Allerton Waste Recovery Park

OBJECTION TO AMEY CESPA PROPOSAL AT ALLERTON PARK

Planning Application reference: NY/2011/0328/ENV

31 January 2012

North Yorkshire Waste Action Group
c/o Steve Wright, Beverley House, Stonegate, Whixley, York Y026 8AS
Email steve@nywag.org

Shaun Robson,
Planning Services,
Business and Environmental Services Directorate,
County Hall,
Northallerton DL7 8AH

Allerton Waste Recovery Park (AWRP)
Planning Application reference: NY/2011/0328/ENV

Dear Mr Robson

This letter formally registers the objection of the North Yorkshire Waste Action Group (NYWAG) to the proposed Allerton Waste Recovery Park (AWRP) facility at Allerton Quarry, Planning Application Y/2011/0328/ENV. This letter includes two new chapters - on "*Need and Technology Choices*" and "*Environmental Insults: Environmental Risks; Traffic; Visual Impact* ". Like earlier chapters, they contain many points for refusal of planning permission. This is our third letter and follows our earlier letters to you setting out our objections in a number of areas related to the harm that the proposal would cause.

The North Yorkshire Waste Action Group (NYWAG) is a pressure group of concerned residents that favours a sustainable solution to waste management. As stated in our previous letters we have submitted a petition of over 10,000 signatories who oppose the AWRP proposal. We therefore represent a major body of opinion that wishes to see planning permission for AWRP refused.

We have not previously objected to any earlier planning application for waste treatment or disposal at Allerton Park and we are **not opposed** in principle to an appropriate treatment facility being located on this site. We fully recognise the imperative of diverting waste from landfill and believe that there is now an opportunity to create an environmentally sound strategy for waste management. Such a strategy would not include the AWRP proposal for which the Applicant has not established need. Instead, it would reduce the amount of waste produced and maximize re-use and recycling and treat residual waste using Mechanical Biological Treatment (MBT) and Anaerobic Digestion (AD). It would avoid incineration and the associated environmental and health risks and the unnecessary long term financial commitments and risks.

Our objections stem from the need to ensure an optimum solution to the waste problem that is sustainable in economic and environmental terms. The proposed AWRP cannot achieve this. Thus, **we object strongly to the AWRP proposal and request that planning permission is refused.**

This is because: the application runs counter to the UK's national and international commitments on climate change; breaches certain other international commitments; is contrary to EU, National and District Planning Policies; will cause harm to the environment and human health and well-being, to the economy and to sustainability; that harm cannot be mitigated; and the applicant fails to prove a need that overrides the harm.

We highlight the following additional key points:

- The choice of a single site to treat all of North Yorkshire's waste makes no sense given this is the largest rural county in England. The position of the AWRP site is wholly inconsistent with the localism policy, being at one corner of the county.

- There are alternative sites, dismissed by the applicant that could be used in isolation or (preferably) together to better meet the strategic needs of NYCC/CYC. The site selection process appears not to have followed good practice (e.g. EfW plant with CHP are preferable, according to DEFRA) and may have been influenced by a wrong appreciation of the potential for recycling and by a lack of any appreciation of public perceptions concerning the acceptability of various technology options.
- Despite the York City area being the largest waste producer, sites within this area are excluded without proper justification. One such is the former British Sugar Factory (site 041), which is well located to receive waste from York and areas such as Scarborough, Thirsk and Northallerton; it also offers options for Combined Heat and Power (CHP). By contrast, the AWRP site does not have any CHP potential and would therefore add to the avoidable and unnecessary adverse climate impacts associated with the EfW (incineration) plant.
- AWRP would be a massive and highly visually intrusive industrial development that would be out of place in a rural setting. This results in major adverse landscape and visual impacts that cannot be mitigated.
- Social and economic impact that derive from: fear of the adverse health impacts arising from incinerator emissions; lower air quality; adverse impacts on living conditions for people living nearby coupled with economic penalties (e.g. lower house prices) and adverse traffic impacts. These are material concerns.
- The applicant's attempt to justify AWRP on the grounds of renewable energy generation fails for the EfW (incineration) component because it is not a renewable energy source (as is made clear in PPS22). It is a high carbon technology and the applicant quotes policies which relate to low carbon technology and climate change which the proposal does not adhere to. Moreover, planning decisions on waste facilities should relate to waste rather than secondary considerations such as energy which is merely a minor by-product. The applicant must therefore demonstrate why this particular technology is suitable for this location and in this regard he fails.
- Granting planning permission for AWRP would seriously undermine the developing Core Waste Strategy, which should set the strategic case for what needs to be done when and how to meet the waste treatment needs in NYCC/CYC.

We summarise our case in this covering letter and in the detailed responses previously submitted together with those attached with this letter. We also reserve the right to make further comments later.

Finally, we reiterate our strong objections to the AWRP proposal and request that planning permission is refused. In doing so, we are in full agreement with the objections submitted by Marton cum Grafton Parish Council on behalf of a number of other Parish Councils.

Yours sincerely,

Steve Wright

Chairman, NYWAG

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SUMMARY OF GROUNDS FOR OBJECTION

AWRP is contrary to Planning Policies and to National and International Commitments

Planning Policies

AmeyCespa quote a number of Planning Policies without demonstrating that the proposed AWRP would comply with them. In many cases the reality is that AWRP would be contrary to these policies. We explain the deficiencies of AmeyCespa's interpretation of planning and other policies throughout the supporting chapters that we have submitted in support of our Objection to the proposed AWRP. We also agree with the material on planning policies set out in the objections submitted by Marton cum Grafton Parish Council (McG PC) on behalf of a number of other Parish Councils and see little point in repeating them here.

