

North Yorkshire Waste Action Group

Objection to Allerton Waste Recovery Park:

Sustainability - What Sustainability?

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SUMMARY

1. **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*”.
2. In their Sustainability Assessment AmeyCespa state that Planning Policy Statement (PPS) 1 “*Delivering Sustainable Development*” confirms that SD is the core principle underpinning planning. This Chapter shows that AWRP is not a sustainable development. We are in favour of replacing landfill with better, more sustainable alternatives. **We object strongly to elements of the proposed AWRP and favour replacing it with a sustainable solution.**
3. **We contend that AWRP actually runs counter even to the modest sustainability objectives set by AmeyCespa. 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). The benefits of current and future waste management innovations would not be available to NYCC and York. The employment AWRP would provide is more than offset by job losses elsewhere in the local economy.
 - 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.
 - 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.
4. The Waste Hierarchy reflects sustainability issues - it shifts the focus away from waste as an unwanted burden towards it being a valued resource, which can provide opportunities for sustainable growth. Essentially, the further up the hierarchy, the greater the contribution that is made to sustainability. Disposal is not a sustainable option.
5. The EfW (incinerator) plant is electricity generation only rather than CHP so has relatively low energy recovery efficiency. The Waste Framework Directive (Directive 2008/98/EC) clarified the “recovery” and “disposal” definitions. Incineration can only qualify as recovery rather than disposal if the energy recovery efficiency exceeds a designated threshold (0.65 for new installations). In general “disposal” plants produce only electricity or, when CHP, treat less than 200,000 t/y. Thus **the EfW (incinerator) plant should be regarded as “disposal”**. **It would not be a sustainable development.**

National Policy

6. AmeyCespa did not recognise national policy on SD – e.g. Chapter 7 of the UK’s SD Strategy (Cm 6467), statements by DEFRA’s Secretary of State or the aims of a joint DEFRA and DECC initiative “*to send a much greater volume of our biodegradable waste through AD*”. They also ignore the UK’s obligations under the Stockholm Convention on persistent organic pollutants. They do, however quote a Government statement that it is expected that SD will be at the heart of the new National Planning Policy Framework: “*The Government is committed to ensuring that the planning system does everything it can to support long term, sustainable economic growthThe presumption [in favour of SD] is key to delivering these ambitions, by creating a positive, pro-development*

framework, but one underpinned by the wider economic, environmental and social provisions in the National Planning Policy Framework.” They also quote from the draft National Planning Policy Framework, a key passage being: “The three ‘pillars’ of the economy, society and environment are interconnected. Our long term economic growth relies on protecting and enhancing the environmental resources that underpin it, and paying due regard to social needs”.

7. AWRP would run counter to all three of these pillars:
 - AWRP, particularly the EFW (incinerator) plant is oversized and thus a waste of public money that will cost jobs in NYCC and York Council, reduce opportunities for employment in the private sector by discouraging more labour-intensive but cheaper alternatives and impose an unnecessarily high burden on council tax payers;
 - Constructing AWRP with its high capital intensity would damage economic recovery when compared with cheaper and cleaner alternatives.
 - There are social costs (lost jobs opportunities and unnecessarily high council tax bill. Also, ill-health resulting from emissions will impose costs on society and the NHS.
 - AWRP’s EFW (incinerator) plant emits a range of harmful pollutants that carry a range of health risks, some greater than internationally accepted levels. It is the worst waste treatment option other than landfill for climate change.
 - Fly ash and air pollution control residues are classified as hazardous waste. Unlike other waste management technologies incineration creates hazardous waste where none existed before.

These factors alone are sufficient to show that AWRP is not a sustainable development so any presumption in favour of SD is irrelevant.

