the federal government, in consultation with the provinces, does set certain ambient standards for air pollution which are then adopted by provinces as "goals" or "guidelines." Binding regulation of air pollution is largely left to provincial governments. See generally Canada-Wide Accord on Environmental Harmonization; Canada-Wide Environmental Standards Sub-Agreement.
8. However, pursuant to section 166 of the Canadian Environmental Protection Act ("CEPA"), the federal government is obligated to take specified action where the Minister of the Environment has "reason to believe that a substance released from a source in Canada into the air creates, or may reasonably be anticipated to contribute to (a) air pollution in a country other than Canada . . .," provided further that the country that is affected by the air pollution grants Canada the same rights with respect to the prevention, control or correction of cross-boundary air pollution as is granted by section 166 of the CEPA.
9. Section 115 of the United States Clean Air Act, 42 U.S.C. § 7415, grants Canada the same rights with respect to the prevention, control or correction of cross-boundary air pollution as are granted by CEPA § 166. In particular, Clean Air Act Section 115 states,

Whenever the Administrator, upon receipt of reports, surveys or studies from any duly constituted international agency has reason to believe that any air pollutant or pollutants emitted in the United States cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare in a foreign country . . . the Administrator shall give formal notification thereof to the Governor of the State in which such emissions originate.

The notice of the Administrator shall . . . require a plan revision with respect to so much of the applicable implementation plan as is inadequate to prevent or eliminate the endangerment
10. In addition, pursuant to section 176 of CEPA, the federal government is obligated to take specified action where the Minister of the Environment has "reason to believe that a substance released from a source in Canada into water creates, or may reasonably be anticipated to create, (a) water pollution in a country other than Canada . . ." provided further that the country that is subject to the water pollution grants Canada the same rights with respect to the prevention, control or correction of cross-boundary water pollution as is granted by section 176 of the CEPA.
11. CEPA § 175 defines "water pollution" as a condition of water, arising wholly or partly from the presence in water of any substance, that directly or indirectly (a) endangers the health, safety or welfare of humans; (b) interferes with the normal enjoyment of life or property; (c) endangers the health of animal life; (d) causes damage to plant life or to property; or (e) degrades or alters, or forms part of a process of degrading or altering, an ecosystem to an extent that is detrimental to use by humans, animals or plants.
12. Section 310 of the United States Water Pollution Control Act ("Clean Water Act"), 33 U.S.C. § 1320, grants Canada the same rights with respect to the prevention, control or correction of cross-boundary water pollution as are granted by CEPA § 176 .
13. Under sections 166 and 176, CEPA mandates that the Minister of the Environment first consult with the government that has authority to prevent, control or correct the air and water pollution (here, the provincial government of Ontario) and if such government cannot or will not take the requisite action, then the Minister of the Environment must either require OPG to prepare and implement a pollution prevention plan or propose appropriate regulations to prevent, control or correct the pollution. CEPA §§ 166(2)(3); 176(2)(3). CEPA § 272 provides further that "[e]very person commits an offence who contravenes (a) a provision of this Act . ..."

## C. Canadian Fisheries Act

14. The federal government of Canada has exclusive legislative authority over "Sea Coast and Inland Fisheries" pursuant to section 91.12 of the Constitution Act, 1867. The Fisheries Act was enacted pursuant to this authority to regulate and protect Canada's fisheries.
15. Under the pollution provisions of the Fisheries Act, it is an offense to "deposit or permit the deposit of a deleterious substance of any type in water frequented by fish or in any place under any conditions where the deleterious substance or any other deleterious substance that results from the deposit of the deleterious substance may enter any such water" (Sec. 36(3)), unless the deposit is authorized by regulation. See Regina v. MacMillan Bloedel (Alberni) Limited, 47 C.C.C.2d 118, affirming, 42 C.C.C.2d 70 (British Columbia Court of Appeals 1979).
16. "Deleterious substance" is defined, in part, as "any substance that, if added to any water, would degrade or alter or form part of a process of degradation or alteration of the quality of the water so that it is rendered or is likely to be rendered deleterious to fish or fish habitat or the use by man of fish that frequent that water." Sec. 34(1)(a).
17. "Water frequented by fish" is defined as Canadian fisheries water. Sec. 34(1).
18. "Fish habitat" is defined as "spawning grounds and nursery, rearing, food supply and migration areas on which fish depend directly or indirectly in order to carry out their life processes." Sec. 34(1).
19. "Deposit" is defined as "any discharging, spraying, releasing, spilling, leaking, seeping, pouring, emitting, emptying, throwing, dumping or placing." Sec.34(1).
20. The federal Minister of Fisheries and Oceans has the responsibility for the administration and enforcement of the Fisheries Act. However, in 1978 the Minister of the Environment was assigned responsibility for administration and enforcement of the pollution prevention provisions of the Fisheries Act. In 1985, the Department of Fisheries and Oceans and the Department of the Environment entered into a memorandum of understanding and subsequently developed a Fisheries Act Habitat Protection and Pollution Prevention Provisions, Compliance and Enforcement Policy (the "Compliance and Enforcement Policy"), for general guidance and not as a substitute for the Fisheries Act.
21. The Compliance and Enforcement Policy guides government officials in the proper application of the Act. A stated principle is that "fair, predictable, and consistent enforcement govern application of the law, and responses by enforcement personnel to alleged violations." The Compliance and Enforcement Policy is intended to ensure that violators will comply with the Fisheries Act within the shortest possible time, that violations are not repeated and that all available enforcement tools are used. The possible responses to alleged violations include warnings, directions by Fishery Inspectors, orders by the Minister, injunctions and prosecutions.

## III. POLLUTION FROM OPG'S PLANTS HARMS HUMAN HEALTH AND THE ENVIRONMENT IN THE NORTHEASTERN STATES AND IN EASTERN CANADA ${ }^{1}$

## A. OPG's Coal-Fired Power Plants Emit Sulfur Dioxide ("SO, ${ }_{2}$ "), Nitrogen Oxides ("NO,") And Mercury ("Hg").

22. OPG, formerly known as Ontario Hydro, is an electricity generating utility owned by the Province of Ontario.
${ }^{1}$ Copies of relevant sections of the cited material are attached as Appendix $C$, which is submitted separately.
23. On or about April 1, 1999, the newly formed OPG took over the ownership and operation of six electricity generating plants. The three largest of these plants, ${ }^{2}$ which cause the most significant adverse environmental impacts, are:

## (a) Nanticoke Generating Station

Nanticoke Generating Station ("Nanticoke") is the largest coal-fired power plant in North America with a capacity of $3,920 \mathrm{MW}$. (Generation capacity data for this and other listed plants are from OPG, Towards Sustainable Development (2001) at 28.) Located on the north shore of Lake Erie near Port Dover, Nanticoke entered service in 1973. It has eight units fitted with low$\mathrm{NO}_{\mathrm{x}}$ burners. OPG is planning to install Selective Catalytic Reduction ("SCR") devices on two units to reduce nitrogen oxide emissions, but these devices will not deal with sulfur dioxide or mercury emissions. OPG does not plan to install such controls on the remaining six units. Consequently, emissions from those units will continue largely uncontrolled.
(b) Lambton Generating Station

Lambton Generating Station ("Lambton"), located on the St. Clair River, south of Sarnia, entered into service in 1969. Its production capacity of $1,974 \mathrm{MW}$ comes from four coal-fired units. Two of the units are equipped with sulfur dioxide scrubbers. OPG is installing SCR devices on two of the units at this plant.
(c) Lakeview Generating Station