By way of illustration, AmeyCespa (para 1.11.37) mention saved Policy 4/1 (the main locational policy) which is one of the policies within the Waste Local Plan (WLP), the statutory policy document for waste management planning in North Yorkshire. They also quote it at para 10.4.10 as saying "*Policy 4/1 Waste management Proposals - Proposals for waste management facilities will be permitted provided that:*" conditions a) to j) below are met. In reality none of them are met as set out below (the policy conditions are in italic bold):

a. ***The siting and scale of the development is appropriate to the location of the proposal***
AWRP would be a massive and highly visually intrusive development of an uncompromisingly industrial architecture that would be wholly out of place in a rural setting. The resultant major adverse landscape and visual impacts cannot be mitigated. This means AWRP also fails WLP Policy 4/1.

b. ***The proposed method and scheme of working would minimise the impact of the proposal***
AWRP would have avoidable and substantial adverse impacts on the environment and human health which are a direct result of the technology chosen. The demand to bring in waste from the entirety of North Yorkshire and the City of York means excessive traffic and hence road accidents that would not be associated with other methods and schemes of working to deal with NYCC/CYC municipal waste.

c. ***There would be no unacceptable environmental impact***
Incineration is the worst waste management option other than landfill for greenhouse gas (GHG) emissions so that this technology choice runs counter to the UK's national and international commitments on climate change and to local policies that derive from it. It would also contravene planning policies PG13 and PG22. In addition, a wide range of other emissions from the EfW (incinerator) give rise to pollution over a wide area that leads to harm to human health (with babies and young children being amongst those most at risk), to the environment and ecosystems, and to our local architectural heritage. Visual impact would be unacceptable (see a) above) and cannot be mitigated. This will adversely affect a large number of public footways and bridleways.

d. ***There would not be an unacceptable cumulative impact on the local area***
The effects of climate change are cumulative and include but go beyond the area where the GHGs are emitted. Many of the other emissions are bio-accumulative and therefore their effects on human health and on the environment more generally are both cumulative and unacceptable. The environmental effects of pollutants on both ecosystems and the built environment will also build up over time.

e. ***The landscaping and screening has been designed to effectively mitigate the impact of the proposal in a way that is sympathetic to local landscape character***
We agree with McG PC that none of the so-called mitigation measures reduce, mask or change the visual and landscape harm to the immediate and distant landscape caused by an alien structure in what is otherwise open countryside and that the proposed Section 106 Agreements are irrelevant and deficient in scope and impact to offset this harm. We believe the fact that £1 million in compensation will go solely to the owner of Allerton Park and will not benefit the wider community could prove socially divisive. The proposal to repair six small monuments and a boundary wall provide no effective mitigation to the general public who have little or no access to these. The proposed Community Heritage Fund is inadequately

specified. Like McG PC, we fail to see why members of the public should be required to apply for funds so they can mitigate the impacts of AWRP when this is the responsibility of the applicant.

f. ***Where appropriate, adequate provision is made for the restoration, aftercare and management of the site to an agreed afteruse***

The proposal is remarkably light on decommissioning (where very few details are given) and subsequent restoration of the site. Indeed, beyond acknowledging that "*the proposed development would result in part of the quarry being unable to be restored as originally anticipated*" AmeyCespa say nothing of value concerning decommissioning of what could by then be polluted land in a rural and agricultural environment.

g. ***The proposed transport links are adequate to serve the development***

Transport links are not fully adequate and traffic from AWRP (particularly during the operational phase) would have a material adverse impact on the local road network and the significant element of HGV movements will increase congestion and accident risks. In particular: a single site for dealing with NYCC and CYC waste maximises vehicle mileage and therefore adverse impacts; emissions of CO_2 and other pollutants damage the environment and local ecosystems; the large number of HGVs associated with the development will be detrimental to the safety and security of residents and North Yorkshire road users. There are serious safety issues concerning the A59/A168 junction, especially during periods of peak traffic flow giving rise to enhanced accident risks. This has both financial and social costs.

h. ***Other environmental amenity safeguards would effectively mitigate the impact of the proposal***

We reiterate the comments made at e) above. In addition, monitoring of pollution from the EfW (incinerator) is the most basic safeguard and yet it is open to criticism. Our concerns include the quality and nature of monitoring covering the way that it is done (too infrequently, as with dioxins and heavy metals, no checking of start-ups and shut-downs, no unannounced checks), the compounds monitored (too few and some of the most serious hazards such as ultrafine particles not measured at all), the levels deemed acceptable (some health risks have no lower threshold or low-dose toxicity), failure to apply the precautionary principle, lack of monitoring of body burdens in the local population or the build-up of pollutants in the locality. The most dangerous particulates are $PM_{2.5}$ yet they are not monitored at all – only the far less relevant PM_{10}.

i. ***It can be demonstrated that the proposal represents the Best Practicable Environmental Option for dealing with the waste***

AWRP is not the BPEO for dealing with the waste as there are cheaper, cleaner and more environmentally friendly alternatives. For example, the EfW (incinerator) is, like all incineration, the worst waste management option other than landfill for GHG emissions, a position exacerbated by the fact that there is no realistic prospect of it operating in CHP mode. (This is contrary to Government policy). Moreover, incineration produces a wide range of other emissions that many other waste management technologies do not. Alternative technology choices would avoid these risks and the concomitant harm. By choosing a single site, the proposal maximises the impact of and risks associated with road traffic (see also g) above).

McG PC also point out that the BPEO means communities *"taking more responsibilities for their own waste and enabling waste to be recovered at the nearest appropriate installation by means of the most appropriate methods and technologies"* (PPS10) and that the proposed location can only be considered as proximate if 'community' is defined as the whole of North Yorkshire, and if the best available technology requires a large single facility. Neither condition applies.

j. ***The location is geographically well located to the source of the waste thereby according with the proximity principle.***

AWRP fails the proximity principle, it stops communities taking responsibility for managing their waste locally, and it is not the most appropriate technology for this site.

National and International Commitments

The UK is committed under the United Nations Framework Convention on Climate Change and the legally binding measures of the **Kyoto Protocol** to cut GHG reductions**.** The latest round of climate talks in **Durban** will

for the first time bring all major emitters into international efforts to limit global warming. The EU will place its current emission-cutting pledges inside the legally-binding **Kyoto Protocol**. Talks on a new legal deal covering all countries will begin this year (2012) and end by 2015, coming into effect by 2020.