Local Policy

8. AmeyCespa say the planning system has been substantially reformed to make **contributing to the achievement of SD a statutory objective** and that the new spatial planning system exists to deliver **positive social, economic and environmental outcomes**. AWRP does not meet these requirements. It does **not** contribute to the achievement of sustainable development and does not lead to positive social, economic and environmental outcomes; indeed quite the reverse. **Thus planning permission should be refused.**
9. PPS12 - “Local Spatial Planning” states the role of sustainability appraisal in the planning context as *“... providing a sound evidence base for the plan and form an integrated part of the plan preparation process. Sustainability Assessment should inform the evaluation of alternatives. Sustainability appraisal should provide a powerful means of proving to decision makers, and the public, that the plan is the most appropriate given reasonable alternatives”*. PPS12 defines the sustainability appraisal as the *“... appraisal of the economic, social and environmental sustainability of the plan”*.
10. We fully concur with the need for *“a sound evidence base”*. Such an evidence base would show that there are cleaner, cheaper and more environmentally friendly alternatives to AWRP and that therefore substantially more sustainable options are available. This would have demonstrated *“to decision makers and the public”*, that the plan for the proposed configuration at AWRP is **not** *“the most appropriate given reasonable alternatives”*. **Thus planning permission should be refused.**

AmeyCespa’s Sustainability Objectives

11. AmeyCespa defined four sustainability objectives under the four key objectives for SD as set out in PPS1: a) Social progress that recognises the need of everyone. b), Effective protection of the

environment. c) Prudent use of natural resources, d) Maintenance of high and stable levels of economic growth and employment. Almost incredibly, they omitted effective protection of human health.

12. Against these (now five) criteria:

❖ **Maintenance of high and stable levels of economic growth and employment.**

- AWRP is greatly oversized and a waste of public money. It will cost jobs in NYCC and York Council and reduce opportunities for employment in the private sector (see above)
- Constructing it would damage economic recovery when compared with cheaper options that would allow innovation and carry much less financial risk.
- The high capital costs carry with them concomitant opportunity costs.

❖ **Effective protection of the environment**

- The main difficulties from an environmental standpoint arise from AWRP's EfW (incinerator) plant, as outlined above.
- Fly ash and air pollution control residues are classified as hazardous waste. This is the very antithesis of sustainable development.
- Emissions from the incinerator (EfW plant) have environmental consequences since they impact on ecosystems, wildlife and agriculture.

❖ **Prudent use of natural resources**

- Incineration destroys resources by making them inaccessible so virgin sources must be exploited.
- 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.

❖ **Social progress that recognises the need of everyone**

- There are social costs both in relation to lost jobs opportunities and the unnecessarily high council tax bills that people will have to face. In addition, the ill-health that will result from emissions will impose costs on society and on the NHS.

❖ **Effective protection of human health**

- The EfW (incinerator) emits a wide range of toxic pollutants which harm human health.

13. **These factors confirm that AWRP is not a sustainable development**

14. AmeyCespa contention that their sustainability appraisal showed that the proposed AWRP is generally very positive or positive in meeting the sustainability objectives is completely wrong. Indeed, even on the criteria they use it is generally negative or very negative. Many of their so-called sustainability commitments have nothing to do with sustainability (i.e. do not accord with the Brundtland definition of sustainability) or are at best marginal and some would result in damage (e.g. those concerning *liaison/education*).

Conclusions

15. AWRP is not a sustainable development; indeed it would cause harm in a variety of ways. The EfW plant is the most damaging element of AWRP and should probably be regarded as a disposal technology. Since sustainable development is now central to the planning process and sustainable development criteria are not met, any presumption in favour of SD must be set aside. According to Art 4(2) of the WFD, Member States should encourage those waste management options that deliver the best overall environmental outcome. **Bearing in mind the damaging effects that**

developing AWRP would have, it is not in the public interest and planning permission should be refused.

1: INTRODUCTION

1. In their Planning Statement Part 2: Sustainability Assessment AmeyCespa state that Planning Policy Statement (PPS) 1 - "*Delivering Sustainable Development*" confirms that sustainable development is the core principle underpinning planning. This Chapter shows that the Allerton Park Waste Recovery Park (AWRP) is not a sustainable development. Major reasons for this are the presence of a large incinerator (the so-called Energy from Waste (EfW) plant) coupled with seriously unambitious targets for re-use and recycling.
2. As we discuss in our chapter "*Need and Technology Choices*", NYCC/AmeyCespa have considerably underestimated the potential for re-use and recycling (a truly sustainable way of dealing with waste so that the AWRP facility is substantially over-sized. Moreover, there is a wide range of alternatives that are cheaper, cleaner and more environmentally friendly than a solution based on incineration.
3. Our argument is not against replacing landfill with better, more sustainable alternatives. Indeed, we are very much in favour of doing so. **We do however object strongly to elements of the proposed AWRP** and favour replacing it with one of the cheaper, cleaner and more environmentally friendly alternatives. **Doing so would enable a sustainable solution which AWRP does not provide.**
4. Many of our statements in this Chapter derive from our other Chapters, in particular:
 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. Need and Technology Choices

2: WHAT IS SUSTAINABLE DEVELOPMENT?

