

## **SHOULD REGULATORS PASS KILLING & MAIMING in BUCKS & BEDS?**

**Compiled 14 May 2009 & Copyright by Dr. Dick van Steenis MBBS**

Should you reside or work downwind of the proposed Bucks incinerator site, note it can be passed by the council, subject to agreement by the public health director and the Environment Agency. Note that incineration of waste causes a shortening of lifespan of up to 14 years (seen in Coventry), by increasing a range of diseases especially heart attacks & cancers. A university-led study in Belgium detailed diseases and deaths caused during years 1 to 5, 6 to 10 and 11 to 20, ending up with a 480% rise in cancer incidence on top of the country's rise, yet that St. Niklaas incinerator was operating under the EC 2000 directive, as would be this proposal. The proposed chimney will spread the damage up to 22 miles downwind (depending on weather conditions), including Buckingham, Brackley, Bletchley, **Stewkley**, Leighton Buzzard, Dunstable, Aylesbury & Berkhamsted. Operating temperature is usually quoted as 850C, but waste needs over 1250C to properly break down incinerated items.

Incineration of waste vaporises heavy metals making the particulates emitted even more lethal when you inhale them into your lungs. Emissions will consist of PM2.5 and PM1 particulates, which mostly pass through the abatement equipment and which go into the deepest part of your lungs when inhaled. 90% of PM1s escape through the abatement equipment. Your health can be put at risk for 2 days just from an hour's exposure if the wind blows the PM2.5s your way. Interaction of gasses and ultrafine particles from any other sources will form secondary PM2.5 particles, thus increasing the proposed incinerator's effects on health downwind. Wind direction, speed and temperature inversions are crucial factors. When you inhale PM1 and PM2.5 particulates the soluble fraction gets into the bloodstream and your cells, while the insoluble fraction is partly dealt with by macrophages and T-lymphocytes with the remnants walled off in the lungs causing COPD. The resultant inflammatory process can cause asthma, heart attacks, strokes & clinical depression. When in the cells, mutations will occur due to heavy metals, PAHs, dioxins, PCBs, any radioactivity or dioxins leading to altered gene function, birth defects & cancers. In USA even 12 year olds had 20% loss of lung peak-flow due to PM2.5 induced COPD. Unlike USA, where PM2.5s have been rigorously monitored & regulated since 1997, in the UK only PM10s (PM10 down to PM4—none of which gets into your lungs) are measured using instruments that can be adjusted to minus eg Brighton during June 2007 where PM2.5s read fraudulent minus 106ug/m<sup>3</sup> There is no regulation in the UK to protect the public. The May 2008 issue of Journal of the American Medical Assoc. proved (UK) PM10s have no relevance to heart or lung disease—it is only PM1s & PM2.5s that count, & these are emitted. A MILAGRO California study of Mexico City smog particulate content published 5.9. 2008 confirmed the smog arose from municipal waste incineration. A Korean study in 2003, revealed blood of those downwind had levels of dioxins/furans of 53.4pg (excess+) compared with 12.2pg in workers. If data of low birth weight, infant mortality, childhood asthma, cancers or age-standardised mortality & heart attacks are mapped out at electoral ward level as Michael Ryan & myself & others have done, comparing upwind with downwind as stated in the Environment Agency 2001 CLARINET report, all becomes clear.

The IPPC law was downgraded by Mr. Prescott in 2000 to "anything will do". The Environment Agency truthfully state they know nothing about health. Far worse, the Health Protection Agency heed a Guy's Hospital director who said "Air pollution does not exist" so have not done these required studies. Advisors have serious conflicts of interests. The notorious DEFRA 2004 review was written by a lobbyist for 5 incinerator companies. There was no data, complained the Royal Society. It was just sheer delusion. Without knowledge of toxicology or use of available data or relevant measurements, the PCT, HPA & EA only heed government "spin", "reviews" and "diktat". They lack a single peer-reviewed journal as evidence. I have 360 journal references backing up what I am telling you here. You must challenge your PCT public health director, who the GMC say must know the subject, be up to date and listen to & protect the public. The total NHS cost of this unregulated UK industrial air pollution is c.£55 billion pa plus losses to education, invalidity, productivity & crime. There will be cumulative & synergistic impacts in the body, eg cadmium & lead in the body will multiply the effects of mercury by 50 times, and pollutants within PM2.5s interact with your blood fatty acids to increase

risk of a heart attack. For PM2.5s, it only requires 8.5 ug/m<sup>3</sup> to reduce FEV1 by 60ml or 25ug for 2 hours to increase heart attack incidence by 46%. PCTs cannot afford the consequences.