The 2003 Energy White Paper set out the UK's long term goal of reducing CO_2 emissions by some 60% by about 2050, with real progress to be shown by 2020. The Climate Change Act introduced a long-term legally binding framework to tackle climate change and meets its commitments. It requires that emissions are reduced by at least 80% by 2050, compared to 1990 levels and introduces legally binding carbon budgets, which will set a ceiling on the levels of GHGs that can be emitted into the atmosphere.

AWRP's EfW (incinerator) is the worst alternative to landfill for emitting GHGs and is therefore a high carbon technology. As such, **granting planning permission would run counter to the UK's national and international commitments on climate change and planning policies that stem from them**.

As revealed in our chapters on *Harmful Emissions* and *Health Risks*, incinerators emit a wide range of pollutants that carry a wide range of risks to human health. It is therefore arguable that the EfW (incinerator) at AWRP would contravene basic human rights as stated by the United Nations Commission on Human Rights, in particular the Right to Life under Article 2 of the European Human Rights Convention.

The Stockholm Convention, which the UK has agreed to commits countries to eliminating persistent organic pollutants, including PCB, dioxins and furans, calling for countries to prevent not just the *release* of these pollutants but also their *formation*. The formation of these substances is an inevitable consequence of the use of incinerators such as that proposed at AWRP. The Convention also requires parties to take measures to reduce the ***total releases*** of these substances (which includes releases to fly ash). Incineration therefore violates the Stockholm convention.

Incineration also violates the Environmental Protection Act of 1990 which states that the UK must prevent emissions from harming human health.

AmeyCespa Fail to Demonstrate Need

AmeyCespa fail to justify the size of the AWRP facility and use exaggerated projections of future waste volumes; they assume rising waste volumes when the trend nationally and locally is for falling waste volumes. Moreover, they assume a projected increase in reuse and recycling to only 50% when the Scottish and Welsh targets are for 70% by 2025, a level that has already been achieved around the world. Finally, they do not provide any argument to support their waste forecasts; it is they who should do so since they are applying for planning permission for this facility and not NYCC.

More realistic projections are needed to give a better estimate of the amount of waste that would need to be treated at the fourth tier of the waste hierarchy (recovery). If re-use and recycling were to reach 70% (in line with the Scottish and Welsh target and best practice from around the world) then for every 100 tonnes of waste that AmeyCespa have assumed needs to be managed at the recovery level only 60 tonnes actually needs to be managed at this level. Moreover, while projections of waste arisings are uncertain it is reasonable to assume that the falling trend will not reverse, though it will slow in time. If waste arisings stay constant at 460,000 tonnes and 70% reuse and recycling is achieved (as it could be without AWRP) and making an allowance for increasing population then there is a need for facilities at the recovery level to treat just 160,000 tonnes. **AWRP is grossly oversized and therefore not needed**.

While our estimate of need is lower than that of McG PC at 200,000 tonnes this is for perfectly sound reasons (e.g. they assume 65% re-use and recycling) and the overall message is the same: **AWRP is grossly oversized and therefore not needed.**

AmeyCespa fail to establish the need for AWRP, partly because they do not offer a quantitative analysis and partly because many of the policies they quote in attempting to support the need for AWRP are actually

contravened. Their attempt to justify it on the grounds of renewable energy generation fails for the EfW (incineration) component of AWRP because it is a high carbon technology and the policies relate to low carbon technology and climate change. They are therefore contravened. More generally, AmeyCespa's attempt to justify the need for the facility on the grounds that it is a 'green' facility that will recover energy and resources in a sustainable manner fails because it is simply not true. The Mechanical Treatment (MT) facility will only guarantee to recover 5% additional recyclates; over 85% of the waste entering AWRP will be burnt using an inefficient technology that wastes heat and large volumes of C&I waste will go straight into the incinerator. This is contrary to Government guidance that makes it clear that waste is a valuable commodity to be re-used, recycled and recovered and only then, **if all else fails**, disposed of by the most efficient form of EfW. The form of EfW at AWRP is not the most efficient form of EfW so even this is not met.

In summary, AmeyCespa fail to establish that "*there is a demonstrable and overriding need for the development*". Indeed, there are flaws in even the very partial justification presented by AmeyCespa with policies that they cite being contravened by their proposals and the actual need for some sort of facility at the "other recovery" tier in the waste hierarchy is very much smaller than they claim.

The proposal will cause harm

AWRP will cause serious long-term harm over a wide area and in numerous ways. These are covered in detail in the chapters that we have submitted with this Objection and all we can do here is pick out a few points which together give a broad indication of the range of harm. Even so, it is necessary to read our supporting chapters together with the McG PC objection to understand its full extent

Technology Choice that leads to Financial Harm

AWRP relies on capital-intensive old technology (incineration) that AWRP would lock NYCC/CYC into an inflexible long-term (~25 year) contract. As newer technologies continue to develop, this could have substantial adverse effects on project finances and therefore on the Councils to the detriment of those who receive council services and those who pay council tax.

Independent costing shows that many alternatives are cheaper than AWRP. For example a Thermal Mechanical Biological Treatment (MBT) plant, as used currently to process Darlington's municipal waste at a gate fee of £65 per tonne (nearly half the cost proposed by the proposed AWRP) would save of £13m per year on gate fees alone - some £325m over the 25-year lifetime of the proposed PFI deal compared with AWRP. This would be in addition to savings on Landfill Tax. Moreover, the contract period could be only 12 years instead of 25 years, giving NYCC/CYC future flexibility while achieving NYCC's objective of reducing waste to Landfill by 80 %.