5. **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 come¹. The term was used by the *Brundtland Commission*² which coined what has become the most often-quoted definition of sustainable development as

"development that meets the needs of the present without compromising the ability of future generations to meet their own needs"

¹ This is sometimes taught as **ELF**-Environment, Local people, Future.

² The **Brundtland Commission**, formally the **World Commission on Environment and Development (WCED)**, known by the name of its Chair Gro Harlem Brundtland, was convened by the United Nations in 1983. The commission was created to address growing concern "about the accelerating deterioration of the human environment and natural resources and the consequences of that deterioration for economic and social development." In establishing the commission, the UN General Assembly recognized that environmental problems were global in nature and determined that it was in the common interest of all nations to establish policies for sustainable development.

The Brundtland Commission report was published in 1987ⁱ. AmeyCespa quote this widely used definition of sustainability in their paragraph 2.1.

6. To AmeyCespa (paragraph 2.1.3) and the Allerton Waste Recovery Park (AWRP) Project this means developing a facility that meets the current need for waste management within North Yorkshire and the City of York which ensures:
 - effective protection of the environment;
 - maintains high and stable levels of economic growth;
 - ensures social cohesion and inclusion; and
 - uses resources wisely and efficiently without compromising the ability of future generations to meet their needs.

7. **We contend that AWRP does none of these things. It**
 - Damages the environment through emitting substances harmful to man, wildlife or the environment. Emissions include substances that are carcinogenic, mutagenic and/or teratogenic emissions, endocrine disruptors or lead to adverse effects from heavy metals. Further, there are acid gas emissions which damage both health and the environment. Finally, other than landfill incineration (i.e. the EfW plant) is the worst waste management option for climate change. Moreover, incineration leads inevitably to the creation of hazardous wastes (fly ash and air pollution control residues) where none existed before.
 - Damages economic growth; the facility is capital intensive and front end loaded. Moreover, the 25 year contract is inflexible and locks the councils into a technology that some already regard as obsolescent. This means the benefits of current and future innovations in waste management will not be available to NYCC and York.
 - Does anything but ensure social cohesion and inclusion; there are social costs both in relation to lost jobs opportunities and the unnecessarily high council tax bills that people will have to face. In addition, the ill-health that will result from emissions will impose costs on society and on the NHS.
 - It does not use resources wisely and efficiently but does compromise the ability of future generations to meet their needs. This is because the re-use and recycling target is an unambitious 50%. In consequence, much material that could have been re-cycled will instead be incinerated. This means that virgin resources will have to be exploited to replace these materials.

This means that even the modest sustainability aims set by AmeyCespa for the AWRP facility are not met.

3: POLICY AIMS – ARE THEY MET?

3.1: European Policy

8. The Waste Hierarchy reflects sustainability issues. As the SEPAⁱⁱ say *“The Directive shifts the focus away from waste as an unwanted burden towards being a valued resource, which can provide opportunities for sustainable growth in a low carbon economy”*.

9. The Waste Hierarchy is set out in Article 4 of the revised EU Waste Framework Directive (Directive 2008/98/EC) - see DEFRAⁱⁱⁱ and EA^{iv}. It comprises five steps for dealing with waste, ranked according to environmental impact – **the ‘waste hierarchy’** (illustrated in Table 1 and

Figure 1). Prevention, which offers the best outcomes for the environment, is at the top of the priority order, followed by preparing for re-use, recycling, other recovery and disposal, in descending order of environmental preference, as illustrated in the table below. However, there is considerable difference between the environmental impact of the various technologies under “other recovery”, both in terms of the climate change and other emissions.

