

OH Sub No. 63

Basis for Submission to EPA hearing on Dublin Bay Incinerator.
From: T Plunkett
To: Sandymount & Merrion Residents Association
c/o Lorna Kelly/ Catherine Cavendish
Please Use/edit as appropriate; I may be at the Gresham on Thursday.
May 1, 2008.

Recd From: T. Plunkett
for CRAI

The WHO Standard for PM 2.5's is 10 µg/m³

Environmental Protection Agency

01 MAY 2008

ORAL HEARING
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We request the PM_{2.5} standard for Dublin is set to the WHO standard of 10 µg/m³.

Background

Most countries have no effective public health system to examine the patterns of sickness and premature deaths resulting from industrial PM_{2.5} pollution. Some monitor PM₁₀s, but particles doing the most harm are within the range PM₁ to PM_{2.5}.

14/04/2008, The European Commission stated in a directive setting binding standards for fine particles (paraphrasing) ... together with coarser particles known as PM₁₀, **PM_{2.5}'s are among the most dangerous pollutants for human health.**

Recent studies have shown that PM_{2.5} in the air contribute to the premature death of 350,000 people across the European Union every year. [<http://www.eubusiness.com/Environ/air-quality.01/>].

In March 2007, the Irish Environment Minister passively confirmed the incinerator will cause significant premature deaths (up to 300 deaths annually was postulated in the proposed Dail Question rejected by Dr Hanlon, Ceann Comhairle; emails available).

Compared to the EU standard of 25 µg/m³

- the percentage reduction in deaths from PM_{2.5} pollution could grow by more than seven times if PM_{2.5} levels were reduced to 10 µg/m³.

In California, where hard cash-benefit considerations drive decisions, the standard is 12 µg/m³. Currently the US-EPA is considering reducing its PM_{2.5} standard even further. The World Health Organization standard is 10 µg/m³.

The US EPA states in 2008 that gases are a significant producer of nanoparticles. The incinerator promoters make a fuzzy claim the incinerator will not directly emit significant PM's – their wording is suboptimal and not precise. The incinerator will emit hundreds of thousands of tonnes of polluting gases. Will these gases in turn generate massive quantities of PM_{2.5}'s?.

There is no safe threshold for nanoparticles. Adverse effects were evidenced down to the lowest measurable – Harvard School of Public Health study, 1995.

Reference

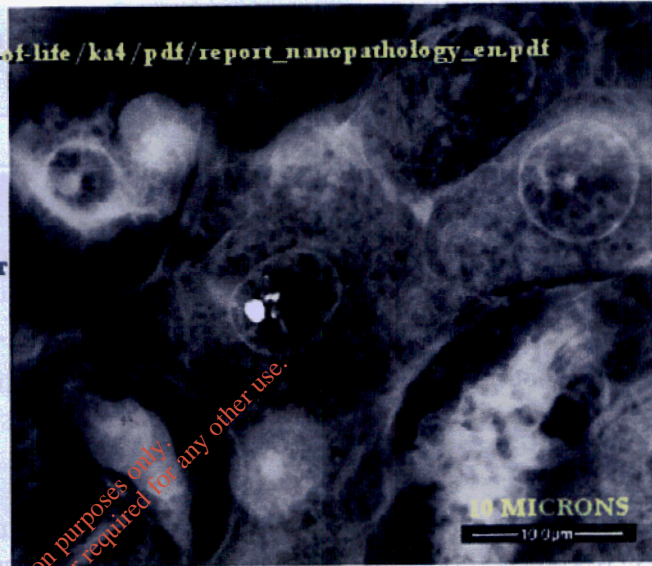
“Reducing ambient levels of fine particulates could substantially improve health: a mortality impact assessment for 26 European cities.”

Journal of Epidemiology and Community Health 2008;62:98-105; doi:10.1136/jech.2007.059857

: <http://jech.bmj.com/cgi/content/abstract/62/2/98>

http://ec.europa.eu/research/quality-of-life/ka4/pdf/report_nanopathology_en.pdf

Field emission Environmental Scanning Electron-Microscope image of a cancerous tissue of liver with a living cell containing nanoparticles in the nucleus.



Electron Microscope image of a cancerous tissue of liver with a living cell containing nanoparticles in the nucleus

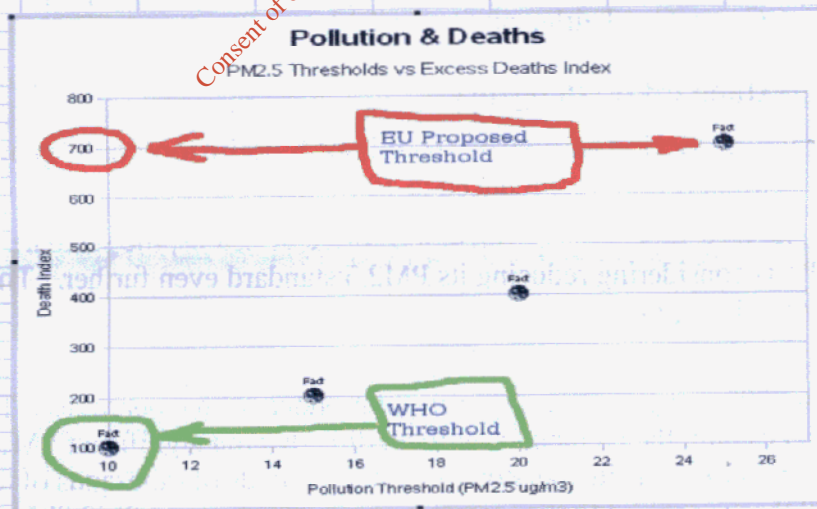


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Further background information is available if deemed appropriate.