We do not wish to be prescriptive as there are a number of other alternatives. However, other advantages over AWRP that a scheme like that at Darlington would include are: markedly less capital investment, speed and ease of construction, modularity, no need for a single site, much better for the environment, the possibility of shorter term contracts so there is no need to lock out possible benefits from innovation. Similarly, Barnsley, Doncaster and Rotherham Councils are embarking on a similar MBT solution to handle 260,000 tonnes of waste per annum at a total cost of circa £0.7 billion over 25 years, with their residual waste going to Ferrybridge. This is nearly half the cost of the AWRP scheme and could save North Yorkshire £30 million per annum.

For contracts of the magnitude associated with AWRP, all DEFRA and project review group guidance related to the WIDP programme requires that there should be continuous review of value for money (vfm). We understand that this has not been done. The economic viability of the project is questionable due to inflated waste volumes and savings forecasts and the fact that proven cheaper, cleaner and readily available alternatives already exist.

The main concerns over financial and economic viability are financial risk, magnitude and length of commitment, lack of viability, lack of flexibility and lack of proof of vfm. There are significant financial risks because the majority of any alleged savings would occur only in the second half of the 25-year life and then

only if the volume, tax forecasts and other assumptions are correct. Proper project appraisal would normally include a discounted cash flow (DCF) analysis. Any DCF analysis would emphasise the high costs in the early years and largely discount the benefits in the latter years. This would lead to a negative Net Present Value, a clear indicator that the project is not financially viable.

AWRP is too large to meet the need, is inflexible and likely to involve the Councils in asymmetric relationships with an effective transfer of risk to the Councils. It would be prudent to refuse planning permission for AWRP to avoid the financial harm and enhanced risk to the Councils that would result.

Climate Change

Most of the harm from AWRP results from the EfW (incinerator). From a climate change standpoint, the advantage over landfill is markedly less for incineration than for any other waste management technology. (The deeply flawed nature of the WRATE model used by AmeyCespa means that its findings must be discounted). Incineration releases high levels of CO_2 with nearly all the carbon content in the waste being emitted as CO_2 Moreover, incineration is comparable in terms of CO_2 per unit of power to energy produced from fossil fuel.

By contrast alternatives such as MBT followed by AD have markedly less GHG emissions. Recycling, particularly of plastics makes a considerable difference to GHG impacts by avoiding emissions from virgin manufacturing processes. Waste prevention is the most beneficial option from a climate point of view, followed by reuse and recycling; while landfill and incineration are the worst options. Thus the EfW (incinerator) is in direct contradiction of the sustainability criteria set by the Brundtland Commission, a fact that is particularly serious when one considers the environmental damage that global warming is expected to cause and the potential that it brings for human conflict.

The fact that incineration is actually the worst option from a climate change standpoint means that the material in AmeyCespa's Planning Statement pertaining to GHG and the alleged benefits of incineration is wrong.

Harmful Emissions and Contaminants

The main source of pollution from AWRP is the EfW (incinerator). This would burn a variable and uncertain mix of materials so emissions are not constant but include varying quantities of substances harmful to man, wildlife or the environment. Emissions include chemicals derived from substances found in the waste or produced during its decomposition or both together with combustion products (e.g. NO_x). Despite emission control measures, there remain carcinogenic, mutagenic and/or teratogenic emissions (e.g. dioxins and furans), endocrine disruptors (e.g. dioxins, PCBs, PBDEs) together with the possibility that their effect is enhanced by their presence on particulates, Some particulates are sufficiently small to enter the sensitive lung tissue and damage it, causing premature death in extreme cases, yet these are the very particulates that are least efficiently removed by air pollution control measures. A number of harmful heavy metals are emitted. Further, there are acid gas emissions; NO_x reacts with ammonia, moisture, and other compounds to form nitric acid vapour and related particles, inhalation of which may cause or worsen respiratory diseases such as emphysema, bronchitis and/or aggravate existing heart disease.

The EfW (incineration) plant represents a technology that alone, among waste management options knowingly creates hazardous waste where none existed in the feedstock (municipal solid waste). Fly ash and air pollution control (APC) residues are classified as hazardous waste and must be dealt with in a safe and appropriate manner. Moreover, IBA contains toxic chemicals and some of it is ecotoxic. Thus incinerator ash is harmful if it escapes into the environment or if harmful chemicals leach from it. Neither of these risks can be discounted.

Harm to Human Health

The risks to human health emanating from AWRP stem from the EfW (incinerator) plant and its harmful emissions. Health impacts arising from waste incineration is a contentious subject for many reasons (complexity, uncertainty, vested interests, the nature of the 'scientific method', difficulties 'proving' causal

relationships, 'confounding factors' including both social factors and other sources of pollution, etc.). Thus, while no one disputes the fact that waste incineration carries risks to human health there is inevitably debate about the degree of harm and the 'acceptability' of the risks.

There is a large body of scientific evidence and opinion that indicates there are reasonable grounds for concern about potentially dangerous effects of incinerator emissions on human health, with babies and young children being amongst the most vulnerable. Incineration is linked directly to a wide range of adverse health impacts including cancers, heart disease, diseases of the respiratory tract, endocrine system disorders and the effects of toxic heavy metals. Quantitative calculations of the health risks associated with a modern MSW incinerator based on current allowed emission levels show that the risk of dying from incinerator emissions over the 25 year operating life of an incinerator is 6.23×10^{-6}, and the 70-year lifetime risk is 1.74×10^{-5}. Both of these values are well above the *de minimis* acceptable lifetime target level of 10^{-6} (i.e. 1 in a million) used by the US Environmental Protection Agency and recommended by the Committee on Toxicity of Chemicals in Food, Consumer Products and the Environment. Thus even new incineration plant such as the proposed EfW (incinerator) plant at AWRP has the potential to cause serious health risks.