10. The waste hierarchy has been transposed into UK law through the Waste (England and Wales) Regulations 2011. The Regulations came into force on 29 March 2011. The provisions relating to the hierarchy (set out at in Regulations 12, 15 and 35) came into force on 28 September 2011.
11. The further up the hierarchy, the greater the contribution that is made to sustainability. Disposal is not a sustainable option.

Table 1: Waste Hierarchy

Stages	Include
Prevention	Using less material in design and manufacture. Keeping products for longer; re-use. Using less hazardous materials
Preparing for Re-use	Checking, cleaning, repairing, refurbishing, whole items or spare parts
Recycling	Turning waste into a new substance or product. Includes composting if it meets quality protocols
Other Recovery	Includes anaerobic digestion, incineration with energy recovery, gasification and pyrolysis which produce energy (fuels, heat and power) and materials from waste; some backfilling
Disposal	Landfill and incineration without energy recovery

Figure 1 – The Waste Hierarchy



Source: SEPA

12. The picture is actually a little more complex than suggested by Table 1 and Figure 1. The AD plant with its electricity generation clearly classifies as “other recovery” and can properly be regarded as a renewable energy technology. However, the EfW (incinerator) plant is electricity generation only rather than CHP and therefore has relatively low energy recovery efficiency. This means its classification as “recovery” needs to be examined in more detail
13. The Waste Framework Directive^v (Directive 2008/98/EC) set new standards in the waste management field, including ambitious recycling targets all over the EU and a requirement to

develop national waste prevention programs. It also clarified the “recovery” and “disposal” definitions. According to the new waste hierarchy, incineration can be qualified as a recovery operation rather than a disposal one, when the energy recovery efficiency is higher than a designated threshold. The threshold for MSW incineration facilities to be classified is that the energy recovery efficiency³ calculated according to the “R1 formula” (see Annex 1 for a derivation) is equal to or greater than 0.65 for installations permitted after 31 December 2008. According to Grosso *et al*^{vi}, about 40% of European incinerators do not meet the 0.6 threshold for plant existing before end 2008 and are thus classified as “disposal”. In general the “disposal” plants produce only electricity or, when CHP, they treat less than 200,000 t/y. This indicates that the EfW (incinerator) facility may not meet the criterion for being regarded as a recovery facility and should probably not be regarded as a renewable energy technology.

14. This suggests that the EfW (incinerator) plant should be regarded as “disposal” which would place it at the bottom of the waste hierarchy. Disposal is not a sustainable solution.
15. MSW regarded as recovered according to the R1 formula has to be distinguished from the question of whether or not the recovery of a certain waste in such a facility (energy from waste in its true sense, using one of a number of technologies) is to be seen as a waste management option with the best environmental outcome considering the waste hierarchy and taking into account life-cycle thinking (Article 4 of the WFD).
16. **According to Art 4(2) of the WFD, Member States should encourage those waste management options that deliver the best overall environmental outcome.** For waste streams where recycling is the preferable option, this should include appropriate measures such as introduction of separate collection schemes and other measures supporting recycling, implementing recycling targets and avoiding overcapacities for waste incinerators in waste management plans⁴.

3.2: National Policy

17. Chapter 7 of the UK Government Sustainable Development Strategy (Cm 6467^{vii}) states that *“The overall objective of government policy on waste is to protect human health and the environment by producing less waste and by using it as a resource wherever possible. Through more sustainable waste management – reduction, re-use, recycling, composting and using waste as a source of energy – the Government aims to break the link between economic growth and the environmental impact of waste.”*
18. Achieving the Coalition’s ambition of being *“the greenest government ever”* and *“working towards a zero waste economy, encouraging paying people to recycle and working to reduce littering”* as set out by DEFRA’s Secretary of State^{viii} means action at all stages of the waste hierarchy to achieve optimal waste management which reduces waste, ensures maximum re-use and recycling and deals with the residual wastes in an environmentally responsible manner that takes full and proper account of health risks”. In addition, DEFRA will be working with the Department of Energy and Climate Change (DECC) *“to send a much greater volume of our biodegradable waste through anaerobic digestion – generating renewable energy and bringing*

³ The “R1-formula” is not strictly speaking an expression of efficiency in physics, but a performance indicator for the level of recovery of energy from waste in a plant dedicated to the incineration of municipal solid waste

⁴ Drawn from *“Guidelines on the energy efficiency formula for incineration facilities dedicated to the processing of municipal solid waste according to Annex 2 of Directive 2008/98/EC”* European Commission, Directorate General on Environment.

down levels of greenhouse gases from landfill". A natural extension of this would be to avoid waste management options that are unusually bad for climate change.

