



## ERIE COUNTY DEPARTMENT OF HEALTH

Andrew J. Glass, Director of Health

Mark A. DiVecchio, County Executive

### FOR IMMEDIATE RELEASE

July 1, 2009

By resolution of Erie City Council dated April 15, 2009, the attached statement was made today to council by Paul Burroughs, Esq., chair of the Erie County Board of Health.

I am Attorney Paul Burroughs, chair of the Erie County Board of Health. I am here today to respond to your request that the board of health review the Inhalation Risk Assessment report of ERE and make our findings know to the Erie City Council.

The Erie County Board of Health continues to have significant concerns regarding the development and operation of a tires derived fuel plant in the county and specifically within the city.

In October 2008, we formulated a resolution which was unanimously approved by all members of the board. The resolution was based upon study and review of ERE application documents and upon interviews with numerous scientists and practitioners representing the fields of climatology, chemistry, wildlife biology, as well as several physician specialists. Additionally, we reviewed a significant number of scientific articles and research papers all dealing with the pollutants identified by Erie Renewable Energy and the PA Department of Environmental Protection as criteria pollutants. We also reviewed numerous other albeit non-regulated pollutants which will be pumped into the environments in which we live.

Our research has shown:

- ERE has estimated that, on average, 900 tons per day of tire derived fuel (TDF) would be combusted at the facility.
- The combustion of the TDF will generate approximately 155 tons per day of ash.
- There is no estimate of the emission of carbon dioxide. (Because CO<sup>2</sup> is one of those non-regulated emission, yet, as we know, CO<sup>2</sup> is a primary cause of global warming.)
- There is no emission estimate given in the plan approved application for polyaromatic hydrocarbons (PAHs). PAHs are a subset of volatile organic compounds (VOCs). ERE has estimated that 27.5 tons per year of VOCs will be emitted per year.

- There is no direct estimate of the amount of PM-2.5 emitted from the facility. ERE will most likely be required to conduct a stack test for filterable PM-2.5 as part of the plan approval.
- Nitrous and sulfur oxides produced contribute to acid rain.
- Mercury compounds concentrates in the lake/water and benthos, bioaccumulates and biomagnifies through the food chain. Even the smallest amount of Mercury is harmful to humans, fish and animals.

(January 2009 New England Journal of Medicine) scientific study has proven:

- There is direct relationship between the level of fine-particle pollutants in the air people breathe and life expectancy in cities across the United States.
- Reducing the average level of fine-particle pollutants – the most damaging kind – by 10 micrograms per cubic meter of air adds about seven months of life expectancy, according to the study of 51 metropolitan areas from Portland, Wash., to Tampa Bay, Fla.

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(2006 Air and Waste Management Association)

- Despite important gaps in scientific knowledge and continued reasons for some skepticism, a comprehensive evaluation of the research findings provides persuasive evidence that exposure to fine particulate air pollution has adverse effects on cardiopulmonary health.
- Since 1997, there has been a substantial amount of research that added to the evidence that breathing combustion-related fine particulate air pollution is harmful to human health.
- Tires contain around 20 different metals most of which have effects on humans, aquatic life and animals.

(2002 Environmental Health Perspectives)

- The magnitude of the association between particulate pollution and daily deaths suggests that controlling fine particle pollution would result in thousands fewer early deaths per year.

(Circulation 2008)

- Studies show an association between long-term air pollution and well-established quantitative measures of atherosclerosis. Biological plausibility for a causal relationship between air pollution and atherosclerosis is supplied by animal studies.

(Environmental Science Technology 2006)

- Ultrafine particles are emitted preferentially and exhibit the longest atmospheric residence time.
- “Atmospheric PM has been linked with adverse effects on human health.”

(Environmental Science and Technology 2001)

- During their migration through the air, PAHs can undergo environmental factors which transform them into products in some cases more dangerous than the originally released. PAHs or their derived compounds can get into water and soil being assimilated by the different organisms (plants, animals, fish, etc.) existing in the corresponding ambient. As result and due to the biological cycle at which living species are submitted, PAHs and derived compounds can get into the human body more or less directly, by ingestion, inhalation, or contact with the skin forming adducts which could alter the regular behavior of cells.

(JAMA 2002)

- Long-term exposure to combustion-related fine particulate air pollution is an important environmental risk factor for cardiopulmonary and lung cancer mortality.

Based upon these and numerous other research findings, our resolution recommended four steps are taken:

- 1) that an independent risk assessment of the long term operation of this plant on the health, safety and welfare of the people and the environment be required as a part of the review process by the Pennsylvania Department of Environmental Protection;
- 2) that the developer provide to the Board of Health and the Erie community the design of the risk assessment and the raw data following the assessment as well as the report itself and all supporting data;
- 3) that specific reference to current research regarding polycyclic aromatic hydrocarbons (PAH's) and the specific emissions of this plant be addressed within the assessment;
- 4) that specific reference to current research regarding ultrafine particulate matter (less than 2.5 microns in size) and the specific emissions of this plant be addressed within the assessment.

We have subsequently reviewed the ERE submitted assessment and find that the report closely follows the regulated parameters of the DEP and verifies that operations of the plant would be within those guidelines. The report does not offer any interpretive data and corresponding affects on health. The report also does not address our request for raw data and other specific components of our resolutions. There is a noticeable absence in the report of the public health effects of (known) non-criteria pollutants.

The Board of Health shares the opinions and findings of the Erie County Medical Society. We recognize that the operation of this plant will significantly raise the pollutants being emitted into our air, our ground and our water. According to the literature, the pollutants, both criteria and non-criteria, will have a measurable, definite negative impact on the health of the residents of the City of Erie, the County of Erie and surrounding populations.

The Board of Health is even more concerned when we see and are told that the current regulatory process has such a difficult time monitoring and enforcing pollution controls at a neighboring facility which has been operating out of compliance for years, namely Erie Coke. All the while, while we had been being assured by DEP that Erie Coke was operating within regulatory compliance, large amounts of non-compliant discharges are finding their way into our environment.

You should also be aware that the Board of Health requested assistance from the PA Department of Health. As a result, the Bureau of Epidemiology and the Agency for Toxic Substances and Disease Registry is currently reviewing all submitted data and considering the health impacts of the proposed plant. The Department of Health is in contact with the DEP and has assured us that this review will be complete and submitted to the Erie County Department of Health and the DEP prior to any final decision being made by the DEP. The resultant assessment documents will provide information regarding potential exposures and probable adverse health effects associated with such levels of exposure to various compounds.

At this time, based upon the information which we have been provided, the opinion of the Erie County Board of Health is that the operation of the proposed ERE facility will pose a definite short term as well as long term negative health risks and consequences upon the residents of Erie County. The operation of this plant will also pose a negative risk and consequences to the quality and health of the environment of Erie County.