Official UK bodies such as the Health Protection Agency do not share this scientific consensus. Indeed HPA's position statement went so far as to say that "*Since any possible health effects are likely to be very small, if detectable, studies of public health around modern, well managed municipal waste incinerators are not recommended"* (see our *Health Risks* chapter, para 155). HPA appear now to be withdrawing at least in part from their position that studies around modern, well managed municipal waste incinerators (MWIs) are not worthwhile. By early January the HPA had confirmed that it is working with scientists to draw up "*detailed proposals*" for a study into birth outcomes around waste incinerators[1] followed shortly afterwards that a fresh study is to take place[2]. While HPA chief executive Justin McCracken confirmed their "current *position on the potential health effects of well run and regulated modern MWIs remains valid*", he did state that "*we recognise that there are public concerns about this issue and this study will provide valuable new evidence"*.

This partial weakening of the HPA's position at least as far as research is concerned confirms the need to adopt a precautionary approach as required by EU law.

The need for further study is also recognized in medical circles. The Royal College of Obstetricians and Gynaecologists' Standards Board has approved a new Scientific Advisory Committee Opinion Paper '*Chemical Exposures During Pregnancy: Increasing Awareness of Potential Risks to Child Health'* which it is hoped to publish within the next 18 months[3].

Under EU law the application of the Precautionary Principle has been made a statutory requirement where potentially dangerous effects deriving from a phenomenon, product or process have been identified and scientific evaluation does not allow the risk to be determined with sufficient certainty. This is the situation regarding the health risks associated with incineration and hence the AWRP EfW (incinerator) plant. Also, EU Treaty Article 174(2) as amended at Nice 2004 recognized that scientific evaluation can be inconclusive and

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[1] Source: http://www.mrw.co.uk/news/study-could-derail-incinerator-projects-experts-warn/8624768.article 13 January 2012

[2] The remit of the new study are:
For a distance of up to 10-15 km from MWIs operating in the England and Wales, scientists will research whether there is a potential link between the emissions from MWIs and health outcomes, including: low birth weight, still births and infant deaths.
Researchers will also investigate any possible link between MWI emissions and babies born with congenital anomalies, such as cleft palate and spina bifida, in areas where good quality data is available.
Emissions exposure will be estimated by dispersion modelling using data from MWIs that is provided to the Environment Agency as required by their Environmental Permits.
Areas with good data on congenital anomalies are those with a high quality register. These areas include the North East of England, the West and East Midlands, Wessex and Wales.
The study will examine the risk to all congenital anomalies, including separate analysis of subsets such as: cleft lip, cleft palate, major heart defects, respiratory defects and anomalies of the neural tube, abdominal wall, or urinary tract
Source: http://www.mrw.co.uk/news/incinerator-study-gets-green-light/8625364.article 24 January 2012

[3] Letter from Dr Anthony Falconer FRCOG, President, Royal College of Obstetricians and Gynaecologists to NYWAG, 2 November 2011

accorded priority to public health: "*a precautionary approach must be paramount, as opposed to acting only where proof or very strong suspicion of harm can be demonstrated".* Thus the Precautionary Principle must be applied in considering the harm from the EfW (incinerator) and whether or not to grant planning permission.

Finally, fear of the adverse health impacts arising from incinerator emissions covering *inter alia*; lower air quality; adverse impacts on living conditions for people living nearby coupled with economic penalties (e.g. lower house prices) and adverse traffic impacts and emissions from the plant and local residents' concerns about the impact on their health are all material concerns that have been factors in refusing planning permission for incinerators (see our chapter on *Need and Technology Choices*).

Harm to Ecosystems and the Built Environment

Emissions from AWRP would damage ecosystems through acidification of terrestrial and aquatic ecosystems (which leads to loss of flora and fauna), eutrophication (which can lead to changes in species diversity), exposure to ground level ozone (including yield losses affecting agricultural crops) and the impacts of heavy metals and persistent organic pollutants resulting from to their environmental toxicity and due to bioaccumulation. Many of the pollutants are bio-accumulative and enter the food chain so damage the health of birds and animals placing stress on ecosystems. In addition, there would be damage to materials and cultural heritage due to soiling and exposure to acidifying pollutants and ozone.

AmeyCespa fails to acknowledge these effects impact over a wide area and tend to understate the effects of the various environmental insults of the proposed AWRP on local ecosystems. This is true of their assessment of each phase in the life of the proposed AWRP – namely construction, operation and decommissioning.

Pollutants in water courses can enter into aquifers (e.g. the Sherwood Sandstone) and pollute them. This would tend to be a cumulative process (the pollutants are persistent and residency time in aquifers can be long) and could render them unsuitable for any future water extraction.

Location of Site and Traffic Problems

AmeyCespa fail to show any convincing rationale or need for a single site solution. In reality it is simply an artefact of choosing a capital-intensive technology (incineration) coupled with the desire for economies of scale. Other technology choices would allow and encourage smaller, cheaper and cleaner facilities that would enable proper adherence to the proximity principles enshrined in planning documents such as PPS10 and policy ENV14 of the YHRSS.

Traffic is a major issue, particularly during the operational phase. AmeyCespa's claim that '*the assessment of the proposed development demonstrates that there are no significant environmental effects from traffic and transport associated with this development*' is **utterly wrong**. In reality:

- A single site for dealing with NYCC and CYC waste maximises vehicle mileage and therefore adverse impacts
- Emissions of CO_2 and other pollutants damage the environment and local ecosystems
- The large number of HGVs associated with the development will be detrimental to the safety and security of residents and North Yorkshire road users. In particular, there are serious safety issues concerning the A59/A168 junction, especially during periods of peak traffic flow giving rise to enhanced accident risks. This has both financial and social costs.

Traffic associated with the proposed AWRP would have a material adverse impact on the local road network and the significant element of HGV movements will increase congestion and accident risks. The proposed AWRP would therefore appear be contrary to the Councils policy of road accident reduction.

Landscape and Visual Harm

The proposed AWRP facility would be visually intrusive to an unacceptable degree. The AWRP building would appear as an isolated but prominent alien feature in the wider rural landscape, which would be seen from a

wide area and the plume could be seen for 10-20 km. Despite some limited and inadequate attempt at screening; the AWRP facility would clearly intrude into the openness of the countryside. It is an unacceptable visual intrusion entirely out of character with the surrounding landscape which will harm current recreational facilities and the enjoyment of public rights of way and potentially damage the tourist industry locally.