19. It also means taking full account of the UK's obligations under the Stockholm Convention on persistent organic pollutants (POPs), as discussed in our chapters on Harmful Emissions and Health Risks.
20. Despite ignoring existing national policy, AmeyCespa state that in their paragraph 2.1.4 that on the 15 June 2011 the Government published a statement setting out the draft wording on the presumption in favour of sustainable development. They say that the draft statement was intended to give an early indication of the Government's intentions and that it is expected to be at the heart of the new National Planning Policy Framework. The draft statement as quoted says that;

"The Government is committed to ensuring that the planning system does everything it can to support long term, sustainable economic growth, and has made it clear that significant weight should be placed on the need to support economic recovery through the planning system and related consent regimes.....The presumption [in favour of sustainable development] is key to delivering these ambitions, by creating a positive, pro-development framework, but one underpinned by the wider economic, environmental and social provisions in the National Planning Policy Framework."

21. The Department for Communities and Local Government website^{ix} states that *"this is a key part of our reforms to make the planning system less complex and more accessible and to promote sustainable growth"* and that consultation closed on 17 October 2011. The draft National Planning Policy Framework also states that:

"Our approach to sustainable development involves making the necessary decisions now to realise our vision of stimulating economic growth and tackling the deficit, maximising wellbeing and protecting our environment, without negatively impacting on the ability of future generations to do the same."

The three 'pillars' of the economy, society and environment are interconnected. Our long term economic growth relies on protecting and enhancing the environmental resources that underpin it, and paying due regard to social needs".

22. We contend that AWRP would run counter to all three of these pillars *of the economy, society and environment*. In support of this contention are:

- AWRP, and in particular the EFW (incinerator) plant are greatly oversized and therefore represent a waste of public money that will cost jobs in NYCC and York Council, reduce opportunities for employment in the private sector by discouraging more labour-intensive but cheaper alternatives (e.g. jobs in relation to re-use and recycling) and impose an unnecessarily high burden on council tax payers.;
- Constructing the AWRP with its high capital intensity would damage economic recovery when compared with cheaper and cleaner alternatives that do not depend on a long-term inflexible contract. There are alternatives that allow innovation and depend on smaller unit operations so do not carry such significant financial risks.

- There are social costs both in relation to lost jobs opportunities and the unnecessarily high council tax bills that people will have to face. In addition, the ill-health that will result from emissions will impose costs on society and on the NHS.
- AWRP's EfW (incinerator) plant emits a range of harmful pollutants that carry a range of health risks, some greater than internationally accepted levels. In addition, it is the worst waste treatment option other than landfill for climate change.
- Fly ash and air pollution control residues are classified as hazardous waste. Incineration is almost unique among waste management technologies in creating hazardous waste where none existed before. This is the very antithesis of sustainable development.

23. **These factors alone are sufficient to show that AWRP does not represent a sustainable development so any presumption in favour of SD is irrelevant.**

3.3: Policy at Local Level

24. In their paragraph 2.1.6, AmeyCespa state that the planning system has been substantially reformed to embed community responsive policy-making at its heart and to make **contributing to the achievement of sustainable development a statutory objective**. They further state that the new spatial planning system exists to deliver **positive social, economic and environmental outcomes**, and requires planners to collaborate actively with a wider range of stakeholders and agencies that help to shape local areas and deliver local services (our emphasis). We contend that AWRP does not meet these requirements. Thus is outlined above and discussed further below:

- AWRP as presently proposed does **not** contribute to the achievement of sustainable development.
- AWRP does not lead to positive social, economic and environmental outcomes. We have discussed the adverse social effects and damage to the local economy above, our chapter on Need and Alternative options shows that AWRP is too large a facility and that its high costs are unnecessary (cheaper, cleaner alternatives exist) while our chapters on climate change, harmful emissions and health risks show that environmental outcomes are all negative.

Thus planning permission should be refused.

