



CHEL滕HAM

BOROUGH COUNCIL

OUNCILLOR ROGER WHYBORN

Programme Officer
Ms Yvonne Parker
2 Priory Court
Burnley
Lancashire
BB11 3RH

16 November 2011

Dear Ms Parker,

GLOUCESTERSHIRE WASTE CORE STRATEGY (CS)

We wish to make further representations to the examination of the above. Firstly we would want to establish with you that the attached draft(s) are eligible as a written submission, principally under Issue 7.

This Council's present stance on the processing of residual municipal waste has developed in the light of knowledge recently gained, and advances in technology since the CS was formed in 2007; hence the Council can no longer support a Technology Neutral approach to processing of residual waste.

We note that in 6.4 that the residual municipal waste management procurement process per se cannot be challenged in this hearing. However this Council believes that the Technology Neutral input to that process has the potential to produce a result which is flawed, perhaps severely flawed. It has proved impossible for us to make any objective study of competing technologies, specific to the scope of Gloucestershire County Council (GCC) as a waste disposal authority, due to the confidential nature of the data within the procurement process, and the fact that GCC has done little or no studies of its own, preferring to rely on the Technology Neutral bidding process to come up with the right answer.

You will appreciate that as a relatively small district council, our resources are limited. Nevertheless through the diligence of its members and officers, it has become clear within the last few months that there is at least one, and maybe more than one, alternative technology to the EfW (Energy from waste) proposed by GCC's top two successful bidders, and which carries far fewer of the difficulties usually associated with EfW, and is potentially far more advantageous environmentally. It also appears to be cost-effective. This council believes that this subject is so important that alternative technologies should be examined, independently of the procurement process, and in public. Without re-examination there is significant risk of a massive error and concomitant mis-application of public funds. We therefore hope you will see fit to include our submission as a valid contribution.

This council also has some concerns over the health issues associated with the processing of fly-ash and other, potentially hazardous waste arising as expressed in our earlier responses to the WCS Publication (10 February 2011) and Focused Changes (8 August 2011) under Issue 5, and also impinging on Issue 2 (Q3). We are enclosing two subsequent letters sent to GCC's Planning department regarding the recently approved Wingmoor Farm planning application dated 8 April 2011

and 8 September 2011, which we believe should be taken into account, given public concern over the hazards referred to.

Yours sincerely,



Clr. Roger Whyborn
Cabinet Member – Sustainability

Enc:

CBC – Position Statement

Letter dated 8 April 2011

Letter dated 8 September 2011 (and accompanying attachment from NHS)

GCC PROPOSED RESIDUAL WASTE INCINERATION PROCESS

This paper is mainly drawn from the writer's letter of 14th October 2011 to County Cllr Waddington which followed the motion passed by Cheltenham Borough Council (CBC), and which appears as Appendix 1 to this letter. It is submitted under Issue 7 of the hearing, but impinges on many of the other issues.

The above letter refers to an earlier (Dec 2010) stakeholder consultation which was the subject of widespread criticism at the time, especially the dearth of meaningful process comparisons from GCC at the time – even under FoI requests by GCC members. I said then “CBC simply has not been provided with the level of information upon which I would want an answer to be given.”

Substantially that is still the case, but in the light of the emergence from elsewhere of evidence of viable alternatives, CBC felt it is imperative to draw a number of issues to attention. In truth, it has taken some months to get to a point where CBC have felt there is sufficient *prima facie* evidence to propose - on record - that there are alternatives to EfW (Energy from Waste, Incineration) which are not only more publically saleable, but also make economic sense. Whilst we appreciate this conclusion is later than desirable, there is still time to make a “mid-course correction” on what might otherwise be a wrong and very expensive course, and which could take a couple of decades to recover from.

This Council's concerns are centred around several issues:-

Economics

Various capital figures have been quoted in sources, but as a ball park figure £500M is often used, with a payback of £150M over the 25 year life. (It has recently emerged that the £500M includes revenue payments, but this dearth of information all adds to the general sense of obfuscation.) Who knows what waste technology will be around then? There is therefore real anxiety amongst members of CBC about the huge financial risk to which the County Council tax-payer will be exposed. This concern is compounded by two matters:-

(i) The EfW plant is a large inflexible continuous process, requiring a certain baseload of waste to be fed to it, in order for it to work. It is good to have reached 50% recycling in Cheltenham recently, and good to have a 70% aspiration across the County, but indications are such that recycling rates in excess of 80% are achievable, and beyond, which must put in jeopardy the prospect of finding sufficient domestic (or indeed commercial) waste to feed it. After all, 10 years ago, today's recycling rates would have been regarded as unachievable, and madness. GCC have said that they would divert commercial/industrial waste in the event there was insufficient waste to feed the plant; however this argument lacks robustness, as it is to be expected that recycling levels of C & I waste will also greatly improve over time.

