

TORONTO STAFF REPORT

February 13, 2006

To: Board of Health
From: Dr. David McKeown, Medical Officer of Health
Subject: Legal Petition to Reduce U.S. Air Pollution

Purpose:

To seek City Council approval to sign on to a legal petition, the purpose of which is to reduce air pollutant emissions from U.S. coal-fired power plants, under Section 115 of the U.S. Clean Air Act.

Financial Implications and Impact Statement:

There are no financial implications arising from the adoption of this report.

Recommendations:

It is recommended that:

- (1) the Board of Health adopt this report and forward it to City Council;
- (2) City Council add City of Toronto to the list of signatories to the legal petition entitled, “Petition under s. 115, United States *Clean Air Act*, 42 U.S.C. s. 7415(a) to the United States Environmental Protection Agency for relief from certain emissions from large electric generating units in the States of Illinois, Indiana, Pennsylvania, Michigan, Ohio, West Virginia, and Kentucky”; and City Council notify Sierra Legal Defence Fund of its decision;
- (3) City Council forward this report for information to all Boards of Health in Ontario, the Great Lakes and St. Lawrence Cities Initiative, the Federation of Canadian Municipalities, the Association of Local Public Health Agencies, the Ontario Public Health Association, the Greater Toronto Area Clean Air Council, and the Director of Public Health for Montreal (RRSSSMC); and encourage other municipalities to

participate in Sierra Legal Defence Fund's legal petition to reduce U.S. coal-fired power plant emissions;

- (4) City Council commend the Premier of Ontario for his June 2005 commitment to investigate ways Ontario can boost its support of U.S. states seeking cleaner air through legal mechanisms with the U.S. federal government;
- (5) City Council request that the Premier of Ontario, in addition to filing comments to the U.S. Environmental Protection Agency on the proposed changes to New Source Review, undertake the necessary activities to reduce Toronto residents' exposure to transboundary air pollution, including legal action as appropriate;
- (6) the City Solicitor, in consultation with the Medical Officer of Health, be authorized to support any further action taken by the Province of Ontario that aims to reduce transboundary emissions from the U.S., including any further submission on the proposed New Source Review rules;
- (7) the Medical Officer of Health, in consultation with the City Solicitor, monitor and report back on progress regarding the legal petition; and
- (8) the appropriate City Officials be authorized and directed to take the necessary action to give effect thereto.

Background:

The Board of Health and City Council have supported previous efforts to reduce air pollution from coal-fired power plants in the U.S. At its meeting February 1, 2 and 3, 2000, City Council authorized the City Solicitor and the Medical Officer of Health to submit a Friend of the Court (*Amicus Curiae*) brief in the U.S. court case involving American Electric Power (AEP). The brief was submitted, describing the impact on Toronto's citizens of air pollution from U.S. coal-fired power plants, and the court's decision is anticipated soon. At its meeting April 12, 13 and 14, 2005, City Council adopted a staff report entitled "Curbing Transboundary Air Pollution", dated March 16, 2005. The report provided an update on the AEP case and Council requested the Premier of Ontario to give high priority to reducing transboundary pollution.

City Council has also articulated a position on coal-fired electricity in Ontario. At its meeting July 20, 21 and 22, 2004, Council urged the Premier of Ontario to develop a strategy to phase out coal-fired power generation. Council highlighted the need to do so using energy conservation and renewable energy, rather than nuclear power. The Government of Ontario has since committed to phasing out coal-fired electricity generation by 2009.

At this time, Sierra Legal Defence Fund is requesting that the City of Toronto and other municipalities sign on to a legal petition to the Administrator of the U.S. Environmental Protection Agency (U.S. EPA), as provided for by Section 115 of the U.S. *Clean Air Act*. The legal petition demonstrates that air pollutants released from U.S. coal-fired power plants

contribute to health impacts of Canadians, and asks the Administrator to reduce these emissions. This legal petition is parallel and complementary to the AEP court case to which Toronto submitted a brief. This report describes the legal petition and recommends that the City of Toronto be added to the list of signatories.

Comments:

Air Quality and Health:

It is established that air pollution injures health. Pollutant particles and gases cause a variety of respiratory and cardiac effects, particularly in the elderly and the very young. Air pollution can also exacerbate existing health conditions including asthma. Air pollution in Toronto is estimated to contribute to approximately 1,700 premature deaths and 6,000 hospitalizations each year. In 2005, Toronto experienced a record number of smog alert days, emphasizing the need to reduce air pollution as quickly as possible.