25. In their paragraphs 2.1.7 to 2.1.8, AmeyCespa state that Section 19(5) of the Planning and Compulsory Purchase Act 2004 requires local planning authorities to carry out an appraisal of the sustainability of proposals within each of their development plan documents (sustainability appraisal). This requirement on planning authorities to undertake an appraisal of the sustainability of their plans and policies incorporates the requirements of the European Directive on Strategic Environmental Assessment (SEA). PPS12 - "Local Spatial Planning" states the role of sustainability appraisal in the planning context as *"... providing a sound evidence base for the plan and form an integrated part of the plan preparation process. Sustainability Assessment should inform the evaluation of alternatives. Sustainability appraisal should provide a powerful means of proving to decision makers, and the public, that the plan is the most appropriate given reasonable alternatives"* (para 4.43). PPS12 defines the sustainability appraisal as the *"... appraisal of the economic, social and environmental sustainability of the plan"* (para 4.39).

26. We fully concur with the need for “*a sound evidence base*”. Such an evidence base would show that there are cleaner, cheaper and more environmentally friendly alternatives to AWRP and that therefore substantially more sustainable options are available. This would have demonstrated “*to decision makers, and the public*” that the plan for the proposed configuration at AWRP is **not** “*the most appropriate given reasonable alternatives*”. **Thus planning permission should be refused.**

27. In their paragraphs 2.1.9, AmeyCespa state that PPS12 defines the sustainability appraisal as the “*... appraisal of the economic, social and environmental sustainability of the plan*” (para 4.39). These factors are, of course, interlinked and social and environmental factors are considered above. Economic factors are considered in detail in our chapter on Need and Alternative Technologies. Suffice it to say here that there are cheaper alternatives using proven technology.

28. AmeyCespa’s paragraphs 2.1.10 et seq discuss the status of the North Yorkshire Waste Local Plan and the Regional Spatial Strategy (RSS). We agree that while the uncertainty surrounding the RSS continues to exist, it is appropriate for AmeyCespa to have undertaken an assessment of the manner in which their proposal accords with the fundamental objectives of sustainable development. We do, however, strongly disagree with both their evidence and their conclusions.

4: METHODOLOGY

29. Our methodology differs from that of AmeyCespa in several respects. Firstly, we have looked at international requirements and European Directives which AmeyCespa appear not to have done. Our conclusions from doing this are discussed above and indicate that AWRP is not a sustainable development. Secondly, we have not carried out a detailed investigation of planning documents in the way that AmeyCespa have done; indeed we are prepared to accept that they have covered this search reasonably thoroughly.

30. We mimic their *Stage A2 – Collecting baseline information* and *Stage A3 – Identification of issues and problems* in the sense that we have identified a substantial of information in our various chapters listed above and in other work that we have undertaken. This information provided us with key factors on which to focus but we also feel that it is necessary to respond to the points made by AmeyCespa in their Table 3.

31. AmeyCespa (Stage B2 and later) undertook development of options and their assessment of the options and factors influencing the selection of the site, development technology and development design and layout retrospectively. Had it been done prospectively, it is possible that different technology choices would have been made. Certainly, as is made clear in our Need and Technology Choices chapter, there are a range of cheaper, cleaner options and it is almost certain that most of them would have offered a more sustainable solution.

5: AMEYCESPA’S SUSTAINABILITY OBJECTIVES

32. AmeyCespa defined four sustainability objectives under the four key objectives for sustainable development as set out within PPS1. These were:
 - Social progress that recognises the need of everyone
 - Effective protection of the environment
 - Prudent use of natural resources
 - Maintenance of high and stable levels of economic growth and employment

We must add effective protection of human health.

33. Against these (now five) criteria:

❖ **Maintenance of high and stable levels of economic growth and employment.**

- AWRP, particularly the EfW (incinerator) plant is greatly oversized and therefore represents a waste of public money. This will cost jobs in NYCC and York Council and reduce opportunities for employment in the private sector by discouraging more labour-intensive but cheaper alternatives (e.g. jobs in relation to re-use and recycling) and impose an unnecessarily high burden on council tax payers.
- AWRP is capital intensive and front-end loaded and linked to an inflexible 25-year contract. Constructing it would damage economic recovery when compared with cheaper and cleaner alternatives that would allow innovation and would depend on smaller unit operations so do not carry such significant financial risks.
- The high capital costs carry with them concomitant opportunity costs. Put simply, there will be things that the Councils wish to do that they will be unable or unwilling to afford.