Lakeview Generating Station ("Lakeview") located in Mississauga, just west of Toronto, has a capacity of $1,138 \mathrm{MW}$. The plant's eight units (four are currently not in use) entered into service between 1962 and 1969. OPG has stated that it intends to continue burning coal at this plant without installing any further controls until 2005, when it intends to either convert the plant to natural gas or shut down.
24. OPG is one of Ontario's most significant emitters of sulfur dioxide, nitrogen oxides and mercury. According to Ontario's Ministry of the Environment, OPG's six fossil fuel fired facilities generate $14.7 \%$ of the nitrogen oxides, $23.7 \%$ of the sulfur dioxide and $22.6 \%$ of the mercury of total domestic provincial emissions. Ontario Ministry of the Environment, CoalFired Electricity Generation in Ontario ( March 2001), at 17.
${ }^{2}$ OPG also owns and operates three smaller electric generating facilities located in western Ontario. The Atikokan Generating Station, located in northwestern Ontario between Lake Superior and the Manitoba border, entered into service in 1985. It has one coal-fired 215 MW unit equipped with low- $\mathrm{NO}_{\mathrm{x}}$ burners. The Thunder Bay Generating Station, located in Thunder Bay on the shore of Lake Superior, entered service in 1981. It has two coal-fired units with a total capacity of 310 MW . The Lennox plant is an oil/natural gas fired facility.
25. Ontario's report provides the following total emissions for 1999 for the three largest OPG plants, ${ }^{3}$ reporting $\mathrm{NO}_{\mathrm{x}}$ and $\mathrm{SO}_{2}$ in metric tons (or tonnes) and Hg in kilograms (kg):

|  | nitrogen oxides <br> (tonnes) | sulfur dioxide <br> (tonnes) | mercury (kg) |
| :--- | :--- | :--- | :--- |
| Nanticoke | 24,190 | 81,300 | 264.6 |
| Lambton | 12,780 | 27,300 | 135 |
| Lakeview | 8,320 | 17,600 | 83.2 |

26. In 2000, Nanticoke was ranked second in Ontario for releases of mercury to the environment. Ontario Clean Air Alliance, Up The Stack: Coal-Fired Electricity's Toxic Impact (2002) at 9. According to the Ministry of Environment, Lakeview "stands out as a heavilypolluting station ( $\mathrm{SO}_{2}$, Mercury, $\mathrm{NO}_{\mathrm{x}}$ ) located in the midst of a heavily-populated area" and is the "oldest and least efficient plant in OPG's fleet." Coal-Fired Electricity Generation in Ontario, supra, at 45. The same Ministry of Environment report also describes Lakeview as a major source of local mercury emissions. Id.

## B. Transport Of Sulfur Dioxide And Nitrogen Oxides And Their Conversion and Deposition As Acidic Precipitation.

27. Pollutants emitted into the atmosphere by OPG facilities are transported by the winds and deposited to the surface by either dry (particulate) deposition or wet (precipitation) deposition. Some of the emitted pollutants are chemically converted in the atmosphere into other pollutants. Gaseous pollutants such as sulfur dioxide and nitrogen oxides undergo gas-to-particle conversion to form sulfates and nitrates. The subsequent physical process of coagulation produces sulfate and nitrate particles ranging in size from 0.1 to 1.0 microns. These dry particles will settle to the surface via gravity where, in the presence of water, they are converted to sulfuric acid and nitric acid. Alternatively, sulfate and nitrate particles can acidify atmospheric moisture
${ }^{3}$ Emissions from the smaller plants are:

|  | nitrogen oxides <br> (tonnes) | sulfur dioxide <br> (tonnes) | mercury (kg) |
| :--- | :--- | :--- | :--- |
| Thunder Bay | 2,030 | 7,520 | 67.1 |
| Atikokan | 1,300 | 5,480 | 63 |
| Lennox | 2,050 | 1,610 | n.a. |

and reach the surface via "acid precipitation." Acid precipitation is rain, snow, sleet, hail, cloud cover, fog and dew that has experienced a significant decrease in its pH from natural levels by the addition of sulfuric and nitric acids.
28. Most of North America is in the zone of the prevailing westerly winds, which blow predominantly from southwest to northeast in summer and from northwest to southeast in winter. The average atmospheric residence time of sulfate and nitrate particles is on the order of 80 hours, or a little more than three days. In that period of time the acidic progeny of the sulfur dioxide and nitrogen oxides emitted by OPG can readily reach Quebec, the Maritime Provinces, New York State, and Connecticut, Rhode Island and other New England States. A 1985 New York State study indicates that Ontario is the source of $23 \%$ of the sulfur deposition on Whiteface Mountain (Adirondacks); and 22\% of the sulfur deposition in the western Adirondacks. New York State Department of Environmental Conservation, A Policy for New York State to Reduce Sulfur Dioxide Emissions, Final Environmental Impact Statement (June 1985) at Fig. 3.3-9. See also V. Dutkiewicz, et al., The Relationship Between Regional $\mathrm{SO}_{2}$ Emissions and Downwind Aerosol Sulfate Concentrations in the Northeastern US, 34 Atmospheric Environment 1821, 1831 (2000) (same finding based on 1994-1997 data).

## C. Adverse Environmental Impacts of Acidic Deposition

29. Acidic deposition, whether dry or wet, can have a devastating impact on fish and fish habitat, either directly, or indirectly by its effect on other substances in the environment. Experimental evidence indicates that increased acidity, measured as decreased $\mathrm{pH},{ }^{4}$ inhibits reproduction and kills young fish. In addition, lowered pH leaches metals such as aluminum and mercury from the soil into the water. Decreases in pH and increases in aluminum concentrations have diminished the species diversity and abundance of plankton, invertebrates and fish in acidimpacted surface waters in the Northeast. Acid episodes, such as during spring snow melt which releases months of acidic deposition into waters over a very short time frame, are particularly harmful to aquatic life because abrupt changes in water chemistry allow fish few areas of refuge. High concentrations of aluminum are directly toxic to fish and are a primary cause of fish mortality during acid episodes. High acidity and aluminum levels disrupt the salt and water balance in fish, causing red blood cells to rupture and blood viscosity to increase. Studies show that the viscous blood strains the fish's heart, resulting in a lethal heart attack. Driscoll, C.T., et al., Acid Rain Revisited: Advances in Scientific Understanding Since the Passage of the 1970 and 1990 Clean Air Act Amendments (2001) at 15. Studies also show that aluminum accumulates on the gills of rainbow trout and disrupts gill ion transport and respiratory function. U.S. Environmental Protection Agency, National Acid Precipitation Assessment Program (NAPAP), NAPAP Biennial Report to Congress: An Integrated Assessment (1998) at 52. Increasing concentrations of mercury in fish flesh poses a threat to those who eat the fish, ranging from loons to humans.
${ }^{4} \mathrm{pH}$ is a logarithmic measure ranging from 0 (most acidic) to 14 (most alkaline) with neutral, i.e., distilled water at 7 .
30. Decreasing pH to the range of $6.0-5.0$ will cause the elimination of many aquatic plant and animal species and thus the disruption of existing biological communities. At pH 5 , major extinctions of fish population will commence, and below pH 4.5 no fish species will survive. Since 1999, National Acid Deposition Program (NADP) data show weekly pH values of wet deposition have fallen below 4 in many states, including New York, Connecticut, Vermont, Maine, New Hampshire, Massachusetts, and New Jersey. Clean Air Task Force, Unfinished Business: Why the Acid Rain Problem Is Not Solved (2001) at 2.
31. The severity of the impact from acid deposition is in part a function of the predominant geologic formations in the area in question. Environments with high alkalinity, i.e., significant deposits of calcium and magnesium, are less at risk because the acidic deposition can be largely neutralized. However, areas with little or no capacity to buffer incoming acidic deposition, such as is found in the granite regions of the Canadian Shield, the Adirondack region of New York State, in many areas in the Maritime Provinces and in the New England states, will suffer significant adverse effects.
32. Acid deposition has had a devastating impact on fish and fish habitat in the Adirondack region of New York State. Based on a 1976 study, $51 \%$ of 217 Adirondack region lakes at an elevation above 2000 feet had a pH below 5.0. There were no fish in $90 \%$ of these acidified lakes, although during the period of 1927-37 only $4 \%$ of these lakes were similarly acidified and devoid of fish.
33. A recent survey of the Northeast concluded 41 percent of lakes in the Adirondack Mountains and 15 percent of lakes in New England have exhibited chronic or episodic acidification or both. 83 percent of the affected lakes are acidic because of atmospheric deposition. Driscoll, C.T., et al., Acidic Deposition in the Northeastern United States: Sources, Inputs, Ecosystem Effects; and Management Strategies, 2001 at 196. In fact, surveys of 1,469 Adirondack lakes conducted in 1984 and 1987 show that 24 percent of lakes in this region do not support fish. These lakes had consistently lower pH and higher concentrations of aluminum than lakes that contained one or more species. Even acid tolerant fish species such as brook trout have been eliminated from some waters in the Northeast. Acid Rain Revisited, supra, at 15. The Catskill Mountains in New York State also contain many streams with low acid neutralizing capacity ("ANC"). Ten years of sampling at four streams there indicates a lack of any recovery despite decreases in sulfate deposition and less acid rain. Unfinished Business: Why the Acid Rain Problem is Not Solved, supra, at 4.
34. Plankton and invertebrates are among the first to die from acidification. Id. Such disruption reduces the total food resources available to fish, forcing them to shift to less beneficial foods, thus subjecting them to competitive and nutritional stress. Many acidified lakes can support only sphagnum moss or highly acid-tolerant flora. Dramatic adverse impacts on the reproduction of several amphibian species endemic to the Adirondack region have also been noted. For example, eggs of some salamanders show a pre-hatching mortality of $80 \%$ or more when incubated in acidified water comparable to their normal breeding pools. Mayflies and
some crayfish have also demonstrated significant sensitivity to acidification. The result is that biological communities in acidified lakes have fewer species (less bio-diversity) than water bodies that are not acidic. As diversity is diminished, ecosystems become less stable and productive. Id.
35. Impacts of acidic deposition in Canada can be anticipated to be no less severe than in the Adirondack region of New York State. Most of Ontario, nearly all of Quebec, northern New Brunswick, most of Nova Scotia and almost all of Newfoundland, all situated down-wind from OPG, lack sufficient buffering capacity in their soils and thus are highly vulnerable to acid deposition. Research carried out in the Muskoka-Haliburton Highlands and Killarney Lakes region of Ontario demonstrate the destructive impact on fish and fish habitat. It is estimated that nearly 100,000 Canadian lakes will be damaged by acid deposition. Atlantic salmon habitat in Nova Scotia rivers has been devastated by increased acidity. A study of 49 rivers that historically supported salmon found populations to be extinct in 14 rivers and severely reduced in 20. Loss of salmon is correlated with increased acidity. Id. Moreover, all indications are that the Atlantic salmon population will continue to decline in Nova Scotia. Id. at 1. Acid rain has resulted in large losses of fish and aquatic communities in over 30,000 sensitive lakes in Ontario and Quebec. Id. at 4. Moreover, damaged Canadian watersheds, located primarily in southern Ontario and Quebec, have not responded to reductions in sulfate deposition as well or as rapidly as those in less-sensitive regions.
36. Acid deposition also damages terrestrial ecosystems. Studies show that various plant species exhibit foliar damage, altered responses to pathogens, symbionts and saprophytes, affects on germination of conifer and hardwood seeds and the establishment of seedlings. Acid deposition also leaches nutrients from the soil, and causes changes in the bacterial and fungal communities that maintain the critical cycling of nutrients in the soil. Given the importance of forest products to the Canadian economy and Northeastern United States and the fact that the Northeast is heavily forested, the consequences of acid deposition caused by emissions from OPG are potentially severe.
37. Finally, sulfate and nitrate deposition contributes to the deterioration of building materials (limestone, marble, mortar, concrete, paint and metals) and, as suspended particulate matter in ambient air, they can significantly decrease visibility.