According to the Ontario Ministry of Environment, on days of poor air quality U.S. sources (plus background concentrations) account for approximately 50 percent or more of ozone and particulate air pollution (PM_{2.5}) in the Toronto area (1). Similarly, the Ministry estimates that U.S. emissions are responsible for approximately 55 percent of Ontario's air pollution-related health-care and environmental costs.

U.S. emissions from coal-fired electricity generation are substantial. According to the Commission for Environmental Cooperation, the electricity generating sector is responsible for a large portion of total U.S. air pollution emissions (69 percent of SO₂, 22 percent of NO_x, 40 percent of mercury and 39 percent of CO₂). This equates to U.S. electricity generating sector emissions of approximately nine million tonnes of SO₂, four million tonnes of NO_x, 44 tonnes of mercury and two billion tonnes of CO₂. In the U.S., 50 percent of electricity is generated from coal, compared with 19 percent in Canada (2). Some of these coal-fired emissions travel up the Ohio valley and enter southern Ontario as transboundary air pollution.

Reducing U.S. coal-fired pollutant emissions will benefit U.S. and Canadian citizens. The U.S. Public Interest Research Group Education Fund indicates that if American coal-fired power plants were to install modern emissions controls, there would be enormous reductions in pollutant emissions. There are approximately 1,100 power plants in the U.S. Pollutant emissions from the 548 dirtiest coal-fired power plants in America would drop by an estimated 62 percent for NO_x and 70 percent for SO₂, if the appropriate pollution controls were installed (3).

The City of Toronto has many initiatives to reduce local air pollutant emissions. City efforts include the Green Fleets program, the Better Buildings Partnership, the annual Low-sulphur Fuel Purchase and the developing Comprehensive Air Quality Strategy. The Province of Ontario has shown leadership on reducing emissions from coal-fired electricity generation by committing to phase out coal-fired electricity generation by 2009. Unfortunately, the City of Toronto and the Province of Ontario cannot, on their own, adequately protect the health of Toronto residents

through local actions to improve air quality. Additional actions by the U.S. to reduce pollutant emissions are also required.

Legal Petition:

Sierra Legal Defence Fund is asking the City of Toronto and other municipalities to sign on to a legal petition that aims to reduce air-pollutant emissions from U.S. coal-fired power plants. As described in Attachment 1, under the provisions of the U.S. *Clean Air Act*, Canadians whose health or welfare is endangered by air pollutants originating in the U.S. may petition the Administrator of the U.S. EPA to take action to prevent or eliminate the endangerment. The Administrator must only have "reason to believe" that Canadians are being endangered before he or she is obliged to take action. Once a finding of endangerment is made, the Administrator must require individual states to reduce the emissions.

On June 17, 2005 Sierra Legal Defence Fund, on behalf of a number of environmental groups, filed a petition to the U.S. EPA for action to prevent or eliminate the emissions. Sierra Legal Defence Fund is asking municipalities in southern Ontario to sign on to the petition, and is approaching the City of Toronto for this purpose. The City of Windsor has endorsed the petition.

The purpose of the legal petition is to demonstrate to the U.S. EPA Administrator that U.S. coal-fired power plant emissions contribute to increased air pollution and health impacts in Canada. The legal petition requests that the EPA Administrator order the relevant states to reduce pollution emissions.

It is recommended that the City of Toronto sign on to the legal petition that is to be submitted to the U.S. EPA Administrator. Endorsing the legal petition would complement Toronto's other efforts to reduce air pollution from local and transboundary sources. Endorsing the petition does not commit the City to participate in any legal action that may arise out of the petition. It is recommended that Toronto's Medical Officer of Health, in consultation with the City Solicitor, monitor and report back on progress regarding the legal petition.

Other Opportunities:

In addition to the legal petition, there are other opportunities for the City of Toronto to work toward reducing transboundary air pollution, for instance by supporting the Province of Ontario's efforts. On June 20, 2005, at the Shared Air Summit, the Premier of Ontario announced several initiatives for reducing transboundary air pollution that affects Ontario and the north-east states. These initiatives include investigating ways Ontario can boost its support of those U.S. states that are seeking cleaner air through legal mechanisms with the U.S. federal government. It is recommended that City Council commend the Premier of Ontario for his June 2005 commitment to investigate ways Ontario can boost its support of U.S. states seeking cleaner air through legal mechanisms with the U.S. federal government.