The ONLY safe way of handling waste is PLASMA GASIFICATION, which operates on electricity, produces vitrified gravel, (hydrogen) & electricity –all for sale- and has very low emissions at a net cost of some £33 per ton. Who has the morals to protect the public?? Challenge the authorities to protect your health by instead installing this plasma gasification as best available technique. The EC directives on waste 2006/12/EC of 27 April 2006 and 2008/98/EC of 19 November 2008 insist member states use best available technology to protect public health. Plasco's plasma gasification in Ottawa had zero construction cost to government and under £5 million annual cost. Why let the regulators break EC law? Read Popular Science, March 2007. Other plasma gasification plants are built or planned in Wales, France, Florida, Michigan, New York, 11 others in USA, Puerto Rico etc. Veolia are building the Michigan plant while fobbing off English residents with an inferior incinerator by comparison (which is now not BAT or BATNEEC as required by IPPC law and this April 2006 EC directive). Even DEFRA admit in their July 2007 report that PM2.5s CAUSE illnesses and CAUSE premature deaths but so far have not acted on their new-found discovery which has been legislated upon in USA since 1997. Rates of the main diseases in USA (compare with list below) dropped 6% in 2005/5. The Infant Mortality in New York City is now at an all time low. The Harvard long-term follow-up found just 1ug/m<sup>3</sup> PM2.5s represented 3% of deaths of all causes. Exposure, not deprivation is what counts.

The range of illnesses caused by inhaling PM2.5 particulates from waste burning include---

- Birth defects, low birth weight babies (in direct proportion to PM2.5 levels), stillbirths & miscarriages.
- Premature deaths of babies, infants and adults. eg. London's infant mortality in zones downwind of the incinerators is 7 times higher than in wards upwind. (9.0 cf 1.3/1000 - ONS data 2003/5--M.Ryan)
- Four wards downwind of the Wolverhampton incinerator including Essington have average infant mortality of 15.3 per1000 births – while upwind right across to the Welsh Irish Sea coast has zero.
- T-lymphocyte diversion to lungs with depletion causes SIDS, cot deaths, autism, MS, GBS
- Attention deficit and other behaviour problems, some leading to crime (eg knife crime London).
- Lower IQ & educational achievement down 2 years, worse GCSE grades (due partly to PAHs)
- Asthma, COPD, respiratory & other infections (especially boys) and infant bronchiolitis.
- Coronary heart disease, heart attacks, arteriosclerosis, strokes, SADS.
- Diabetes-- Dioxins, arsenic, cadmium, lead & mercury are implicated.
- Endometriosis & other hormone disruption can arise from dioxin exposure.
- Multiple chemical sensitivity with allergies & arthritis
- ME, CFS, Hypothyroidism with low T3 level (adding to obesity)
- Clinical depression & suicides. Note suicide belt downwind of Ironbridge power station. Professor Weisler of Carolina found suicides, brain cancers & violence resulted from a new incinerator.
- CANCERS—non-Hodgkins lymphoma, brain, breast, colon, lung, prostate, kidney, liver etc
- Breast cancer for example can be caused by faulty genes (2%), HRT (5%) radiation, OP pesticides & herbicides, and from chimneys—cadmium, dioxins (& similar), & PAHs. Jersey's cancer deaths are higher than SW England especially breast cancer in screening age women (78 cf. 57 in England).
- Analysis of 9 health parameters in Telford by ward in 2005 revealed increases in illnesses, SMR (64 in ward upwind & 149 ward downwind. An incinerator built in Colnbrook 1990 caused Slough SMR to worsen from 88 to 121 by 2001 meaning about 11 years off lifespan. Those with internet access can check [www.ukhr.org](http://www.ukhr.org) and [www.countrydoctor.co.uk](http://www.countrydoctor.co.uk) (under pollution at bottom of main page) for more details. It is up to you to act or you will have the consequences imposed on you. The regulators normally just follow government “spin” & diktat & wrong advice.

GLOSSARY--

COPD = Chronic Obstructive Pulmonary Disease      PAH- Poly-Aromatic Hydrocarbons      CFS= Chronic Fatigue Syndrome      IPPC = Integrated Pollution & Prevention Control      USEPA = USA Environmental Protection Agency      SADS = Sudden Adult Death Syndrome