(ii) A visit was made by three CBC members to the Mechanical Biological Treatment (MBT) plant at Avonmouth, two of whom were respectively an engineer and a chemist, educated to degree level. The members understood the MBT plant had a capital cost of c£25M, and has been specified on the basis of a 9 year payback. This plant is taking 120,000 tonnes p.a. of waste from the West of England Partnership – BANES, Bristol, North Somerset, South Glos. Unlike EfW plant this plant is a series of modular low cost units, and thus can be expanded or contracted easily. Being only a semi-continuous dayshift operation, its capacity is very flexible.

In this particular plant, many usable fractions such as metals, paper and card, and plastics are pulled out from the waste stream using mechanical processes, then most of the rest is put through a 35 day aerobic composting degradation process, and eventually from that area comes a soil conditioner, and a quantity of inert residual waste, which must be landfilled.

The question of gate fees was discussed with New Earth Solutions (N.E.S.) who runs this plant, factors such as contract length and tonnage affecting this, and gate fees very close to those quoted for EfW were claimed. Latest CBC understanding is that WRAP quotes that the median is actually £81 or £65 depending on size, see

http://www.wrap.org.uk/downloads/Gate_Fees_Report_20112.30550a48.11009.pdf

Whatever the detailed situation on gate fees, we would be surprised if they were very significant differences, given that neighbouring authorities have found it economical to use this plant, which only opened in April 2011. There will be other considerations, not only environmental and health, but also issues with payback time and capital risk.

CBC members are also appraised of a gasification plant near Swindon, albeit without much detail, nevertheless it as another process to consider, along with other non-incinerative processes around the UK.

We think that the Labour government's high capital PFI approach tended to point towards Energy from Waste as a reference process. When PFI was withdrawn, and with capital costs as low as £25M for an MBT plant, there was an opportunity for a re-think, which may not have been fully taken.

Public Health

You will be aware that expert opinion is divided on this subject, and we wrote to GCC's planning authority expressing this authority's concerns over the health effects of land-filled toxic fly-ash, in connection with the Grundon plant at Wingmoor Farm – particularly as regards small particles in the atmosphere. In terms of the proposed Incinerator itself the concern is toxic fly-ash which escapes the chimney into the atmosphere, though presumably that which doesn't escape will be buried somewhere, perhaps elsewhere in the UK, with all the attendant health concerns. Whilst in no way seeking to criticise Professor Harrison who advised GCC, one would have to point out that contrary views exist. Cllr. Bickerton in his address to Council quoted a 2008 report by the British Society of Ecological Medicine, which indicated an expectation of very significant numbers of additional cancers (cardio-vascular, stomach, and also Asthma) within 7.5km of a typical EfW plant. The root cause of such would be Ammonia, Dioxins, heavy metals and more. Whilst the HPA refutes the BSEM report, the BSEM then went on to give a very firm rebuttal.

This sort of expert debate took place of course over tobacco and asbestos in the past,

What is not in doubt of course is the public perception of the health issue. The numbers of objections to a typical incineration plant would be numbered in high tens of thousands. Whereas the numbers of objections to the MBT plant mentioned above were *de minimis*. We feel that insufficient attention has been given by GCC to this particular aspect.

Environmental concerns

Cllr Bickerton received the following statistics from the N.E.S. plant at Avonmouth

- -3-5% metals-recycled
- -5-8% rigid plastics-recycled
- -12-18% compost like output (pasteurised) -recycled
- -20-25% losses in process–mass degradation by aerobic composting and moisture loss
- -40-45% energy recovery–biomass rich RDF and some plastic film to cement kilns
- -15-20% residues to landfill – front end rejects e.g. mattresses and plastic film mainly

N.E.S. claim, subject to checking, that of the 120,000 tonnes p.a. of domestic residual waste from the WoE Partnership – BANES, Bristol, North Somerset, South Glos, at least 3 of the 4 authorities are already pulling out food waste before it reaches the plant. So the organic content is not especially high. Nevertheless the claimed residual content to landfill (15-20%) is lower than from incineration. Moreover it is relatively inert and would have further scope for product recovery. Very importantly, because they are recovering products like metals and plastic from the waste stream, there is huge environmental benefit there: To quote a familiar example, the energy required to recover a tonne of aluminium from waste is a mere fraction of the energy required to extract a tonne from mined bauxite.

