

October 20, 1999

To: Environmental Task Force

From: Dr. Sheela V. Basrur, Medical Officer of Health

Subject: New York Law Suit Against Mid-western Coal-fired Power Plants

Purpose:

This report responds to a request from the Environmental Task Force (ETF) for advice respecting the ways in which the City of Toronto can support the impending legal action by New York State aimed at curbing air pollution from coal-fired power plants in the mid-western United States.

Source of Funds/Financial Implications:

Verbal discussions with representatives from New York State's Attorney General's Office suggest that minimal financial resources and a manageable level of staff resources would be required to support New York State's legal action with a "Friend of the Court" brief.

Recommendations:

It is recommended that Toronto City Council:

- (1) Commend New York State's Attorney General for pursuing legal action against 17 coal-fired power plants in the mid-western United States that contribute to smog;
- (1) Provide approval in principle for the City to support New York's legal action as a "Friend of the Court", and direct the City Solicitor, in consultation with the Medical Officer of Health and the Commissioner of Works, to investigate the legal and resource implications required for this action, and report back to the November Council meeting through the Policy and Finance Committee (with copies sent to the Board of Health, Works Committee, Environmental Task Force and the Toronto Inter-Departmental Environment Team for information);
- (1) Request that the Association of Municipalities of Ontario (AMO) and the Federation of Canadian Municipalities (FCM) endorse Toronto's intervention as a "Friend of the Court" in New York State's legal action;

- (1) Request that Toronto Hydro report to the December Council meeting indicating whether its supplier, Ontario Power Generation, is buying electricity from any of the 17 coal-fired power plants identified in the law suit;
- (1) Request that Toronto Hydro report to Council on the feasibility of adopting a purchasing policy which encourages a shift to natural gas and renewable energies by stipulating that air emission rates for nitrogen oxides, sulphur dioxide, carbon dioxide and mercury, be considered along with price when purchasing electrical power;
- (1) Request that the Chief Financial Officer report to Council on the feasibility of adopting a similar purchasing policy for the City as a purchaser of electricity; and
- (1) Indicate to the Premier of Ontario that it is essential to the health of Ontario residents that the Province establish aggressive air emission standards for electricity generated in Ontario and for Ontario consumers, before the market opens to full competition in the year 2000.

Background:

In April 1999, the Toronto Board of Health adopted a Toronto Public Health report entitled: "Changes in Ontario's Electrical Sector and Air Quality", which recommended that the provincial government establish health protective air emissions caps to limit air pollution from coal-fired power plants providing electricity to Ontario consumers. These air emissions caps were endorsed by Toronto City Council in July 1999 when it adopted a Works and Emergency Services report entitled: "Ontario Clean Air Alliance: Recommended Caps for Ontario's Electrical Sector to Improve Air Quality".

In June 1999, when City Council adopted the "Smog Prevention and Reduction: Status Report and Work Plan" prepared by the Chief Administrative Officer (CAO), it recommended that the CAO explore the federal and provincial ways and means available to address transboundary air pollution issues that affect the City.

On September 27th, the Environmental Task Force (ETF) recommended that the Medical Officer of Health and the City Solicitor comment to the ETF by October 18th on the ways in which the City can support the legal action initiated by New York State's Attorney General against 17 coal-fired power plants situated in the mid-western United States. This report has been prepared in consultation with staff in Legal, Works and Emergency Services, Treasury and Financial Services, and the Corporate Policy and Planning Division of the Chief Administrative Officer's Office. In informal discussions, Toronto Hydro representatives have indicated concurrence with the recommendations contained in this report.

Comments:

- (1) Smog and U.S. Coal-Fired Power Plants

Smog is a significant health hazard for the residents of Toronto. The levels of ozone and particulates (the two major components of smog) in Toronto's air commonly exceed the levels at which serious health effects, hospitalizations and premature deaths have been demonstrated. The Ontario Ministry of Environment has estimated that, each year, 1800 people die prematurely in Ontario and 1400 people are admitted to hospitals, because of the particulates in Ontario's air. Since Toronto residents comprise 22% of Ontario's population, we estimate that Toronto itself experiences about 400 excess deaths and 300 excess hospitalizations each year due to the particulates in air.

Smog episodes in Toronto are very closely linked to the generation of electricity in coal-fired plants in the mid-western United States. The Ontario Ministry of Environment estimates that about 50% of the ozone which affects Toronto in the summer comes from the United States. Most of that ozone originates as nitrogen oxides emitted from coal-fired plants in the mid-western United States. In 1995, U.S. coal-fired power plants were responsible for 26% of their nation's nitrogen oxide emissions. Individually, these plants can emit as much nitrogen oxides in one year as all the cars and trucks in a large metropolitan area. For example, the James M. Gavin power plant in southern Ohio emitted more than 110,000 tonnes of nitrogen oxides in 1996. This is almost one half of the nitrogen oxide emissions that were produced by the entire transportation sector in all of Ontario in 1992.

