

SAVI, Stop Aylesbury Vale Incineration

A 10 point summary

Buckinghamshire County Council (BCC) proposes a 300,000 tonne/year mass burn incinerator at Lower Greatmoor Farm (LGF) near Grendon Underwood close to the existing Calvert landfill site in North Buckinghamshire. SAVI opposes the plan and proposes an alternative strategy for municipal solid waste (MSW) disposal in the county. Below are 10 reasons against mass burn incineration (MBI), and 10 corresponding reasons detailing the advantages of advanced thermal treatment (ATT). In these two pages we can only summarise. For more detailed arguments and facts, please see the supporting annexes as follows: Annex A, Planning, Consultation and the Law; Annex B, Alternative Technologies; Annex C, Health; Annex D, Transport; and Annex E, Environment and Tourism. Or go to our website at www.besavi.co.uk

10 reasons against mass burn incineration	10 reasons for advanced thermal treatment
<p>1. Centralisation MBI can only achieve competitive economies of scale at high volumes, 300,000 t/yr is a minimum figure. This means all Bucks municipal solid waste (MSW) has to be hauled long distances to a central point. WRG (the prospective contractor) will have to get more MSW from outside Bucks which now produces 140,000 t/yr, a figure which is falling as we continually improve our recycling rates.</p>	<p>De-centralisation ATT is competitively economical at low volumes, typically 55,000 t/yr. This means ATT technology can be sited around the county, close to where the MSW is produced and power is needed. To refute a frequent and false argument, ATT is scalable and a 350,000 t/yr unit is now being built in USA, but SAVI's view is that it's not appropriate for Bucks. Decentralisation has lots of advantages.</p>
<p>2. High Health Risk MBI is a serious health risk as evidenced by the requirement for a high chimney. Particulates are the most serious and cause increased risk of heart disease, birth defects, cancer and other health disorders. 90% of PM2.5 particulates are not scrubbed out of chimney emissions. Mercury, arsenic, nickel, lead, and dioxins are also present.</p>	<p>Low Health Risk Healthwise, emissions are more or less zero, and the ash is not hazardous.</p>
<p>3. Invasive, High Transport Requirements Hauling all of Bucks' MSW to one central point has severe transport implications. Bringing 160,000 tpa from outside the county to try to achieve economies of scale more than doubles the traffic and noise incidence. This could lead to further unwanted development. MBI is only a waste reduction measure – it does not solve the waste problem. Residual ash amounting to 1/3rd of the original weight (100,000 tonnes) must be disposed of. This toxic incinerator ash is classified as hazardous. Either this has to be transported to another site (more transport implications) or the existing landfill site at Calvert will need to be reclassified to accept hazardous waste. This reclassification will attract hazardous waste from outside the county (so more transport). The construction of a planned new access road is expensive and problematic from several viewpoints – environmental, social disturbance, and health.</p>	<p>Low Intensity Transport Requirements In Aylesbury we already have several businesses that handle the sort of volumes that an ATT installation would generate, 50,000t to 100,000t./yr., e.g. Shanks Recycling and ASM. The traffic they generate is unobtrusive for two reasons: they're already in well planned high traffic areas; and the unit size of such plants is one sixth to one third of an MBI plant. All of it, including the emissions and residues, is not hazardous. No new access road would be needed. SAVI's analysis of some of BCC's correspondence, and of a transport study it commissioned, seem to indicate a need for improved planning coordination.</p>
<p>4. High Local Environmental Impact Locally, the construction of a new planned access road from the A41 "will wipe out" at least one, perhaps three BAP¹ species, and seriously jeopardise at least one SSSI. Once demonstrated</p>	<p>Low Local Environmental Impact There is low or no environmental impact in the sort of locations suitable for ATT, e.g. urban or industrial locations. Flue emissions are negligible (including much</p>

¹ Biodiversity Action Plan. BCC, like all county councils, is legally responsible for BAP species preservation