## D. Adverse Human Health Impacts of Acid Deposition

38. In the eastern United States, sulfate aerosols make up 25 to 50 percent of the inhalable particles on average and cause up to 75 percent of the aerosol pollution during extreme transport episodes. People exposed to sulfur dioxide can suffer a variety of respiratory ailments. Particulate matter ("PM") is an extremely harmful pollutant that contributes to a number of respiratory difficulties, ranging from bronchitis to asthma and even premature death. At least one study performed for the United States government has attributed 30,000 premature deaths nationwide each year to fine PM attributable to power plant emissions. See Clean Air Task

Force, Death, Disease \& Dirty Power, Mortality and Health Damage Due to Air Pollution from Power Plants (October 2000) (presenting the findings of a study conducted by Abt Associates); Abt Assocs., Inc., The Particulate-Related Health Benefits of Reducing Power Plant Emissions (Oct. 2000). Reducing this pollution would yield tremendous economic benefits as well as tangible health benefits. Using a well-accepted valuation methodology, Abt Associates finds that the total monetary benefits of cleaning up power plants (in the United States) to modern pollution standards would be over $\$ 100$ billion per year.
39. The data and calculations in the Clean Air Task Force and Abt Associates reports are supported by other studies. See, e.g., Peters A., et al., Increases in Heart Rate during an Air Pollution Episode, 150 Am.J. of Epidemiology 1094-1098 (1999); Bates, D., Lines that Connect: Assessing the Causality Inference in the Case of Particulate Pollution, 108 Environmental Health Perspectives 91-92 (November 2, 2000); Krewski, D. et al. Reanalysis of the Harvard Six Cities Study and the American Cancer Society Study of Particular Air Pollution and Mortality: Investigators' Report Part I: Replication and Validation (2000) at http://www.healtheffects.org/Pubs/Rean-ExecSumm.pdf; Ontario Medical Association, The Illness Costs of Air Pollution on Ontario, (June 2000) at http://www.oma.org/phealth/icap.htm.
40. OPG is also a major source of nitrogen oxides which react with other pollutants on hot sunny days to form ground level ozone. Ozone, a prime ingredient in summer smog, causes debilitating health effects when inhaled. On high ozone days, hospital admissions, emergency room visits, and mortality related to ozone all increase. When it is inhaled, people may experience chest pain, congestion, coughing, or a sore throat or feel short of breath. Ozone can cause acute respiratory problems, aggravate asthma, and cause inflammation of lung tissue. About seven per cent of the hospital admissions in the summer can be attributed to the smog. American Lung Association of New York State, Clean Air Fact Sheet.
41. Certain populations are especially sensitive to high ozone levels:
(a) Children: Studies show ozone exposure can slow the growth of lungs and increase the risk of asthma. See Frischer, T., et al. Lung Function Growth and Ambient Ozone: A Three-Year Population Study in School Children, 160 Am. J. Respir Crit Care Med 390396 (1999); McConnell, R., et al., Asthma in Exercising Children Exposed to Ozone: a Cohort Study, 359 The Lancet 386-391 (2002); Mardock, J.E., et al. No Escape: Can you Ever Really "Get Away" From the Smog? A Midseason Look at Ozone in 1999, Clean Air Task Force (1999).
(b) The elderly: High ozone levels accelerate the natural decrease in lung intake and aggravates conditions such as emphysema and chronic bronchitis. See, e.g., Mortimer, K.M, et al., The Effect of Ozone on Inner-City Children with Asthma, 162 Am J. Respir Crit Care Med 1838-1845 (2000).
(c) Those with asthma or other lung conditions: High ozone levels compound asthma or other lung conditions because ozone is an irritant, inflaming sensitive lung tissue.
42. There is evidence that healthy people also can suffer the effects of ozone. The effect of ozone on the lungs is cumulative, irritating lungs by burning the sensitive lung tissue. The evidence shows that high ozone does have an effect even on healthy adults. The impact on lungs can be as damaging as smoking a pack of cigarettes a day. Mardock, J.E, et al., Smog Watch 2000: Dirty Air Spots and Clean Air Solutions, Clean Air Task Force (2000). Ozone can harm healthy adults as it does sensitive populations, causing symptoms including coughing, shortness of breath, wheezing, chest pain, congestion, headaches, nausea, and irritation of the throat and eye tissue.
43. During the last few summers many areas of upstate New York have been recording high numbers of ozone exceedances. According to a report from the American Lung Association of New York State, the highest number of ozone exceedances for the 2002 ozone season was recorded at the state monitor in Dunkirk, Chautauqua County. The monitor in Rochester, New York, recorded twice as many exceedances this summer as in any of the previous six summers. Monitors at the summit and base of Whiteface Mountain in Essex County and in the Albany, New York area all recorded more exceedances of the 8-hr ozone standard than in any of the previous six summers. American Lung Ass'n of New York State, Unhealthful to Breathe: Summertime Ozone Levels in New York State (October 2002).
44. Both sulfur dioxide and nitrogen oxides pollution from OPG plants (and other sources) can potentially trigger asthmatic episodes. Asthma is a chronic inflammatory disorder of the lungs, characterized by episodic and reversible symptoms of airflow obstruction. See American Thoracic Society, Health Effects of Outdoor Air Pollution, reprinted from the American Journal of Respiratory and Critical Care Medicine, Volume 153, Numbers 1 and 2 (January and February 1996) at 4.
45. Asthma is the sixth-ranking chronic condition in the United States and the leading serious chronic illness of children in the United States. An estimated 17 million Americans suffer from asthma; 5.3 million are under the age of 18 . Between 1982 and 1995, the asthma prevalence rate - the rate per thousand persons -- rose from 34.8 to 56.8 , an increase of 63.2 percent. The prevalence of pediatric asthma rose, over the same period, from 40.1 to 74.9 - an 86.8 percent increase. See American Lung Association, Lung Disease Data 2000 (2000) at 5.
46. In the United States, asthma accounts for an estimated 3 million lost work days for adults and 10.1 million lost schools days in children annually. Over the past 20 years, mortality, morbidity and hospital discharge rates attributed to asthma have increased substantially. Between 1979 and 1998, the age-adjusted mortality rate increased 56 percent while the prevalence rate increased by almost 22 percent in males and 97 percent in females between 1982 and 1996. See American Lung Association, Trends in Asthma Morbidity and Mortality, Epidemiology and Statistics Unit (January 2001) at 7.
47. Asthma entails an annual economic cost to the United States in direct health care costs of $\$ 8.1$ billion; indirect costs add another $\$ 4.6$ billion for a total of $\$ 12.7$ billion. Inpatient hospital services represented the largest single direct medical expenditure, over $\$ 3.5$ billion. Reduced productivity due to loss of school days represents the largest single indirect cost, at $\$ 1.5$ billion. Id.