U.S. coal-fired power plants are also the single most significant source of sulphur dioxide. When sulphur dioxide reacts with other chemicals in the atmosphere, it produces sulphates, a fine acid mist which accounts for 25 to 40% of the particulates in smog. In 1995, coal-fired power plants were responsible for 63% of the sulphur dioxide emissions in the United States.

In 1998, the U.S. Environmental Protection Agency introduced a Ruling that would have effectively reduced nitrogen oxide emissions from coal-fired plants in 23 jurisdictions by about 64% by the year 2007. This Ruling could have reduced the emission rates for nitrogen oxides for U.S. coal-fired plants from the current range of 5.5 to 10 pounds per megawatt-hour to about 1.5 pounds per megawatt-hour. (Ontario's emission rates range from 3 to 5 pounds per megawatt-hour). The Ruling would have significantly improved air quality in southern Ontario. Unfortunately, the Ruling, which was challenged by industry, was stayed by the Court of Appeals this past summer.

(1) New York's Legal Action

On September 15th, New York's Attorney General announced that he intends to sue 17 coal-fired plants in five mid-western states for failing to upgrade their pollution controls when they expanded their plants. Under the U.S. Clean Air Act, old coal-fired power plants do not need to comply with the more rigorous air emission standards contained in the Act unless they are substantially modified or expanded. If successful, the New York legal action could substantially improve air quality in southern Ontario by forcing the identified power plants to comply with the air emissions standards that apply to new coal-fired power plants.

There are a number of ways in which the City of Toronto could support New York State's legal

action. Staff from New York's Attorney General's Office have indicated that a "Friend of the Court" brief, which could be prepared internally by staff in Legal, Toronto Public Health, and Works and Emergency Services, could have a positive impact on New York's legal action. Given that Toronto's air quality could be substantially improved with the success of New York's legal action, it is recommended that the City Solicitor, in consultation with the Medical Officer of Health and the Commissioner of Works and Emergency Services, investigate the resource and legal implications involved in the preparation of a "Friend of the Court" brief, and report back to Council, through Policy and Finance Committee, at the next meeting. In the interim, and in order to protect the position of the City of Toronto, the City Solicitor should be authorized to seek leave from the U.S. Court to obtain "Friend of the Court" status.

(1) Using Toronto's Purchasing Power

With the passage of Bill 35, the Electricity Competition Act, Toronto Hydro, which is fully owned by the City of Toronto, has the ability to generate electricity as well as to distribute electricity. It also has the ability to buy electricity from organizations other than the former Ontario Hydro. The new reality in the electrical marketplace provides the City with the opportunity to encourage the use of environmentally friendly technologies through Toronto Hydro's purchasing policy and through City of Toronto's corporate purchasing policy.

Toronto Hydro should be asked to determine if its current supplier, Ontario Power Generation, is currently purchasing electricity from any of the U.S. coal-fired power plants identified in New York State's legal suit. It should also be asked to investigate the feasibility of developing a purchasing policy which would encourage a shift to natural gas and renewable energies by specifying that air emissions rates for nitrogen oxides, sulphur dioxide, carbon dioxide, and mercury, will be considered along with price when purchasing electrical power. The City of Toronto should pursue a complimentary policy in relation to its own purchase of electrical power.

(4) Provincial Actions Needed

Toronto Hydro's ability to provide clean energy will be limited if the provincial government fails to establish air emission caps for the electrical sector that are protective of human health and the environment. Without aggressive air emission standards, coal-fired power plants will continue to have the financial advantage over cleaner energy sources produced with natural gas and renewable energies, thereby perpetuating needless hospitalizations and premature deaths in Toronto and beyond.

Conclusions:

The New York legal suit against 17 coal-fired plants in the mid-western United States may provide the City of Toronto with the opportunity to express its support for emissions reductions from U.S. coal-fired power plants that are upwind from Toronto. It also raises questions about the source of electricity bought by Toronto Hydro which is fully owned by the City of Toronto. The introduction of competition to Ontario's electrical sector may provide the City with the opportunity to support cleaner energy sources through its relationship with Toronto Hydro. However, the opportunity to purchase "clean" power may be seriously limited if the provincial

government does not establish health protective air emission standards for the electrical industry as a whole.

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