February 22, 2005

Secretary, United States Section 1250 23rd Street NW, Suite 100 Washington, DC 20440 Distibution Antion FB

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Dear Mr. Secretary:

I appreciate the Canada-United States Air Quality Agreement's Progress Report 2004, a service to citizens, to have objective information collected in one accessible place.

Please continue your work on human health effects. See a recent peer-reviewed study that links air pollution, especially polycyclic aromatic hydrocarbons (PAHs), to genetic changes in developing fetuses (Akron Beacon Journal (Ohio), 2-16-05); copy attached.

To demonstrate the benefits of cleaning up coal-fired power plants, the University of Maryland found that during the August 2003 Northeast blackout, sulfur dioxide levels were 90% lower; ozone was about 50% lower; and light scattered by particles was reduced by 70%--increasing visibility by 20 miles. This is from the most recent Northeast Ohio Public Energy Gouncil's newsletter (NOPEC), our electricity aggregation group; www.nopecinfo.org; copy attached.

Looking ahead, the International Joint Commission should address greenhouse gases, mercury and other airborne toxics in this report. I am aware of the summaries in the IJC's 12th Biennial Report and appreciate all the work being done. Please continue publishing a Progress Report every two years.

Sincerely yours,

Edith Chase

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## Study indicates pollution may alter genes of fetuses

Chromosomes show more aberrations tied to higher cancer risk

> By Seth Borenstein Knight Ridder Newspapers

washington: Air pollution from traffic and power plants seems to cause genetic changes - the kind linked to cancer - in developing fetuses, a federally funded study released Tuesday has concluded.

A first-of-its-kind study of 60 pregnant women in poor areas of New York City used backpacks to monitor the women's exposure to airborne carcinogens and then tested their babies' umbilical-cord blood after birth. Babies whose mothers were exposed to higher pollution levels had 53 percent more aberrations in their chromosomes. Other studies have shown that these types of chromosomal changes increase the risk of cancer.

"This finding shows the process can begin as early as the womb as a result of air pollution," said study author Frederica Perera, the director of Columbia University's Center for Children's Environmental Health. "We know that these pollutants make their way across the placenta."

Perera's study didn't determine what parts of the babies' genes changed or whether they all changed in the same areas.

The peer-reviewed study - funded by the National Institute of Environmental Health Sciences and published in this month's journal Cancer Epidemiology Biomarkers and Prevention - links in-the-womb chromosome damage to elevated exposure to polycyclic aromatic hydrocarbons.

There are more than 100 PAHs, which are the byproducts of combustion, including car and truck exhaust, power plant emissions, tobacco smoke and even

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## FREDERICA PERERA

director of Columbia. University's Center for Children's Environmental Health

the smoke from grilling meats. Fifteen of the most common PAHs are listed as carcinogens in the official government list of cancer-causing agents.

"This is not something for pregnant women and new mothers to be alarmed about," said Perera, a professor of environmental health. "This doesn't mean that their child is going to get cancer."

But Perera and Kenneth Olden, the director of the National Institute of Environmental Health Sciences, said the new study should make federal officials look toward better pollution-prevention methods.

The issue is timely, because President Bush's proposed revisions of parts of the 1970 Clean Air Act - which regulates emissions from all major polluters except power plants that existed before it went into effect - are up for a key committee vote today in the Senate.

The finding comes on the heels of a 2004 Canadian study that exposed mice to similar air pollutants and found that they caused an increase in genetic mutation.

The Bush administration and power industry lobbyists say the changes - which would put evershrinking caps on power plant emissions while permitting the plants to reduce those emissions however they see fit - are an efficient and market-based way to decrease pollution and limit lawsuits over pollution.

Environmental organizations and some health-advocacy groups - including the American Academy of Pediatrics, the American Lung Association and the American Public Health Association - oppose the plan, saying it will postpone air-pollution cleanups required by the current law and give power plants loopholes on emissions because it wouldn't require the plants to reduce emissions to as little as the current law does.