## E. Adverse Environmental and Human Health Impacts of Mercury Deposition

48. In 1999 alone, OPG released into the atmosphere over 600 kilograms of mercury. Mercury can be present in both ionic and elemental forms and elemental mercury has a long atmospheric residence time. It thus can travel long distances. New York State Energy Research and Development Agency, Environmental Monitoring, Evaluation, and Protection in New York: Linking Science and Policy (2000) at 11. Mercury deposited in aquatic ecosystems will bioaccumulate in fish flesh. Fish in the Adirondack region and in regions of Canada and New England exhibit elevated levels of mercury which often results in fishing limitations or bans. Mercury is highly toxic to humans, causing severe damage to the central nervous system, the liver and kidneys.

## F. OPG's Emissions Significantly Contribute to these Environmental and Human Health Harms

49. OPG's emissions constitute a large portion of Ontario's emissions, which in turn contribute significantly to the air pollution in Northeastern Canada and the United States causing the harm described.

## IV. THE CANADIAN GOVERNMENT HAS BEEN NOTIFIED OF THE HARM TO HUMAN HEALTH AND THE ENVIRONMENT CAUSED BY OPG

50. The subject matter of this submission has been communicated in writing to the Government of Canada. Correspondence to the Canadian Minister of the Environment over several years has described the harm from OPG emissions and requested that Canada take action under Canadian law to reduce the OPG plants' emissions and the impacts of those emissions on New York and the New England states. See Letter of January 31, 2001 to David Anderson, Canadian Minister of the Environment from Eliot Spitzer, Attorney General of New York and Richard Blumenthal, Attorney General of Connecticut; Letter of February 19, 2003 to the Honorable David Anderson, Minister of the Environment from Eliot Spitzer, Attorney General of New York.
51. These concerns have also been raised in correspondence to the provincial government of Ontario. See Letter of May 7, 1999 to Michael D. Harris, Premier of Ontario, from Eliot Spitzer, Attorney General of New York; Letter of June 17, 1999 to Eliot Spitzer, Attorney General of New York, from Michael D. Harris.
52. In addition, this matter has been communicated in writing to the Administrator of the United States Environmental Protection Agency many times with the request that she raise the issue with the Canadian Minister of the Environment. See Letter of April 19, 2001 to Christine T. Whitman, Administrator, U.S. Environmental Protection Agency, from Eliot Spitzer, Richard Blumenthal, John J. Farmer, Jr., Thomas F. Reilly, Sheldon Whitehouse, Philip T. McLaughlin, William H. Sorrell (the Attorneys General of, respectively, New York, Connecticut, New Jersey, Massachusetts, Rhode Island, New Hampshire, and Vermont); Letter of June 4, 2001 to Eliot Spitzer, Attorney General of New York, from Christine T. Whitman, Administrator, U.S. Environmental Protection Agency.
53. This matter has also been communicated to the United States Secretary of State, requesting that pollution from Ontario be a matter of discussion in the negotiation of international agreements. See Letter of July 5, 2000 to Madeline Albright, U.S. Secretary of State, from Eliot Spitzer, Attorney General of New York; Letter of July 31, 2000 to Eliot Spitzer, Attorney General of New York, from David B. Sandalow, U.S. Assistant Secretary of State for Oceans and International Environmental and Scientific Affairs; Letter of August 28, 2000 to David B. Sandalow, U.S. Assistant Secretary of State for Oceans and International Environmental and Scientific Affairs, from Eliot Spitzer, Attorney General of New York; Letter of October 20, 2000 to Eliot Spitzer, Attorney General of New York, from Kenneth C. Brill, Acting Assistant Secretary of State for Oceans and International Environmental and Scientific Affairs.
54. Other Submitting Parties have communicated in writing concerning Canada's failure to enforce its environmental laws as to OPG's emissions. See Letter of March 20, 2003 to David Anderson, Canadian Minister of the Environment, from Robin Greenwald, Executive Director of Waterkeeper Alliance.
55. Other parties in addition to the Submitting Parties have brought to the Canadian government's attention the harms caused by OPG emissions. See, e.g., Letter of May 7, 2001 to David Anderson, Canadian Minister of the Environment from Yvonne Davies, Secretary Board of Health, Toronto, Ontario.
56. Canada has responded to these communications by promising attention to the matter but by doing little about it. The only concrete changes at the OPG plants discussed by Canada have been the installation of pollution control equipment on certain units to reduce $\mathrm{NO}_{\mathrm{x}}$ emissions in an effort to meet obligations under the 2000 Ozone Annex to the Canada-United States Air Quality Agreement. The proposed efforts, however, will not even be enough to allow Ontario to meet its $\mathrm{NO}_{\mathrm{x}}$ reduction requirements under the Ozone Annex. The Canadian Minister of the Environment has recognized the shortcoming of Ontario's plans, and has said that "more will need to be done." Moreover, this effort will do nothing to reduce the levels of $\mathrm{SO}_{2}$, mercury or other pollutants emitted by OPG. See Letter of July 17, 2000 to Dan Newman, Minister of Environment, Ontario, from David Anderson, Canadian Minister of the Environment; Letter of August 24, 2000 to Eliot Spitzer, Attorney General of New York, from David Anderson,

Canadian Minister of the Environment; Letter of October 19, 2000 to Dan Newman, Minister of the Environment, Province of Ontario from David Anderson, Canadian Minister of the Environment; Letter of February 16, 2001 to Eliot Spitzer, Attorney General of New York, from David Anderson, Canadian Minister of the Environment; Letter of November 26, 2001 to Eliot Spitzer, Attorney General of New York, from David Anderson, Canadian Minister of Environment.

## V. CANADA HAS FAILED TO EFFECTIVELY ENFORCE ITS LAWS AGAINST OPG TO CONTROL, OR PREVENT HARM FROM, OPG'S EMISSIONS

57. Although OPG's emissions of sulfur dioxide, nitrogen oxides and mercury and their subsequent deposition and destructive impact on human health, fish and fish habitat, including in Canadian fisheries waters, are scientifically well-established and well-known, the federal Minister of the Environment has not enforced the Fisheries Act against OPG.
58. Although OPG's contribution to air and water pollution in the United States is well established, the federal Minister of the Environment has not effectuated or enforced the provisions of CEPA. Canada has failed to ensure that the provincial government of Ontario prevent and reduce OPG's pollution, and has itself failed to require OPG to prepare a pollution prevention plan, propose regulations to address OPG's pollution, or take other effective action under CEPA to prevent pollution to the United States.
59. Information in this submission is based on government reports and studies and on peer reviewed scientific studies.