❖ **Effective protection of the environment**

- The main difficulties from an environmental standpoint arise from AWRP's EfW (incinerator) plant. This emits a range of harmful pollutants that carry a range of health risks, some greater than internationally accepted levels. In addition, it is the worst waste treatment option other than landfill for climate change.
- Fly ash and air pollution control residues are classified as hazardous waste. Incineration is almost unique among waste management technologies in creating hazardous waste where none existed before. This is the very antithesis of sustainable development.
- Emissions from the incinerator (EfW plant) have environmental consequences since they impact on ecosystems. Some of these affect both wildlife and agriculture. In addition, particulates also contribute to soiling and can have a corrosive effect on material and cultural heritage, depending on the composition of the particulates.

❖ **Prudent use of natural resources**

- Incineration destroys resources by making them inaccessible. This means that new resources have to be gained by exploiting virgin sources. By contrast, re-use and recycling place little or no demand on virgin resources yet NYCC's overall target for recycling is a modest 50%, well below what has been achieved elsewhere. The need to keep "feeding" the incinerator (if only to meet contractual terms and successfully amortise the capital) discourages re-use and recycling so ensures the continuing and unnecessary need to exploit virgin resources.
- If, as is the case in Hampshire, an oversized facility leads to waste being imported then there are necessarily additional transport costs. The fuel for transport is itself derived from a finite natural resource and is being expended in a wasteful manner.
- A centralised site means large transport distances for waste that could reasonably have been treated locally. Not only does it violate the proximity principle, it also leads to unnecessary expenditure of fuel for transport.

❖ **Social progress that recognises the need of everyone**

- There are social costs both in relation to lost jobs opportunities and the unnecessarily high council tax bills that people will have to face. In addition, the ill-health that will result from emissions will impose costs on society and on the NHS.

❖ **Effective protection of human health**

- The EfW (incinerator) emits a wide range of toxic pollutants which harm human health. There is a huge body of scientific evidence 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 heavy metals. Calculations of the risks of modern incinerators that meet current emission standards show that they exceed the generally accepted risk criterion for cancer.

34. **These factors again demonstrate that AWRP does not represent a sustainable development.**

6: SUSTAINABILITY ASSESSMENT COMMENTARY

35. AmeyCespa claim that their Sustainability Assessment was developed to derive whether [or not] the proposed development complies with the fundamental objectives of sustainability and to ensure that specific elements of the project have been designed to incorporate sustainable development opportunities wherever possible. Their Table 2.3 is intended to allow the decision maker to assess individual elements of the development. The objectives were grouped into the four fundamental aims for sustainable development. They (wrongly in our view) exclude human health.

36. AmeyCespa claim that the result of their assessment demonstrates how the final design accords with the objectives of sustainability, but also allows a designer of each specific element of the proposal to consider their solution against the objectives to consider whether a more sustainable option may be available. To test this assertion, we have considered each of the items in their Table 2.3 and given it a rating on the same scale as that used by AmeyCespa. This is

- √√ Very Positive
- √ Positive
- ~ Neutral / No relationship
- ? Uncertain
- * Negative
- ** Very Negative

37. These ratings are, of course qualitative and depend on an element of subjective judgement. Perhaps more importantly, they do not recognise the relative magnitude of the different impacts they are intended to assess. Thus we see health risks and climate change (both important issues) scored alongside such peripheral issues as the provision of an exhibition centre.

38. Tables 2 to 5 below display the results of this consideration. Our commentary derives from evidence we are presenting in other chapters. As will become apparent, we reach somewhat different conclusions.