<p>beyond reasonable doubt, this is not a matter for discussion – it's illegal.</p> <p>Globally and regionally, MBI is now dangerously out of date. Nitrous oxide, CO₂, dioxins, furans and mercury are some of the harmful chemicals that come out of an MBI chimney.</p>	<p>reduced CO₂ which is eventually burnt productively as methane.</p> <p>'Plasma rock' residue is inert and 1% of the original MSW waste weight</p>
<p>5. Low Energy-from-Waste efficiency</p> <p>Engineers and financial managers see this aspect as MBI's Achilles Heel. Low electrical generation efficiencies from MBI plants result in uncompetitive gate fees per ton of MSW. Rising power prices mean that MBI is out of date. This high gate fee means higher council tax bills</p>	<p>High EfW efficiency</p> <p>This is where ATT really wins for those who do not place a cost on health, transport, environment, local businesses, and social disturbance, i.e. for those who look only at straight financial returns. ATT is at least three times more efficient than MBI. See also point 10 below.</p>
<p>6. Offensive Visual Impact</p> <p>The proposed building is as high as Nelson's column, and as high as the electricity pylons which North Bucks residents love to hate. The proposed chimney is three times higher, over 300 feet.</p>	<p>Acceptable Visual Impact</p> <p>No big buildings and no big chimneys are needed. So the plants don't have to be "hidden" in remote rural areas. They would look normal in an urban/ industrial setting</p>
<p>7. Negative for Local Businesses</p> <p>Tourism contributes more to GDP than farming even in rural North Bucks; together they're about 5% of GDP. Tourism particularly would suffer due to a perceived deterioration in the environment</p>	<p>Acceptable for Local Businesses</p> <p>ATT would fit neatly alongside most other local businesses, in urban industrial estates. In some countries ATT plants are sometimes part of businesses that generate a lot of waste and have a high power requirement. ATT plants have been installed in ships and hotels.</p>
<p>8. Discourages Recycling</p> <p>WRG have taken the opportunity to introduce 150,000 tonnes of bio-waste to the incinerator (bio waste would attract the Landfill Accelerator Tax if put into landfill), completely bypassing the recycling route. The huge appetite of MBI militates against recycling targets. The fly and bottom ash can't be used productively, it goes into landfill.</p>	<p>Encourages Recycling</p> <p>The financial incentive to deliver contracted tonnages of MSW, and the penalty of fines if it not, are removed, thus encouraging recycling. The residual inert 'plasma rock' can be recycled as building materials</p>
<p>9. High Impact on Global Warming and against central Government policy and the international trend</p> <p>Government offers no Renewable Obligation Certificates for the incineration of MSW waste.</p> <p>UK is behind many other countries because we don't connect power and waste together in a positive manner. As a result we burn more waste unproductively and have to generate more power separately. The MBI will produce 1m tonnes of CO₂ a year, and trucks will travel 1m miles</p>	<p>Low Impact on Global Warming and with central Government policy and the international trend</p> <p>Displaces coal fired electrical generation. Coal produces 3.6 tonnes of CO₂ for every tonne of coal burnt. Government offers Renewable Obligation Certificates for all wastes processed by ATT</p> <p>Looking further ahead, perhaps 6.5% of UK's total power could be derived from MSW. This puts ATT in the same ball park as other major renewable power sources</p>
<p>10. High cost</p> <p>An industry manager indicates a contract gate tariff for MSW of £120/t. This straight financial figure does not take into account shadow economic costs, (aka social costs), of health deterioration, increased traffic, deteriorating environment, and impact on rural businesses (such as tourism), and house values. There is no indication yet that BCC has done such an economic assessment. But it does take into account income from energy derived from waste (25% of return on capital), from recycling (both of which are poor relative to ATT), and a £70/t landfill tax for ash.</p>	<p>Low cost</p> <p>The same industry manager indicates a contract gate tariff for MSW of £70/t. An economic (as opposed to financial) assessment would take into account social savings due to improved health, lower traffic costs, a protected environment, and protection of rural businesses, all of which make the case for ATT even stronger. But it does take into account income from energy derived from waste (75% of return on capital), and from recycling (both of which are high relative to MBI).</p>