## VI. CANADA'S FAILURE TO EFFECTIVELY ENFORCE ITS ENVIRONMENTAL LAWS HAS CAUSED INJURY TO THE SUBMITTING PARTIES

60. As residents of states downwind of OPG facilities, the submitting parties (or their members) are directly and personally affected by the harm described above. In addition, natural resources used by submitting parties have been and continue to be degraded in recreational and other value.

## VII. THIS SUBMISSION IS CONSISTENT WITH THE GOALS OF THE NAAEC

61. This Submission raises matters whose further study in this process would advance the goals of the NAAEC. In particular, the preparation of a factual record would:
a. foster the protection and improvement of the environment for present and future generations (Preamble par.1, Article 1(a));
b. ensure that activities in Canada do not cause damage to the environment shared with the United States (Preamble, par. 2);
c. promote sustainable development based on cooperation and mutually supportive environmental and economic policies (Article 1(b));
d. increase cooperation between governments to better conserve, protect, and enhance the environment, particularly the shared fisheries (Articles $1(\mathrm{c})$, and 10(2)(i));
e. avoid trade distortions by Canada's failure to enforce the CEPA and Fisheries Act (Article 1(e));
f. strengthen cooperation on the development and improvement of environmental laws, regulations, procedures, policies and practices (Article 1(f));
g. enhance compliance with, and enforcement of, environmental laws and regulations (Articles $1(\mathrm{~g})$, and $10(2)(\mathrm{p})$ ); and
h. promote pollution prevention policies, practices, techniques and strategies (Articles $1(\mathrm{j})$, and $10(2)(\mathrm{b})$ ).

## VIII. THE SUBMITTING PARTIES REQUEST THE DEVELOPMENT OF A PUBLIC RECORD

62. Based on the above information, the Submitting Parties hereby request the CEC to document in a public record the failure of the Canadian government to enforce effectively its environmental laws against OPG, to the detriment of, among others, the Submitting Parties.

May 1, 2003

## Respectfully submitted,

ELIOT SPITZER, Attorney General of the State of New York



RICHARD BLUMENTHAL
Attorney General
State of Connecticut
55 Elm Street
P.O. Box 120

Hartford, CT 06141-0120
Tel. (860) 808-5318
fax (860) 808-5387


Name of Organization: Adirondack Communities and Conservation Program


Leslie Karasin
Program Manager
Adirondack Communities and Conservation Program
138A River Street, Saranac Lake, NY 12983
(t) (518)891-8872
(f) (518)891-8875

Conservation
Education
.
Recreation
Since 1922

# Information for the Ontario Coal Plant NAFTA Petition 

Adirondack Mountain Club, Inc.


Neil F. Woodworth, Deputy Executive Director and Counsel 301 Hamilton Street Albany, New York 12210-1738 518-449-3870 518-449-3875 Fax

Description of the Signing Organization

The Adirondack Mountain Club, Inc. (ADK), is a not for profit New York membership corporation with 35,000 members and represents hikers, canoeists, backpackers, campers and cross-country skiers in New York and other northeastern states. Our members actively use the Adirondack and Catskill Mountains and are deeply concerned about the impact to mountain ecosystems, soils, trees, vegetation and aquatic life from acid deposition. ADK has played an active role in state and national advocacy to reduce the scourge of acid deposition, haze and smog from coal burning power plants since the early 1980s. ADK owns nearly 700 acres adjoining the High Peaks Wilderness Area in Essex County, New York that has been impacted by acid deposition. Our members enjoyment of the Adirondacks and Catskills has been impaired by diminished views and visibility as a result of acid deposition caused by the upwind burning of coal. Recent studies suggest that the inhalation of airborne sulfur dioxides and nitrogen oxides may be detrimental to the health of hikers frequenting the Northeast's mountain peaks.

## CindyEretion)

Cindy Erickson<br>Chief Executive Officer<br>American Lung Association of the City of New York<br>432 Park Avenue South<br>New York, NY 10016<br>Ph: 212-889-3370<br>Fax: 212-889-3375



John Zinn, President/ CEO, American Lung Association of Connecticut 45 Ash Street East Hartford, CT 06108 Phone: (860) 289-5401
Fax: (860) 289-5405

## NAFTA Petition Signature Page

Name of Person Signing: Edward F. Miller
Title of Person Signing: Chief Executive Officer
Name of Organization: American Lung Association of Maine
Address: 122 State Street, Augusta, Maine 04330
Phone: (207) 622-6394
Fax: (207) 626-2919
E-Mail: emiller@mainelung.org


Edward F. Miller
Chief Executive Officer


American Lung Association of Massachusetts, Inc.

One Abbey Lane
Middleboro, MA 02346
Fax: (508) 947-7208
Phone: (508) 947-7204
Constituent Office
Branches

- Boston
- Central Massachusetts
- Essex County
- Southeastern Massachusetts

AMERICAN LUNG ASSOCIATION. of Massachusetts, Inc.

## RESPONSE SHEET REGARDING NAFTA PETITION ON ONTARIO COAL-BURNING POWER PLANTS

## SIGNATURE PAGE

Signature:


Carlos Alvarez
Executive Director
American Lung Association of Massachusetts, Inc.
One Abbey Lane
Middleboro, MA 02346-3210
Tel. (508) 947-7204
Fax (508) 947-7208

Chair, Board of Directors
Mark R. Windt, MD
Center for Asthma, Allergy and Respiratory Disease

Vice Chair, Board of Directors William T. Hay, RRT

Treasurer
Daniel P. Fortin
Secretary
Robert A. Wells
McLane, Graf, Raulerson
\& Middleton

Legal Counsel
Mary Susan Leahy
Orr \& Reno, PA

9 Cedarwood Drive
Unit 12
Bedford, NH 03110
Phone: (603) 669-2411
Toll Free: (800) LUNG-USA
Fax:
(603) $645-6220$

E-mail: info@nhlung.org
Web Site: www.nhlung.org

## When You Can't

Breathe,
Nothing Else
Matters ${ }^{\text {® }}$

Founded in 1904, the
American Lung Association includes affiliated associations throughout the U.S., and a medical section, the American Thoracic Society.

February 21, 2003

Office of the Attorney General Eliot Spitzer
Environmental Protection Bureau
Attn: Assistant Attorney General Norman Spiegel
120 Broadway
$26^{\text {th }}$ Floor
New York, New York 10271
Dear Assistant Attorney General Norman Spiegel:
This letter indicates American Lung Association of New Hampshire's support of the Ontario Coal Plant NAFTA Petition.

The organization is located at 9 Cedarwood Drive Bedford, NH 03110. Our phone number is (603) 669-2411 and our fax number is (603) 645-6220.

Sincerely,


Michael D. Weil, Psy.D.
President \& Chief Executive Officer

NAFTA Petition Signature:

Phect 7 Carso
Robert F. Corso
Chief Executive Officer
American Lung Association of New Jersey
1600 Rte. 22 East
Union, NJ 07083
(908) 6879340
fax: (908) 8512625


Margaret E. Kane
Executive Director
American Lung Association of Rhode Island 298 West Exchange Street
Providence, RI 02903
Voice: (401) 421-6487 Fax: (401) 331-5266


BOARD OF DIRECTORS
Constantine Sidamon-Eristoff Chairman

Oakes Ames
Geoffrey Cobb Ryan Vice Chairs

Alexander Zagoreos Treasurer

Ginny Fields Secretary
Margot Paul Ernst Marian Heiskell Stewardship Chairs

Diane P. Baker Polly Bruckmann William E. Davis Alice DelBosco Gladys Goldmann Seymour Knox, IV Gerhard J. Neumaier Norman Shapiro Virginia K. Stowe Ross S. Whaley
David J. Miller
Executive Director

AUDUBON CENTERS in NEW YORK STATE
Constitution Marsh Audubon Center
P.O. Box 174 Cold Spring, NY 10516
Tel: 845-265-2601
Theodore Roosevelt Audubon Center 134 Cove Road Oyster Bay, NY 11771
Tel: 516-922-3200
Prospect Park
Audubon Center 95 Prospect Park West Brooklyn, NY 11215
Tel: 718-965-8951
Rheinstrom Hill and
Buttercup Farm
Audubon Centers
P.O. Box 1

Craryville, NY 12521
Tel: 518-325-5203

200 Trillium Lane
Albany, NY 12203
Tel: 518-869-9731
Fax: 518-869-0737
nasnys@audubon.org
http://ny.audubon.org

Office of Attorney General Eliot Spitzer<br>Assistant Attorney General Norman Spiegel<br>120 Broadway<br>$26^{\text {th }}$ floor<br>New York, New York 10271

$\times$ YES, sign my organization on to the Ontario coal plant
NAFTA petition.

