OPEN LETTER TO MICHIGAN ELECTED OFFICIALS
FROM MICHIGAN DOCTORS AND OTHER HEALTH PROFESSIONALS

April 13, 2009

Governor Jennifer M. Granholm
Members of the Michigan State Senate
Members of the Michigan State House of Representatives
Lansing, Michigan

Re: **COAL-FIRED POWER PLANTS AND PUBLIC HEALTH**

Dear Michigan Elected Official:

Clean air is necessary for the health and wellbeing of Michigan residents. Yet the coal industry is currently proposing up to eight new coal-fired power projects for Michigan. As Michigan health professionals, we voice our concern over the enormous impact of these plants on public health. If even one of them is built, it will deteriorate the quality of Michigan's air and water and endanger the health of our people.

Coal plants emit large quantities of hazardous pollutants including nitrogen oxides, sulfur oxides, particulate matter, and mercury. These substances are known carcinogens, teratogens, neurotoxins, and/or cardiopulmonary toxins. These pollutants pose a significant health burden on Michigan citizens.

- **Particulate matter** both causes and aggravates a variety of cardio-respiratory diseases that particularly afflict our youngest and elderly residents. PM 2.5 (or fine particulate matter) is especially harmful because the small size of the particles allows them to lodge deep in the lungs. Scientists have calculated that Michigan residents will suffer 115 lung cancer deaths in 2010 due to pollution emitted by coal.[i] The courts recently overturned the 2006 annual PM2.5 National Ambient Air Quality Standard on the basis that EPA did not show the standard was protective of public health, especially that of the elderly and children.
- **Nitrogen oxides** lead to ground-level ozone, or smog, which triggers asthma attacks. Michigan residents will have a projected 24,645 asthma attacks and 1,431 asthma emergency room visits in 2010 due to pollution from coal.[ii] Our children are at special risk because they breathe 50 percent more air per pound of body weight than adults, and because their respiratory systems are not fully developed. Michigan already has one of the highest rates of childhood asthma in the nation.
- **Mercury** causes neurological damage when contaminated fish are eaten by pregnant mothers and young children. Approximately 6 to 8 percent of women of childbearing age have blood mercury levels that pose substantial risks to their developing fetuses; this translates to more than 300,000 babies born in the U.S. annually with exposure to methylmercury, putting them at increased risk of mental retardation and brain damage, cerebral palsy, learning disabilities and other developmental problems.[iii,iv] Fish advisories have had to be released on the ingestion of fish caught in lakes through out Michigan because of contamination with mercury.

The four proposed plants that have so far filed permit applications would emit, together, an estimated 150 pounds of mercury each year. That is a huge quantity, given that the few drops in a mercury thermometer are dangerous if volatilized and inhaled. Each plant is expected to remain in operation and emitting mercury for roughly 50 years. In addition, given the enormous emissions of carbon dioxide from coal combustion, we must underscore the health concerns related to a warming climate. Global warming effects in Michigan will increase the number of extreme heat days, increase precipitation in the Great Lakes region, which with the current sewage systems increases water pollution,

increase the distribution of insect vector borne diseases, and heighten the adverse effect of particulate and ozone air pollutants**.**

Given the adverse health impacts of coal combustion, we call on you to:

- Take action to halt the construction of proposed new coal plants until effective protections are put into place against toxic pollutants and carbon dioxide emissions.

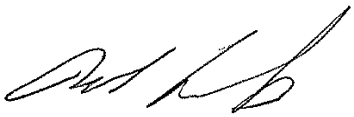
- Compare negative air quality impacts from proposed new coal plants to standards that are fully protective of public health, including that of vulnerable populations, especially for PM2.5.

- Require existing coal plants to install the best available technologies to reduce all forms of air pollution, including carbon dioxide, ozone-causing nitrogen oxides and volatile organic compounds, particulate matter, and mercury.

- Enable Michigan to meet its need for electrical power through increased efficiency and by fully developing our state's bountiful clean energy opportunities. Support funding for "green" jobs, and end state subsidies for coal-powered plants.

By imposing these stringent requirements for new coal plants and supporting the growth of efficiency programs and renewable energy sources, you will move us toward healthier, more prosperous communities and greater well-being for the citizens of Michigan.

Sincerely,



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i Clean Air Task Force. "Power Plant Pollution Locator."
http://www.catf.us/projects/power_sector/power_plant_emissions/pollution_locator/docs/stateData/stateDataMI.pdf (January 23, 2009)
ii Clean Air Task Force. "Power Plant Pollution Locator."
http://www.catf.us/projects/power_sector/power_plant_emissions/pollution_locator/docs/stateData/stateDataMI.pdf (January 23, 2009)
iii Agency for Toxic Substances and Disease Registry (ATSDR). "Toxicological Profile for Mercury," Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service, 1999.
iv Mahaffey, K. R., Clickner, R. P. and Bodurow, C. C. (2004). Blood Organic Mercury and Dietary Mercury Intake: National Health and Nutritional Examination Survey, 1999 and 2000. *Environmental Health Perspectives, 122* (5), 562-570.ft