The visual impact of the AWRP could have economic impact by damaging the tourist industry in North Yorkshire as well as rendering local footpaths intended for recreation utterly unattractive. The applicant appears to have given little consideration to the impact on tourism which is an important element of the local economy. It could also damage to agriculture (e.g. through lower yields).

AWRP will have a strongly adverse visual impact and cause serious harm to the landscape character of the surrounding district. Far from enhancing the local landscape character, it is utterly incompatible with the local landscape in terms of its scale and general appearance. There would be significant visual impacts from public rights of way and an unacceptable impact on recreational amenity.

Reaction to visual impact is necessarily to some extent subjective and we, like McG PC, were therefore keen to get an objective professional view. This was obtained from TPM Landscape Ltd[4] and confirms the strongly negative visual impact of AWRP.

The TPM report has been submitted by McG PC who also explore the planning implications of AWRP under the title "*Landscape and visual harm***"**. We fully agree with their views and comments.

Sustainability

Sustainable development (SD) is a pattern of resource use that aims to meet human needs while preserving the environment so that these needs can be met not only in the present, but also for generations to come. This chapter discusses SD in the light of the *Brundtland Commission* definition of SD as "*development that meets the needs of the present without compromising the ability of future generations to meet their own needs*". The AWRP would not meet this definition.

The 25 to 30 year contract will fundamentally compromise the ability of future generations to meet their needs. It will lead to the destruction of valuable resources that could have been reused or recycled, necessitating the exploitation of virgin resources. The inflexibility of the contract means that it will no longer be possible to respond to future changes in legislation, technology, recycling or cost. The incinerator dominates the facility in cost and treatment volumes and, once built, cannot be reduced in size and its capital-intensive nature forces the operator to run it at full capacity even where there is no need within the county to do so.

AWRP cannot even meet the modest sustainability objectives set by AmeyCespa which do not themselves meet the Brundtland definition. It

- Causes harm by emitting substances harmful to man, wildlife or the environment
- Damages economic growth; AWRP is capital intensive and it would lock the councils into an already obsolescent technology (incineration) and would damage the ability to increase recycling to anywhere even near to best practice . The benefits of current and future waste management innovations would not be available to NYCC and CYC. The employment AWRP would provide is more than offset by job losses elsewhere in the local economy. Constructing it would damage economic recovery when compared with cheaper options that would allow innovation and carry much less financial risk.
- Leads to unnecessary costs both in meeting an alleged need that is not there and the choice of an overly expensive method of managing MSW. This will inevitably lead to one or more of: increases in council tax; loss of council services; job losses in both NYCC and CYC; loss of potential jobs in the private and public sectors and additional costs to the Exchequer in terms of Jobseekers Allowance and other benefits. This exacerbates the effects of the current financial austerity and impacts young people and the most vulnerable in society.

[4] LANDSCAPE AND VISUAL APPRAISAL: In support of local opposition to the proposed AWRP
Produced by TPM Landscape Ltd, Chartered Landscape Architects

- Does not ensure social cohesion and inclusion; there are social costs both in relation to lost jobs opportunities, unnecessarily high council tax bills and costs to health and well-being.
- A centralised site means large transport distances for waste that could reasonably have been treated locally. This could be exacerbated by the need to import waste to "feed" an oversized facility.
- Far from using resources wisely and efficiently, it compromises the ability of future generations to meet their needs. Much material that could have been re-cycled will instead be incinerated so virgin resources will have to be exploited to replace these materials.

Our chapter '*Sustainability, What Sustainability?*' examines the claims made by AmeyCespa in relation to sustainability and finds them to be false.

Finally, there is widespread public opposition to AWRP (we have collected over 10,000 signatures from people who oppose it), demonstrating its negative impacts on well-being and public health. We refute AmeyCespa's self-assessment against sustainability criteria and argue that the project will harm the environment and economy, will not contribute to social cohesion and inclusion, and will not use resources wisely and efficiently. Alternative technologies (dismissed by the applicant) offer significantly greater benefits at markedly less cost.

The harm caused by AWRP cannot be mitigated

As McG PC point out "*None of the so-called mitigation measures reduce, mask or change the visual and landscape harm to the immediate and distant landscape caused by an alien structure in what is otherwise open countryside. The proposed Section 106 Agreements are irrelevant and deficient in scope and impact to offset this harm. The £1 million in compensation will go solely to the owner of Allerton Park and will not benefit the wider community"*. This coupled with the fact that there appears to be no compensation scheme for such factors as loss of value of local houses could prove to be socially divisive.

We further agree that "*The proposal to repair six small monuments and a boundary wall provide no effective mitigation to the general public who have little or no access to these. The proposed Community Heritage Fund is inadequately specified*" Like McG we fail to see why members of the public should be required to apply for funds so they can mitigate the impacts of AWRP when this is the responsibility of the applicant.

We would add that the proposed AWRP would quite properly be fitted with air pollution control systems. Such pollution control is costly but reduces emissions markedly. It can therefore reasonably be regarded as a mitigation measure and we would hope that it is "state of the art". However, even such 'state of the art' systems are inadequate and remaining pollutants cause a range of health and environmental harm as discussed above. Hence mitigation, while essential, is inadequate.

Raising the stack height is in our view necessary as this would lessen impact of emissions in the immediate vicinity where it is greatest, albeit at the cost of redistributing and increasing risk over a greater area. We do not think that the trade-off between raising stack height for reasons of lesser health and environmental impact and lowering stack height to reduce visual impact should favour the latter yet that is what AmeyCespa have done compared with their original proposals. Putting appearance above safety is simple wrong.