$\begin{array}{ll}\text { Contact Person: } & \text { David J. Miller } \\ \text { Title: } & \text { Executive Director } \\ \text { Name of Organization: } & \text { Audubon New York } \\ \text { Address: } & \text { 200 Trillium Lane } \\ & \text { Albany, New York 12203 }\end{array}$
Phone:
Fax:
E-Mail
(518) 869-9731
(518) 869-0737
dmiller@audubon.org
Audubon New York is the state office of the National Audubon Society. Audubon New York promotes the protection and proper management of birds, other wildlife and their habitats through citizen science, advocacy and education. Through our statewide network of 30 local grassroots chapters, and our Audubon Centers and sanctuaries, we provide education and conservation programs dealing with topics of local, statewide and national significance.

## Signature Documentation

NAFTA Petition on Ontario Coal-burning Power Plants


Signature:



Kathleen A. Curtis, Executive Director Citizens Environmental Coalition
33 Central Avenue, third floor
Albany, New York 12210
Phone (518) 462-5527
Fax (518) 465-8347

## Response Sheet Regarding NAFTA Petition on Ontario Coal-burning Power Plants

## Must receive your response by February 21, 2003

Two Step Response:

1. E-mail this form to: Laura.Stasinski@oag.state.ny.us and Judith.Enck@oag.state.ny.us
2. Mail or Fed Ex the signature page to the address below.

Direct any questions to: Laura Stasinski at 5184745488 or Laura. Staskinski@oag.state.ny.us or Judith Enck at 5184739037 or Judith.Enck@oag.state.ny.us

No, I will not sign on to the Ontario coal plant NAFTA petition.
$X$ Yes, sign my organization on to the Ontario coal plant NAFTA petition.


Christopher Phelps
Public Interest Advocate
Connecticut Public Interest Research Group
198 Park Road, $2^{\text {nd }}$ Floor
West Hartford, CT 06119
860-233-7554 (ph) 860-233-7557 (fx)
Mail to: Office of Attorney General Eliot Spitzer
Environmental Protection Bureau
Assistant Attorney General Norman Spiegel
120 Broadway
$26^{\text {th }}$ floor
New York, New York 10271
Phone: 2124168454

# DELAWARE-OTSEGO AUDUBON SOCIETY, INC. PO Box 544 <br> Oneonta, NY 13820 

February 19, 2003

To: Office of Attorney General Eliot Spitzer
Environmental Protection Bureau
Assistant Attorney General Norman Spiegel
120 Broadway
$26^{\text {th }}$ floor
New York, New York 10271
From: Andrew Mason, Conservation Chair
Delaware-Otsego Audubon Society, Inc.
1039 Peck St.
Jefferson, NY 12093
(607) 652-2162

AndyMason@earthling.net

Below are signature, phone and fax numbers for our organization, to be used for our participating in Elliot Spitzer's petition to the Commission on Environmental Cooperation regarding air emissions from Ontario, Canada coal-fired power plants. Our name and address are on this letterhead.

Phone-(607) 652-2162 Fax-(209) 844-2203


Andrew Mason, Conservation Chair
$\underset{\substack{\text { Anne K. Reynolds } \\ \text { Project Director } \\ \text { Environmental Advocates }}}{\text { Annold }}$
353 Hamilton Street, Albany, NY 12210
tel: (518)-462-5526, ext. 238
fax: (518)-427-0381

Envinomment and society Institute

## Response. Sheet Regarding NAFTA Petition on Ontario Coal-burning Power Plants

Must receive your response by February 21, 2003
Two Step Response:

1. E-mail this form to: Laura.Stasinski@oag.state.ny.us and Judith.Enck@oag.state.ny.us
2. Mail or Fed Ex the signature page to the address below.

Direct any questions to: Laura Stasinski at 5184745488 or Laura.
Staskinski@oag.state.ny.us or Judith Enck at 5184739037 or Judith.Enck@oag.state.ny.us
$\qquad$ No, I will not sign on to the Ontario coal plant NAFTA petition.

- $x$ _Yes, sign my organization on to the Ontario coal plant NAFTA petition.

Name of Organization: Environment \& Society Institute
University at Buffalo, State University of New York
Contact Person: John E. Vena, Director
Address: Environment \& Society Institute
University at Buffalo, State University of New York 3435 Main Street, Buffalo, New York 14214-3000
Phone: 716-829-2975 x 637
Fax: 716-829-2979
E-Mail: ub-esi@acsu.buffalo.edu
Three to five line description of your organization, which will be included in the petition:
UB's Environment \& Society Institute is established to coordinate, strengthen, and promote interdisciplinary environmental research, teaching and service activities within the University, and to utilize that expertise in assisting communities to resolve their environmental problems.


Office of Attorney General Eliot Spitzer
Environmental Protection Bureau
Assistant Attorney General Norman Spiegel
120 Broadway
$26^{\text {th }}$ floor
New York, NY 10271

Response Regarding NAFTA Petition on Ontario Coal-burning Power Plants


Ellen M. Gibson, Legislative Liaison to the Board (716) 882-3488 or ellengt@aol.com

Organization:
Finger Lakes Trail Conference
6111 Visitor Center Road
Mt. Morris, NY 14510
315-986-1474
Alternative Contact:
Irene Szabo, FLTC President
585-658-4321 or treeweenie@aol.com
f. strengthen cooperation on the development and improvement of environmental laws, regulations, procedures, policies and practices (Article 1(f));
g. enhance compliance with, and enforcement of, environmental laws and regulations (Articles $1(\mathrm{~g})$, and $10(2)(\mathrm{p})$ ); and
h. promote pollution prevention policies, practices, techniques and strategies (Articles $1(\mathrm{j})$, and $10(2)(\mathrm{b})$ ).

## REQUEST FOR DEVELOPMENT OF PUBLIC RECORD

31. Based on the above information, the submitters hereby request the CEC to document in a public record the failure of the Canadian government to adequately enforce its environmental laws against OPG, to the detriment of, among others, the submitters.

Respectfully submitted,

$\mathrm{H}:$ \WPDat\INTERNS\JKozlows\petition sign on request.wpd


No, I will not sign on to the Ontario coal plant NAFTA petition.
___ Yes, sign my organization on to the Ontario coal plant NAFTA petition.
Name of Organization: Global Warming Action Network
Contact Person: Oliver Clubb, Co-chair
Address: 504 Allen Street, Syracuse, NY 13210
Phone: (315) 479-5983
Fax:
E-Mail: oclubb@accucom.net
Three to five line description of your organization, which will be included in the petition.

Syracuse-based Global Warming Action Network is committed to the promotion of measures at every level of society that will reduce greenhouse gas emissions and mitigate the impact of global warming, notably including reductions in CO 2 and other emissions from coal-burning power plants.


Oliver Clubb, Co-chair
Global Warming Action Network
504 Allen Street
Syracuse, NY 13210
(315) 479-5983

On a separate sheet of paper, mail or send by overnight service the following: signature
type the name of the person signing
type the title of the person signing
type the name of the organization
type the address of the organization
type the phone and fax of the organization
Mail to: Office of Attorney General Eliot Spitzer
Environmental Protection Bureau
Assistant Attorney General Norman Spiegel
120 Broadway
$26^{\text {th }}$ floor
New York, New York 10271
Phone: 2124168454

For sign on to Ontario coal plant NAFTA petition:



## Chairperson

Green Education and Legal Fund Inc.
156 Big Toad Way, Poestenkill NY 12140
518286-3411

$$
\begin{aligned}
& \text { CEC petition } \\
& \text { Attention: Laura Stasinsk, }
\end{aligned}
$$

On a separate sheet of paper, mail or send by overnight service the following:
Veter labuna

Peter Tabuns
Executive Director
Greenpeace Canada
Suite 605, 250 Dundas St. W.
Toronto, Ontario
Canada
MST $2 Z 5$
Phone:416-597-8408 x 3012
Fax: 416-597-8422

702 H Street, NW, Suite 300, Washington, DC 20001
Tel: 202-462-1177 • Fax: 202-462-4507
1-800-326-0959 - www.greenpeaceusa.org

## Signature page for NAFTA Petition for Greenpeace USA



[^0]
# CLEARWATERATER, 



Andre Mele
Executive Director
Hudson River Sloop Clearwater, Ĩnc.
112 Little Market Street
Poughkeepsie, NY 12601
(845) 454-7673
(845) 454-7953

# Lake Clear Association 

PO Box 158 Lake Clear, NY 12945
Presiden-Bob Callaghan Vice President-Jerry Gillmett Secretary/Treasurer-Marilyn Ridotto
February 18, 2003

Dear Mr. Spitzer,
The Lake Clear Association is a community organization concerned with the quality of water and life in, and around, Lake Clear. The water quality of Lake Clear, in Franklin County, is a vital concern of our group. We are very concerned about the known impacts of acid rain on Adirondack Mountain surface waters and support efforts to reduce acid rain causing pollutants.

