Emissions from a mass-burn incinerator at Capel become a major concern for those living within 16 miles due north, north-east and east of the site

Capel Action Group has been made aware of studies which link high infant mortality rates in locations that are downwind of a mass-burn incinerator.

Studies undertaken by Michael Ryan of UK Health Research¹ demonstrate how high incidences of infant deaths coincide with the close proximity to populations of power stations and incinerators. Three of the locations studied were at Kirklees, Coventry and Edmonton, in north London. In each location incinerators are operated by SITA UK Limited, who are the owners of Surrey Waste Management Limited, the company that has submitted a planning application for a mass-burn incinerator at the Clockhouse Brickworks site in Capel.

The three studies mapped the incidence of infant death rates in relation to the siting of incinerators and the direction of prevailing winds. Results for 2003 –2005 were:

	Infant Deaths per 1,000 live births DOWNWIND	Infant Deaths per 1,000 live births UPWIND
Kirklees	9.4	3.5
Coventry	8.2	3.2
Edmonton	10.5	2.5

The maps are attached.

In its Kirklees brochure SITA refers to its 2002 incinerator as a "state of the art EfW facility, which operates under the European Waste Incineration Directive". Yet infant deaths downwind at Kirklees are reported to be almost as high as in Edmonton, where SITA has been operating an incinerator since 1971.

CAG has long argued that newer generation incinerators would continue to be unsafe because they emit highly toxic PM2.5 particulates (fine particles), which cause serious heart and respiratory disease and are responsible for 9 out of 10 of all the deaths that can be attributed to air pollution in Europe. It is well understood in Europe how dangerous PM2.5s are and legislation to reduce population exposure to them is now in process².

If an incinerator were to be built and operated at the Clockhouse Brickworks site CAG has been advised that the infant mortality rate in Capel will not remain at zero, which it has been in each of the last four years. Furthermore in the light of the studies

it can be confidently predicted that emissions from the incinerator will impact far beyond the confines of Capel village. The reasons for this are:

- Surrey Waste Management's statement that the incinerator proposed for Capel would have a stack height of 70 metres, in order that emissions can be spread far and wide.
- The advice CAG has received that emissions, which will include highly toxic PM2.5 particulates, will travel up to 16 miles.
- The prevailing winds in Capel, which are south-westerly for up to 70% of the time.

As a result PM2.5 particulates can be expected to reach over 100,000 people in the following major towns for most of the time:

	Distance from site (rounded up to next full mile)	Population (Census 2001 data)
Redhill	10	25,751
Reigate	9	23,391
Horley	8	21,232
Caterham	15	20,957
South Earlswood an	d	
Whitebushes	9	8,234
Merstham	12	7,385

PM2.5 particulates carried by south-westerly winds can also be expected regularly to reach a total population in excess of 32,000 in the following villages:

Beare Green, Betchworth, Blackbrook, Bletchingley, Brockham, Buckland, Charlwood, Godstone, The Holmwoods, Hookwood, Leigh, Newdigate, Norwood Hill, Outwood, Salfords, Smallfield, South Godstone, South Nutfield.

Crawley (99,754 population), due east of the site, and Dorking (11,337 population), due north, will not affected as regularly but will not be immune.

It has been long known that the proposed incinerator in Capel would regularly affect the local population of 3,600, but the information contained in this paper demonstrates that this is no longer solely a Capel issue. The incinerator would have a much wider impact with over 132,000 people being regularly exposed to PM2.5 particulates.

This proposal must be defeated for the sake of existing and future generations.

We call on all residents in vulnerable areas to object now to County Councillors, District and Borough Councillors. We also encourage objections to members of Surrey County Council's Planning and Regulatory Committee, for it is they who will bear the ultimate responsibility, if collectively they vote in favour of an incinerator at the Clockhouse Brickworks site in Capel.

We expect to hold a public meeting to further expose these issues. Details will be communicated through the local press and on the CAG website.

Maps of the Kirklees, Coventry and Edmonton Wards are available on request or from the Parish Council web-site.

Capel Action Group January 2008

¹The studies analyse Office for National Statistics birth/mortality data at electoral ward level.

² The European Commission is currently proposing tougher new air pollution laws and these are now moving through the EU decision-making process. The Commission proposes merging the current various legal instruments for air pollution into a single legislative Act for Air Quality in Europe. But most importantly this Act introduces for the first time legislation against particles smaller than 2.5 micrometres (PM2.5s), with a view to reducing population exposure to these particles by 20% between 2010 and 2020. PM2.5s cause serious heart and respiratory disease and are responsible for nine out of ten of all the deaths that can be attributed to air pollution in Europe. Similar results can be shown for North America. The Commission estimates that air pollution shortens average life expectancy in Europe by more than eight months.