Many more environmental points could be cited. However we understand from a 2010 report by Eunomia commissioned by N.E.S., which evaluates the plant at Kings Weston Lane (then not built of course), as having a better Carbon position compared to EfW, and very much better than landfill. In the limit, the comparison to landfill is approximately 1T of CO² per 1T of waste.

Transport:

Of concern to collection authorities is that any new plans for disposal of residual waste should take into account the journey times and distances from collection point to disposal, and any consequential CO² and cost effects of extended journey times by collection vehicles, or by added journeys from transfer stations. We should expect that vehicle fuel costs are likely to rise in real terms in the future, so we see it as important to minimise mileages. It is not entirely clear that alternative plants could be economically small enough to enable more than one plant in the County. However it is very very clear that incineration will dictate a single central plant.

Wider considerations

Process definitions can be a something of a problem, and we are aware there are at least two variations of the MBT process. The one referred to in this letter has a front-end sorting process, followed by an accelerated composting process to produce a conditioner. We could also talk about Gasification/pyrolysis/advanced thermal treatment, autoclaving and more.

However the point made by members on Monday 10th October was that not only should all those issues be considered, but that this evaluation must done in public. Hence it can be scrutinised by all, and so the public, having had the subject properly demonstrated, can “buy in” to a proposal which carries wide understanding and consensus at all levels. Attempts to have this type of open approach to process comparisons have however been rejected by the County Council all along, principally citing bidder confidentiality.

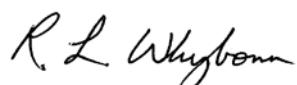
This is arrant nonsense. There are many non-supplier-specific-ways of making that comparison, well within the competence GCC and its technical advisors.

Unfortunately the process comparison exercise has been effectively ‘hobbled’ by the technology-neutral approach to the subject adopted by GCC. CBC members – and some GCC members - were very critical of this approach, which effectively puts the onus on the supplier to choose the process. Evaluation of it is not as scientific as it may appear since choice of weightings has huge effect on the process selected.

The question we are bound to leave is this: The process at the new MBT (Mechanical Biological Treatment) plant which we refer to, must surely be in the frame for evaluation? Four local authorities in the West of England Partnership – BANES, Bristol, North Somerset, South Glos, obviously decided that the process was safe, cost-effective, and environmentally acceptable, so why is it different just over the County boundary?

We think it is vital to get this right now, rather than rush a decision. Hence Cheltenham Borough Council’s motion calls upon GCC to pause on the selection of incinerator (EfW) schemes, until other processes have been openly and fully evaluated in terms of their economic, health, and environmental impact, and that these process comparisons must be objectively demonstrated, scrutinised and debated, that is to say in public.

Yours sincerely



Cllr Roger Whyborn
Cabinet Member Sustainability
(For Cheltenham Borough council)

APPENDIX 1 – CBC MOTION PASSED BY MEMBERS ON 10/10/2011

The Council requests of Gloucestershire County Council, as part of the Waste Management Strategy of reducing Landfill, that alternative UK waste technologies are considered in detail along with the existing incinerator schemes being put forward for Javelin Park/Haresfield.

Further, the council agrees there are alternatives to mass incineration of domestic waste, mature technology which has economic advantage both in the short-term and overall life cycle costs, more environmentally friendly, and compatible with the planned future improved recycling rates across the County.

Therefore Cheltenham Borough Council calls upon Gloucestershire County Council, to pause on the selection of incinerator schemes, until other processes have been evaluated in terms of their economic, health, and environmental impact, and that these process comparisons must be objectively demonstrated, scrutinised and debated in public.

Mr G Jones
Development Processes Manager
Environment Directorate
Gloucestershire County Council
Shire Hall
Gloucester
GL1 2TH

ask for: Councillor Roger Whyborn
ddi number: 01242 231458
email: cllr.roger.whyborn@cheltenham.gov.uk
our ref:
your ref:
date: 8 April 2011

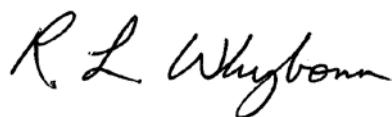
Dear Mr Jones

Planning Application Ref: 09/0028/TWMAJW: Proposed continuation of mineral extraction and restoration through the importation of wastes at Wingmoor Farm Integrated Waste Management Facility (East), Stoke Orchard Road, Bishop's Cleeve

Thank you for your letter dated 22 March 2011 regarding the dust monitoring project that has recently been undertaken for the above application. We note the findings and recommendations in the reports of the Environment Agency and the Health Protection Agency which indicate that the site is operating within the acceptable limits. Therefore, we have no evidence to support popular views which have been expressed locally that the application should be refused.