In addition to the initiatives described above, the U.S. EPA accepted comments up to February 17, 2006 on a proposal to alter the New Source Review (NSR) portion of the U.S. *Clean Air Act*. The purpose of NSR is to ensure that pollution-control equipment is installed or upgraded when

old power plants undergo major modifications or expansions. The AEP court case, in which the City of Toronto has Friend of the Court status, centres on whether AEP was in compliance with this key portion of the U.S. *Clean Air Act*.

The proposed changes to NSR would weaken this provision of the *Clean Air Act*, and thus would allow old power plants to continue to operate without installing modern emission-control equipment. This change would mean that old coal-fired power plants, that have outdated pollution-control equipment or none at all, would be permitted to make modifications that increase the plants' expected lifetime, and increase their gross annual emissions of air pollution, without installing modern pollution-control equipment. This would allow power plants to increase their total pollutant emissions, without using pollution-control equipment that is readily available today. It is in Canadians' and Americans' health interest to urge the U.S. to retain the current NSR provisions, rather than weaken them as proposed.

The existing NSR is a key piece of legislation that, if enforced properly, would reduce transboundary pollution from the U.S. At the time of writing, the Government of Ontario intends to table a submission to the U.S. EPA regarding New Source Review, by the February 17, 2006 comment deadline. This action would be strengthened by having Toronto's support, and the Medical Officer of Health plans to file a letter of support for the Province of Ontario's position on NSR, with the Ontario Ministry of Environment and/or Ontario Ministry of the Attorney General. Support of provincial actions would not commit the City of Toronto to pursue or fund legal action.

It is recommended that City Council request that the Premier of Ontario, in addition to filing comments to the U.S. Environmental Protection Agency on the proposed changes to New Source Review, undertake the necessary activities to reduce Toronto residents' exposure to transboundary air pollution, including legal action as appropriate. It is also recommended that the City Solicitor, in consultation with the Medical Officer of Health, be authorized to support any further action taken by the Province of Ontario that aims to reduce transboundary emissions from the U.S., including any further submission on the proposed New Source Review rules.

Conclusions:

The City of Toronto is making many efforts to reduce local emissions of pollutants. The Government of Ontario is phasing out coal-fired power generation across the province by 2009. Unfortunately, the City of Toronto and the Province of Ontario cannot, on their own, fully protect the health of Toronto residents through local actions to improve air quality. Additional actions to reduce pollutant emissions from the U.S. are also required.

It is recommended that the City of Toronto add its name to the list of signatories to the legal petition prepared by Sierra Legal Defence Fund, which asks the U.S. EPA Administrator to reduce coal-fired power plant emissions. It is also recommended that the City Solicitor, in consultation with the Medical Officer of Health, be authorized to support any further action taken by the Province of Ontario that aims to reduce transboundary emissions from the U.S., including any further submission on the proposed New Source Review rules. These efforts

would complement existing initiatives to improve air quality and reduce the human and financial costs of air pollution in Toronto.

Contact:

Sarah Gingrich
Research Consultant, Environmental Protection Office
Toronto Public Health
Tel: 416-338-3513
Fax: 416-392-7418
Email: sgingri@toronto.ca

Monica Campbell
Manager, Environmental Protection Office
Toronto Public Health
Tel: 416-338-8091
Fax: 416-392-7418
Email: mcampbe2@toronto.ca

Dr. Fran Scott
Director, Planning & Policy and
Associate Medical Officer of Health
Toronto Public Health
Tel: 416-392-7463
Fax: 416-392-0713
Email: fscott@toronto.ca

Dr. David McKeown
Medical Officer of Health

List of Attachments:

Attachment 1: Briefing Note by Sierra Legal Defence Fund. Petition under section 115 of the U.S. *Clean Air Act* for EPA action against smog, acid rain, and climate change pollution in Canada

List of References:

- (1) Ontario Ministry of Environment. 2005. Transboundary Air Pollution in Ontario. Toronto. (Pages i, 47-50).
- (2) Commission for Environmental Cooperation of North America. 2004. North American Power Plant Emissions. Montreal. (Pages 1-5).
- (3) Wu, B. 2003. Lethal Legacy: A Comprehensive Look at America's Dirtiest Power Plants. U.S. Public Interest Research Group Education Fund. Washington, D.C. (Pages 13, 16).