Please sign the Lake Clear Association onto the Ontario coal plant NAFTA petition.
Sincerely,


Robert F. Callaghan, President
P.O. Box 158

Lake Clear, NY 12945
(518) 891-4610

## MASSD/RA ะ $2 \frac{\text { YEARS OF ACTION }}{\text { IN THE PUBLIC INTEREST }}$

Office of Attorney General Eliot Spitzer
Environmental Protection Bureau
Assistant Attorney General Norman Spiegel
120 Broadway
$26^{\text {th }}$ floor
New York, New York 10271
Phone: 2124168454

Attorney General Spitzer,
Please add the Massachusetts Public Interest Research Group (MASSPIRG) to your Petition to the Commission on Environmental Cooperation established by the North American Agreement on Environmental Cooperation regarding clean air enforcement at three large coal-fired power plants in Southern Ontario, owned by Ontario Power Generation.


MASSPIRG Energy Advocate
29 Temple Place
Boston, MA 02111
ph: 617.747.4316
fx: 617.292.8057
www.masspirg.org


Natural Resources Defense Council
1200 New York Avenue, NW
Suite 400
Washington, D.C. 20005 w
(202) $289-6868$
(202) 289-1060 \%

80 N. Main St.
Concord, NH 03301
(603) 229-3222 (ph)
nhpirg@pirg.org
www.nhpirg.org
(603) 229-3221 (fx)


Josh Irwin
Advocate
NH Public Interest Research Group
80 North Main Street
Concord, NH 03301
6032293222 (phone)
6032293221 (fax)

March 7, 2003
Re: Response Sheet Regarding NAFTA Petition on Ontario Coal-burning Power Plants

Signer:
Dena Mottola
Acting Director
NJPIRG Citizen Lobby
11 North Willow Street
Trenton, New Jersey 08608
(609) 394-8155, ex. 306

Fax: (609) 989-9013

 Jasøn K. Babbie, Policy Analyst New York Public Interest Research Group
9 Murray St., ${ }^{\text {rd }}$ Floor
New York, NY 10007
(212) 349-6460
new york state
COMMUNITY OF CHURCHES


[^1]Ontario Coal-burning Power Plants NAFTA petition - Agreement to sign on to petition
NORTHEAST ORGANIC FARMING ASSSOCIATION OF NEW
YORK, INC. (NOFA-NY)
SARAH JOHNSTON, EXECUTIVE DIRECTOR
P.O. BOX 880, COBLESKILL, NY 12043

Phone: 518-922-7937
Fax: 518-922-7646
E-Mail: sarahjohnston@nofany.org

On March $2^{\text {nd }}$, the Governing Council (our board of directors) voted to sign onto the NAFTA Petition ton Ontairo Coal-buring Power Plants. The action is documented in our official minutes.


## Response Sheet Regarding NAFTA Petition on Ontario Coal-burning Power Plants

Ohio Public Interest Research Group (Ohio PIRG)
2460 Fairmount Blvd., Ste. C
Cleveland Heights, OH 44106
216-791-1116 (office)
216-791-9138 (fax)
Signing on Behalf of Ohio PIRG


## Regarding: NAFTA Petition on Ontario Coal-burning Power Plants

Name: Jack Gibbons

Title: Chair
Organization: Ontario Clean Air alliance

Address: $\quad 625$ Church Street, Suite 402, Toronto, Ontario M4Y 2G1

Phone: (416)926-1907 ext. 240
Fax: (416)926-1601
E-Mail: $\quad$ igibbons@pollutionprobe.org

Jack Gibbons


1334 Wainut St., 6th Flr. Philadelphia, PA 19107 www.PennEnvironment.org

RE: Sign-On to Ontario coal plant NAFTA petition
From: PennEnvironment


Energy \& Clean Air Associate
PennEnvironment
1334 Walnut Street, $6^{\text {th }}$ Floor
Philadelphia, PA 19107
p: (215) 732-5897 f: (215) 732-4599

February 16, 2003

Office of Attorney General Eliot Spitzer
Environmental Protection Bureau
Assistant Atty General Norman Spiegel
120 Broadway, 26 Floor
New York, New York 10271
Re: NAFTA petition
Yes, sign my organization on the Ontario Coal Plant NAFTA petition.


Joseph M. Deignan, M.D.
President, Rainbow Lake Association, Inc.
coo PO Box 42
Rainbow Lake, New York 12976
Phone: 518-327-5221


# Residents' Committee to Protect the Adirondacks 

P.O. Box 27, 7 Ordway Lane, North Creek, NY 12853-0027

Phone (518) 251-4257, Fax (518) 251-5068, Email RCPA@netheaven.com www.adirondackresidents.org

April 28, 2003
Office of Attorney General Eliot Spitzer
Environmental Protection Bureau
Assistant Attorney General Norman Spiegel
120 Broadway
$26^{\text {th }}$ floor
New York, New York 10271
Dear Attorney General Spitzer
The Residents' Committee to Protect the Adirondacks (RCPA) supports your action regarding the NAFTA Petition on Ontario Coal-burning Powerfints.
ane Ricketson, Secretary/
Treasurer, Olmstedville
John R. Collins, Jr. Blue Mountain Lake

Peter F. Galvani, Ph.D. Long Lake

Evelyn Greene North Creek

Peter Hornbeck Olmstedville

Joe Mahay Paradox

Peter O'Shea Fine

John Washburn Benson

## EXECUTIVE DIRECTOR

Peter Bauer Blue Mountain Lake

FOUNDING DIRECTORS
Randy Denton
Carl Heilman
Ernest LaPrairie William T. Ling Paige MacDonald Erwin Miller David Moro Arthur Perryman
Richard Stewart


Katharine Strouse Canada
Advocate
Rhode Island Public Interest Research Group (RIPIRG)
11 South Angell Street \#337
Providence, RI 02906
401-421-6578 (phone)
401-331-5266 (fax)

## Scenic Hudson, Inc.

One Civic Center Plaza, Suite 200
Poughkeepsie, NY 12601-3156
Tel: 8454734440
Fax: 8454732648
email: info@scenichudson.org
www.scenichudson.org

Wheit Buments
Mrs. Willis L.M. Reese
Chai
Marjorie L. Hart
Ve Cours
Frank Martucci
Frederick Osborn III Rudolph S. Rauch III

Treawne
Leo C. O'Neill
awioknu hersumer Anne E. Impellizzeri
mewne
Rudolph S. Rauch III
Directors
Phyllis Y. Atwater David J. Brumfield Maureen K. Clancy David C. Clapp Christopher C. Davis William M. Evarts, Jr. Robert P. Freeman Anna Carison Gannett Patrick J. Garvey Gary A. Glynn Morrison H. Heckscher Christine Lehner Hewitt Sven Huseby Jeh V. Johnson Dr. Attallah Kappas David N. Redden Frederic C. Rich John C. Wallner Wheelock Whitney III John H. Winkler Alexander E. Zagoreos

Robert H. Boyle Anne P. Cabot Nash Castro William H. Ewen Benjamin Harrison Frankel George W. Gowen Barnabas McHenry Mrs. Frederick H. Osborn, Jr. Samuel E. Pryor III Elizabeth B. Pugh, Historiun Laurance Rockefeller David Sive
Mrs. Thomas M. Waller

March 5, 2003

Office of Attorney General Eliot Spitzer
Environmental Protection Bureau
Assistant Attorney General Norman Spiegel
120 Broadway
26th floor
New York, New York 10271

No, I will not sign on to the Ontario coal plant NAFTA petition.
X Yes, sign my organization on to the Ontario coal plant NAFTA petition.