CONCLUSION

NYWAG object to the AWRP proposal because the application runs counter to the UK's national and international commitments on climate change; breaches certain other international commitments; is contrary to EU, National and District Planning Policies; will cause harm to the environment and human health and well-being, to the economy and to sustainability; that harm cannot be mitigated; and the applicant fails to prove a need that overrides the harm.

SUPPORTING DOCUMENTS

Previously Submitted Material

November 2011

Our original letter was an initial response to the official notice of the above planning application in order to meet the then 21 day deadline for objections and to reserve the right to make further comment and objection at a later date. It was supported by several Annexes to give an indication of why we contend that planning permission should be refused. Naturally, these were drawn from earlier work but we felt that the arguments we presented in these Annexes were germane to the desirability of refusing planning permission. The purpose of this and later submissions was to present our detailed arguments for refusing planning permission.

This letter contained three Annexes:

A A set of Fact Sheets setting out our response to a series of misconceptions that were being promulgated at the time. While germane to our objection, they are lacking in detail and this is substantially extended and expanded within the Chapters which now form part of our objection.
B Memorandum by NYWAG to the Treasury Select Committee on the Private Finance Initiative
C NYWAG's Evidence to the DEFRA Waste Enquiry

December 2011

A covering letter accompanied by six chapters that focus on the harm that can be caused by environmental and health issues. These have been prepared by a team of highly experienced environmental specialists within our group and challenged assertions made by AmeyCespa in their planning application. These were:

1. Climate Change
2. Harmful Emissions and their Properties
3. Health Risks: Adverse Effects from Incinerator Emissions
4. Risks from Incinerator Ash
5. Air Quality and Health: A Critique of AmeyCespa's Assessment
6. Sustainability, What Sustainability?

Each of these chapters offers a number of **reasons for refusing planning permission**. Together, they tackle many of the environmental issues and harm associated with AWRP and the EfW (incinerator) plant in particular. The December letter also set out a number of further reasons for asking that planning permission be refused. These are covered in much more detail in the chapters accompanying this January 2012 letter.

January 2012

This letter is accompanied by two further Chapters:

7: Need and Technology Choices
8: Environmental Insults: Environmental Risks; Traffic; Visual Impact

The *Need and Technology Choices* Chapter considers the need for the proposed AWRP in the light of the harm that it would do; the likely future tonnages of waste arisings and the potential for re-use and recycling. It relates the findings to existing Government policy and regional/local planning policies. It also presents a critique of the claims made by AmeyCespa, refuting many of them. It then considers options for managing residual waste at the recovery and disposal tiers of the waste hierarchy, recommending a different solution that better complies with the proximity principle. Finally, it considers some sustainability issues, building on and extending the material in *Sustainability, What Sustainability*?

Environmental Insults covers further categories of harm including to: the environment and ecology; traffic flows and enhanced accident risk (especially at the A59/A168 junction); the immediate countryside, the wider landscape, and to visual amenity; and to the quality of life. Its findings on visual impact are supported by the TPM report submitted by McG PC which also forms part of this objection (though not submitted again by us).

GLOSSARY – ALL CHAPTERS

AADT	**Annual Average daily traffic** is a measure used primarily in transportation planning and transportation engineering. It is the total volume of vehicle traffic of a highway or road for a year divided by 365 days. AADT is a useful and simple measurement of how busy the road is.
ACS	American Cancer Society
AD	Anaerobic Digestion
ADD	Attention Deficit Disorder
ADHD	Attention Deficit Hyperactivity Disorder
ADMS	Atmospheric Dispersion Modelling System
AEA	Atomic Energy Authority
AEAT	Atomic Energy Authority Technology
AERMIC	American Meteorological Society(AMS)/United States Environmental Protection Agency (EPA) Regulatory Model Improvement Committee
AERMET	Meteorological data pre-processor in AERMOD
AERMAP	A terrain pre-processor in AERMOD
AERMOD	**A**merican Meteorological Society–AMS/ **E**nvironmental Protection Agency–EPA **R**egulatory **MOD**el
AMS	American Meteorological Society
APC	Air pollution control
APCR	Air Pollution Control Residues
AQ	Air quality
AQFD	Air Quality Framework Directive
AQG	Air Quality Guidelines
AQO	Air quality objective
AQLVs	Air quality limit values
AWRP	Allerton Waste Recovery Park
BMRB	British Market Research Bureau
BSEM	British Society for Ecological Medicine
C&I	Commercial and Industrial
Ca	Calcium
CABE	Commission for Architecture and the Built Environment
CAFE	Clean Air for Europe: CAFÉ
CBM	Cement bound material
CCC	Climate Change Committee
CCGT	Combined cycle gas turbine
CERC	Cambridge Environmental Research Consultants
CFS	Chronic fatigue syndrome
CH_4	Methane
CHP	Combined Heat and Power
CO_2	Carbon dioxide
CO_{2e}	Carbon dioxide equivalent
COC	Committee on Toxicity of Chemicals in Food, Consumer
COMEAP	Committee on the Medical Effects of Air Pollutants
COPC	Compounds of Potential Concern
COPD	Chronic obstructive pulmonary disease
CSF	Carcinogenic slope factor
CYC	City of York Council