However, we still have concerns over the potential impact on the wider communities situated around the site, particular if there remains any possibility for significant quantities of dust to blow around the surrounding areas, even if non-toxic. For this reason, whilst the Council raises no objection to the application, this is subject to the continued use of the stringent conditions imposed by the Environmental Permit.

Yours sincerely



Councillor Whyborn
Cabinet Member for Sustainability

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Ms Sarah Pearse
Development Processes Manager
Environment Directorate
Gloucestershire County Council
Shire Hall
Gloucester
GL1 2TH

ask for: Councillor Roger Whyborn
ddi number: 01242 231458
email: cllr.roger.whyborn@cheltenham.gov.uk
our ref:
your ref:
date: 8 September 2011

Dear Ms Pearse

Planning Application Ref: 09/0028/TWMAJW: Proposed continuation of mineral extraction and restoration through the importation of wastes at Wingmoor Farm Integrated Waste Management Facility (East), Stoke Orchard Road, Bishop's Cleeve

Further to my letter dated 8th April 2011 regarding the dust monitoring project that has recently been undertaken for the above application, I have received a number of representations from members of the public, there are two main themes:- One concerns the fact that only one monitoring station was used for the Health Protection Agency (HPA) sampling exercise. The second concerns the safety, or otherwise, of the very small particles in the atmosphere originating from the site, i.e. sizes PM2.5 to PM4 and below of the relevant chemicals. The HPA report appears on first reading to work on PM10 only. On making further enquiries (see attached response from NHS Gloucestershire), this Council's understanding is that PM2.5 is included within PM10 which has been covered in the HPA report.

However, we are further advised that a reduction in levels of particles below 2.5 $\mu\text{g}/\text{m}^3$ (PM2.5) in the exposure to the population (as expressed as an annual average PM2.5) can have appreciable benefits. Due to their small size the particles are more likely to be deposited deep in the lungs and in the air spaces involved in gas exchange. Therefore exposure to particulate matter may be associated with respiratory and cardiovascular illnesses. That there is some level of hazardous material escaping into the atmosphere is not in serious doubt. Whether there is significant hazard and risk to the surrounding population is not within our competence to answer.

In view of its proximity to residential areas within the Borough, Cheltenham Borough Council feels unable to give unqualified support to this application at this time, and feels that the Planning committee at Gloucestershire County Council should satisfy itself on the above point before proceeding to any decision to approve. If necessary, further studies should be undertaken by GCC. We would also re-iterate our point made in the letter of 8th April that it would not be satisfactory if there remains any possibility for significant quantities of potentially hazardous dust to blow around the surrounding areas.

Yours sincerely

A handwritten signature in black ink, appearing to read "R. L. Whyborn".

Councillor Roger Whyborn
Cabinet Member for Sustainability

Enc: Copy of Email from NHS Gloucestershire

$\alpha\beta\chi\delta\varepsilon$

From: Caryn.Cox@glos.nhs.uk
To: James.Hartley@cheltenham.gov.uk
Cc: Tracey.Crews@cheltenham.gov.uk
Subject: Wingmoor
Date: 01 January 4501 00:00:00

James and Tracey

I have had the following response from the HPA with regard to the Wingmoor dust query.

Let me know if there is anything further you require.

The local resident has contacted the Local Councillor about the monitoring results and the health impact of dust below 2.5 $\mu\text{g}/\text{m}^3$ (PM2.5).

The measurements taken by the Environment Agency and which the HPA commented on previously mentions PM10. PM10 includes PM2.5 and thoracic coarse mass particulate matter (difference between PM10 and PM2.5). Therefore the response sent on 24th February 2010 would have included measurements of PM2.5 in the analysis and therefore the conclusions would remain the same.

In regards to the health impact of PM2.5, due to their size the particles are more likely to be deposited deep in the lungs and in the air spaces involved in gas exchange. Therefore exposure to particulate matter is associated with respiratory and cardiovascular illnesses and the Committee on the Medical Effects of Air Pollution (COMEAP) have concluded that a reduction in the exposure to the population (as expressed as an annual average PM2.5) can have appreciable benefits.

Many thanks

Caryn

Caryn L Cox
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