Name of Organization: Sierra Club, including Sierra Club of Canada Contact Person: James Mays
Address: 2345 County Rt. 3, Olivebridge, NY 12461
Phone: 845-657-2013
Fax: 518-426-3052
E-Mail: [jmays@ulster.net](mailto:jmays@ulster.net)

The Sierra Club is a 750,000 member volunteer driven, non-governmental environmental organization operating throughout the United States, and through an allied organization, Sierra Club of Canada, throughout Canada. Our interests are as multifaceted as our membership, and focus on the protection and enjoyment of our natural environment. Air quality and global warming are issues of great importance to us.

On a separate sheet of paper, mail or send by overnight service the following:


Chair, Human Rights \& Responsible Trade Committee [US]
Sierra Club, including Sierra Club of Canada
85 Second St, $2^{\text {nd }}$ Floor, San Francisco, CA 94105-3441
415-977-5500; Fax: 415-977-5799
[locally: c/o John Stouffer, 353 Hamilton St. Albany, NY 12210; 518 426-9144, Fax: 518-426-3052]

Eastern Canada Chapter
Section régionale de lest du Canada


Dan McDermott
Director, Sierra Club of Canada, Eastern Canada Chapter
Sierra Club of Canada
24 Mercer Street, Suite 102, Toronto, Ontario, Canada, M5V 1H3 phone: 416-960-9696 fax: 416-960-0020


Toronto Environmental Alliance

January 29, 2003
Office of Attorney General Eliot Spitzer
Environmental Protection Bureau
Assistant Attorney General Norman Spiegel
120 Broadway, $26^{\text {th }}$ floor
New York
New York 10271

To whom it may concern:
The Toronto Environmental Alliance (TEA) endorses the NAFTA petition on Ontario coal plants. TEA is a non-governmental, not-for-profit environmental organization with a mandate to promote a greener Toronto. TEA speaks out on environmental issues and works with concerned individuals, public health agencies, local governments and grassroots organizations to foster citizen participation on these issues.

Sincerely,


Keith Stewart, PhD.
Smog and Climate Change Campaigner
Toronto Environmental Alliance
30 Duncan St., Suite 201
Toronto, Ontario
M5V-2C3
Tel. (416) 596-0660
Fax: (416) 596-0345
E-Mail: keith@torontoenvironment.org

## GERALD H. MORROW

To: The Honorable Eliot Spitzer, Attorney General

From: Gerald Morrow, Supervisor, Town of Chesterfield, Essex County

$\qquad$ No, I will not sign on to the Ontario coal plant NAFTA petition.
$X$ Yes, sign my organization on to the Ontario coal plant NAFTA petition.

Name of Organization: Town of Chesterfield
Contact Person: Gerald Morrow, Supervisor
Address: 1 Vine Street, P.O. Box 456, Keeseville, NY 12944
Phone: (518) 834-9042
Fax: (518) 834-4649

The Town of Chesterfield is located in Essex County. Our municipality is home to some of the most precious mountains, recreational areas, and surface waters in the Adirondack Park, including Lake Champlain. The health of these natural resources is vital to the environment and economy of the Town of Chesterfield. Since it has been shown that acid rain threatens the health of natural resources in the Adirondack Park, we strongly support efforts to reduce pollutants, that cause acid rain.


## Gerald L. Bruce

Town Clerk/Collector 946-2105

Councilmen
Froncis Lawrence
Russell Mulvey
Wesley Gonyea
August Augenthaler
Supt. of Highways
Marcel Bruce 946-7196

## Community Center Springfield Road

Wilmington, New York 12997
Tel. (518) 946-7179
Fax (518) 946-7124


Assessers Dana Peck Alphonso Smith David Saunderson
Town Justices
Garyy Hofiman
946-7129

3761

March 14, 2003

To: The Honorable Eliot Spitzer, Attomey General
From: Jeanne Ashworth, Supervisor, Town of Wilmington, Essex County
$\qquad$ No, I will not sign on to the Ontario coal plant NAFTA petition.
_X_Yes, sign my organization on to the Ontario coal plant NAFTA petition.
The Town of Wilmington is located in Essex County. Within our municipal boundaries exist some of the most precious mountains and surface waters in the Adirondack Park, including Whiteface Mountain and the AuSable River. The health of these natural resources is vital to the environment and economy of the Town of Wilmington. Since it has been shown that acid rain threatens the health of natural resources in the Adirondack Park, we strongly support efforts to reduce pollutants which cause acid rain.


Jearne Ashworth, fown Supervisor
Town of Wilmington
e-mail: townl@whiteface.net

## Rebecca Stanfield

Clean Air Advocate
U.S. Public Interest Research Group

218 D Street SE
Washington, DC 20003
202-546-9707
f. 202-546-2461

Pman
Paul B. Burns
Executive Director
Vermont Public Interest Research Group ("VPIRG")
141 Main Street, Suite 6
Montpelier, VT 05602
Phone: 802-223-5221
Fax: 802-223-6855

On a separate sheet of paper, mail or send by overnight service the following: signature

 type the name of the person signing: Robin Greenwald type the title of the person signing: Executive Director type the name of the organization: Waterkeeper Alliance
type the address of the organization: 828 South Broadway, Suite 100 Tarrytown, NY 10591
type the phone and fax of the organization: 914.674.0622, F: 914.674.4560
Mail to: Office of Attorney General Eliot Spitzer
Environmental Protection Bureau
Assistant Attorney General Norman Spiegel
120 Broadway

26th floor
New York, New York 10271

Phone: 2124168454

## Response Sheet Regarding NAFTA Petition on Ontario Coal-burning Power Plants

Must receive your response by February 21, 2003
Two Step Response:

1. E-mail this form to: Laura.Stasinski@oag.state.ny.us and Judith.Enck@oag.state.ny.us
2. Mail or Fed Ex the signature page to the address below.

Direct any questions to: Laura Stasinski at 5184745488 or Laura. Staskinski@oag.state.ny.us or Judith Enck at 5184739037 or Judith.Enck@oag.state.ny.us
$\qquad$ No, I will not sign on to the Ontario coal plant NAFTA petition.
$\ldots$ Yes, sign my organization on to the Ontario coal plant NAFTA petition.

## Name of Organization: WNY Sustainable Energy Association

Contact Person: Walter Simpson
Address: 4 Meadowstream CT, Amherst, NY 14226
Phone: (716) 839-0062
Fax: 829-2704
E-Mail: wsimpson@facilities.buffalo.edu
Three to five line description of your organization, which will be included in the petition.
WNYSEA is an all-volunteer community organization located in Western New York which is dedicated to promoting sustainable energy policies and practices. As such we sponsor various programs to educate the public about energy conservation and efficiency and renewable, solar energy resources and technologies.

On a separate sheet of paper, mail or send by overnight service the following: signature
type the name of the person signing type the title of the person signing type the name of the organization type the address of the organization type the phone and fax of the organization
raple 3
Walter Simpson, Co-Chair,
WNY Sustainable Energy Association
27 St. Catharine CT
Buffalo, NY 14222
881-1639/829-2515

Mail to: Office of Attorney General Eliot Spitzer
Environmental Protection Bureau
Assistant Attorney General Norman Spiegel
120 Broadway
$26^{\text {th }}$ floor
NY, NY 10271


Nancy L. Girard
Director, New Hampshire Advocacy Center/
Vice President-New Hampshire
Conservation Law Foundation
New Hampshire Advocacy Center
27 North Main Street
Concord, New Hampshire 03301-4930
Tel.: (603) 225-3060
Fax: (603) 225-3059


[^0]:    John Passacantando
    Executive Director
    Greenpeace USA
    702 H Street NW, Suite 300
    Washington, DC 20001
    202-462-1177
    202-462-4507 (fax)

[^1]:    EXECUTIVE DIRECTOR
    Mary Lu Bowen