advocates for the environment

SIERRA LEGAL DEFENCE FUND

Briefing Note

Petition under section 115 of the U.S. Clean Air Act for EPA action against smog, acid rain, and climate change pollution in Canada

Background

- Emissions of sulphur dioxide (SO₂), Nitrogen Oxides (NO_x) and Carbon Dioxide (CO₂) are emitted in massive amounts from 250 coal-fired power plants in the US Midwest/Ohio Valley States of Ohio, Pennsylvania, Indiana, Michigan, Illinois, West Virginia, and Kentucky
- These coal-fired power plants emitted 4.5 million tonnes (MT) of SO₂, 1.5 MT of NO_x, and 725 MT of CO₂ in 2002, representing significant percentages of US totals.
- Prevailing winds carry these contaminants to Canada where the health and welfare of citizens is threatened by smog and acid rain, and by climate change globally.
- This year, Ontario surpassed its previous record for the number of smog days in a full year by Canada Day (July 1); over one half of premature deaths from air pollution in Ontario are attributable to US pollution sources.
- Thousands of lakes and rivers continue to be harmed by acid rain in Eastern Canada.
- Rising temperatures, violent weather events, drought and the other harmful impacts of climate change affect all people around the world.

What is a section 115 Petition?

- Under the provisions of the United States *Clean Air Act*, Canadians whose health or welfare is endangered by air pollutants originating in the US may petition the EPA Administrator to take action to prevent or eliminate the endangerment.
- US citizens are accorded a similar opportunity under s. 166 of the *Canadian Environmental Protection Act*.
- On June 17, 2005 the Sierra Legal Defence Fund, on behalf of a number of environmental groups filed a petition to the US EPA for action to prevent or eliminate the subject emissions.
- The EPA Administrator must only have “reason to believe” that Canadians are being endangered before he is obliged to take action.
- Once a finding of endangerment is made, the Administrator must require individual states from which emissions emanate to revise their State Implementation Plans to reduce the emissions.

What do we hope to achieve?

- Cleaner air, healthy water bodies, and a secure climate. The petition provides the opportunity to convince the EPA but also constitutes the first step for a legal process to force the EPA to act if it fails to do so voluntarily.

- This action, together with other actions we have taken in collaboration with a number of U.S. governmental and non-governmental organizations, is part of the larger battle against air pollution from dirty coal-fired power plants in both Canada and the U.S.
- A successful petition will benefit million of Americans as well as Canadians.

What evidence do we present in the section 115 Petition?

- The petition relies on numerous international reports from agencies such as the United Nations, the International Joint Commission, NAFTA's Commission for Environmental Cooperation, the Organization for Economic Cooperation and Development, and others and is buttressed by reports from the US EPA, Environment Canada and numerous other governmental and non-governmental organizations.
- There are available and affordable technologies to reduce NO_x and SO₂ emissions by over 90%, however, recently passed laws do not even require such reductions by 2015.
- The EPA acknowledges under its so-called *Clean Air Interstate Rule* that in 2015 there will still be areas in upwind US states that will continue to fall below American health standards for air quality.
- Reductions in CO₂ emissions that cause climate change will ultimately require greater investment in renewable power and conservation measures as well as a genuine acknowledgement by the US Administration that a grave problem exists.
- Current pollution laws also do not contemplate the aggravating effect of climate change on existing problems, such as rising temperatures on ozone formation.

What if the EPA Administrator rejects the petition or ignores it?

- These are outcomes that the filing of this petition contemplates since a failure by the Administrator to take action provides recourse to US courts.
- Both the *Clean Air Act* and the *Administrative Procedures Act* allow us to sue in US courts if the Administrator rejects our petition or fails to act within a reasonable time (ie 12-18 months).
- We must show that the Administrator's conduct in failing to act --- given the overwhelming evidence of endangerment to Canada --- was arbitrary, capricious, or not in accordance with the law.

If we sign the petition does this oblige us to take part in a lawsuit later?

- No, the petition carries no obligation of involvement beyond your role as signatory to the petition.

What cost and obligation is there if we sign on to the petition?

- We do not anticipate any financial costs other than whatever effort is required on your part to follow the progress of the petition and to help move it forward.

What are the next steps?

- Once additional parties sign on we will file an additional or amended petition to the one filed on June 17, 2005.

Who can I contact for further information?

Albert Koehl, Staff Lawyer, Sierra Legal Defence Fund, 416-368-7533 ext 26 or akoehl@sierralegal.org

July 11, 2005