CYP	The cytochrome P450 superfamily
DaSTS	Developing a Sustainable Transport System
DCF	Discounted cash flow
DECC	Department of Energy and Climate Change
DCLG	Department for Communities and Local Government
DEFRA	Department for Environment, Food and Rural Affairs
DFT	Department for Transport
DNA	Deoxyribonucleic acid
DVT	Deep Vein Thrombosis
EA	Environment Agency
EAWAG	The Swiss Federal Institute for Water Resources and Water Pollution Control
EEA	European Environment Agency
EfW	Energy from Waste Energy from Waste – as used here = incinerator + electricity generation
ENDS	Environmental Dara Services
EPA	Environmental Protection Agency
EPR	Extended Product Responsibility
E-PRTR	European Pollutant Release and Transfer Register
EPUK	Environmental Protection UK
ES	Environmental Statement
ESA	Environmental Services Association
ESP	Electrostatic precipitator
ETSU	Energy Technology Support Unit
EU	European Union
FoE	Friends of the Earth
GHG	Greenhouse gas
GLA	Greater London Authority
GW	Gigawatt (= 1000 megawatts)
GWh	Gigawatt hours
GWP	Global warming potential
HBM	Hydraulically Bound materials
HCFCs	Hydrochlorofluorocarbons
HFCs	Hydrofluorocarbons
HGV	Heavy Goods Vehicle
HHRA	Human Health Risk Assessment
HHRAP	Human Health Risk Assessment Protocol
HI	Hazard Index
HPA	Health Protection Agency
HQ	Hazard Quotient (HQ) – for non-carcinogenic pollutants. For ingestion, the HQ is calculated as the Average Daily Dose (ADD) divided by the reference dose (RfD)
HSE	Health and Safety Executive
IBA	Incinerator Bottom Ash
IBAA	incinerator bottom ash aggregate
IHD	[1]Ischaemic or ischemic heart disease or myocardial ischaemia
IQ	Intelligence Quotient
IPCC	Inter-governmental Panel on Climate Change
IRAP	Industrial Risk Assessment Program
IRIS	*Ilots Regroupés pour l'Information Statistique*
km	kilometre
kms	kilometres
JMWMS	Joint Municipal Waste Management Strategy

LA	Local Authority
LATS	Landfill Allowance Trading Scheme
LCA	Life Cycle Analysis
LTP3	Third North Yorkshire Local Transport Plan
MBT	Mechanical Biological Treatment
McG PC	Marton cum Grafton Parish Council
ME	Myalgic encephalomyelitis (ME), also referred to as CFS, or as post-viral fatigue syndrome (PVFS), or chronic fatigue immune dysfunction syndrome (CFIDS)
MS	Multiple Sclerosis
MSW	Municipal Solid Waste
MSWI	MSW Incinerators
MW	Megawatt
NAAQS	National Ambient Air Quality Standards
NHS	National Health Service
N_2O	Nitrous oxide
NOx	Oxides of nitrogen
NPPF	National Planning Policy Framework
NYCC	North Yorkshire County Council
OJEU	Official Journal of the European Union
P450	The cytochrome P450 superfamily (officially abbreviated as CYP)
PAC	Public Accounts Committee
PAH	Polycyclic Aromatic Hydrocarbons
para	paragraph
PBBs	Polybrominated biphenyls
PBDE	Polybrominated diphenyl ethers
PC	"Process Contribution", the peak contribution of the emissions from the plant to the ground level concentration.
PCB	Polychlorinated biphenyls
PCDDs	Polychlorinated dibenzodioxins (commonly called *dioxins*)
PCCD/Fs	PCDDs and/or PCDFs
PCDFs	Polychlorinated dibenzofurans (commonly called *furans*)
PDD	Pervasive developmental disorder
PEC	"Predicted Environmental Concentration", obtained by adding the background concentration to the annual average contribution to the 99.79th percentile contribution.
PFCs	Perfluorocarbons
PFI	Private Finance Initiative
PM	Particulate matter PM is commonly classified by size, typically expressed in terms of their aerodynamic diameter; thus PM_{10} represents particles of 10 micrometers or less and $PM_{2.5}$ represents particles less than 2.5 micrometers
POPs	Persistent Organic Pollutants
PPG	Planning Policy Guidance
PPS	Planning Policy Statement
PPS1	Planning Policy Statement 1: Delivering Sustainable Development
PVC	Polyvinyl chloride
RDF	Refuse Derived Fuel
RHI	Renewable Heat Initiative
RO	Renewable Obligations
ROC	Renewable Obligation Certification
RSA	Recycled and Secondary Aggregate
RSS	Regional Spatial Strategy
SADS	Cardiac arrhythmia, also known as "Sudden Adult Death Syndrome" and "Sudden

	Arrhythmia Death Syndrome"
SAB-WGEH	International Joint Commission's Science Advisory Board, the Workgroup on Ecosystem Health
SCR	Selective catalytic reduction
SD	Sustainable development
SDP	Statutory Development Plan
SEPA	Scottish Environmental Protection Agency
SF6	Sulphur hexafluoride
SIA	Secondary inorganic aerosol
SIDS	Sudden Infant Death Syndrome
SNCI	Sites of Nature Conservation Importance
SNCR	Selective non-catalytic reduction
SO_2	Sulphur dioxide
SOA	Secondary organic aerosol
SSA	Site Search Assessment
SSSI	Site of Special Scientific Interest
TCDD	2,3,7,8-tetrachlorodibenzo-para-dioxin
TDI	Tolerable Daily Intake
TDS	Total dietary study
TEF	Toxic Equivalency Factors
TEQ	Toxic Equivalence
TOC	Total organic carbon
TWh	Terawatt hours
UFP	Ultrafine Particles
UK	United Kingdom
URF	Unit risk factor – as used for inhalation exposure to carcinogens
US	United States
USA	United States of America
vfm	Value for money
VOCs	Volatile organic compounds
WAG	Welsh Assembly Government
WCS	Waste Core Strategy
WEEE	Waste Electrical and Electronic Equipment
WFD	Waste Framework Directive - DIRECTIVE 2008/98/EC
WHO	World Health Organisation
WHO-TEQ	The system of TEFs used in the UK and a number of other countries is that set by the WHO, and the resulting overall concentrations are referred to as WHO-TEQs.
WHI	Women' Health Initiative
WID	European Waste Incineration Directive
WIDP	Waste Infrastructure Delivery Programme
WR	DEFRA Waste Review - *Government Review of Waste Policy in England 2011*
WRAP	Waste and Resources Action Programme
WRATE	Waste and Resources Assessment Tool for the Environment
WSE2007	Waste Strategy for England 2007
WWS	Welsh Waste Strategy
YHRSS	Yorkshire and Humber Regional Spatial Strategy