Table 2: Social Progress which Recognises the Needs of Everyone

Table 2.1: Improved Access to Services, Facilities, the Countryside and Open Spaces

SP1 To improve access to services, facilities, the countryside and open spaces for the community

1.	AmeyCespa View	Comment / Rating of AmeyCespa Proposal
	The development would provide a vital waste	While AWRP would undoubtedly divert waste from landfill it

<p>service for the communities of North Yorkshire and The City of York, which will ensure that the management of waste is driven up the waste hierarchy, maximising recycling and recovery of energy from waste and ensuring diversion from landfill. There is potential for some positive effect to the economy and thereby indirect effects on nearby communities, attributable to use by construction and operational employees, i.e. lunchtime visits for food and services, increasing need and provision</p> <p>Rating v</p>	<p>would do relatively little to move waste up the waste hierarchy. Indeed, the 50% target for recycling would be “locked-in” if AWRP were constructed so that NYCC/York would miss out on the possibility of 70% recycling that is achieved in some areas. Moreover, the relatively low efficiency of incineration + electricity generation plant such as the EfW at AWRP mean that such plant are disposal, not recovery, facilities.</p> <p>While there could be some benefits to the local economy in nearby communities of the sort mentioned by AmeyCespa, this effect is likely to be small and likely to be more than offset by jobs losses in the two councils (with concomitant loss of services to the public), loss of jobs in leisure as people are put off visiting the area by the overwhelming negative visual impact of AWRP and loss of jobs in re-use and recycling that would otherwise have been created. Moreover, the presence of AWRP will detract not only from existing leisure facilities but discourage investment in new ones.</p> <p>Rating **</p>
<p>Educational facilities would be provided in the form of exhibitions and displays covering a range of related subjects, i.e. the importance of waste management, how the facilities works, the local environment and how this is incorporated into the development. The facility includes the provision of classrooms to support school visits and guided tours of the facility</p> <p>Rating v</p>	<p>Education would only be of use if it were properly balanced, presenting a true picture of alternative technologies including those run by rival organisations. We have no confidence that this would be the case.</p> <p>Rating ? / ~</p>
<p>A commitment has been made to undertake liaison with local schools and the local community</p> <p>Rating v</p>	<p>So be it, but again a balanced view should be presented.</p> <p>Rating ? / ~</p>
<p>A conference facility would be available for use by the local community</p> <p>Rating v</p>	<p>There are already good facilities in village halls and other venues. This proposed conference facility is of little relevance.</p> <p>Rating ~</p>
<p>Opportunities for improving the local highway in the vicinity of the site access are being explored</p> <p>Rating v</p>	<p>Bearing in mind the negative impact that the excess traffic transporting waste will have, coupled with increased delays (with associated economic costs) and additional accident risks incurred, this is the very least that could be done. What would actually be necessary is road improvements completed and paid for by the proposer (i.e. not the public purse) before construction starts.</p> <p>We give this a neutral rating because it is at least a start but if nothing is done than a negative rating would be in order.</p> <p>Rating ~</p>
<p>The facility provides for the employment for approximately 400 workers during the 37 month construction programme; it is aimed to focus on using local construction companies where technically and economically feasible</p> <p>Rating v</p>	<p>The construction period is relatively short and undoubtedly the design and management jobs would go to companies outside the immediate area. Thus the jobs available will be significantly less than the figure of 400 (which may well be a peak figure) and in less skilled roles. It would also prevent the creation of jobs in re-use and recycling. Costs imposed by the scheme on NYCC and York would lead to job losses, particularly at a time of ongoing financial austerity and constraints on council budgets.</p> <p>Rating *</p>

<p>The facility would provide for approximately 70 employees during operation; it is aimed to maximise local employment opportunity where possible</p> <p>Rating √</p>	<p>The roughly 70 jobs during operation are likely to be more than offset by jobs losses in the two councils (with concomitant loss of services to the public), loss of jobs in leisure as people are put off visiting the area by the overwhelming negative visual impact of AWRP and loss of jobs in re-use and recycling that would otherwise have been created. Moreover, the presence of AWRP will detract not only from existing leisure facilities but discourage investment in new ones.</p> <p>Rating *</p>
<p>A Green Travel Plan would be formulated to explore and support opportunities for sustainable transport for employees and visitors</p> <p>Rating √</p>	<p>Why is such a plan not formulated already? Perhaps because the reality of AWRP's geographical position makes this unrealistic?</p> <p>Rating ~</p>
<p>Areas providing for visitor and office employees would be designed to enable access by persons with disability. Some elements of scheme design are constrained by technical requirements of the technology, such that accessibility would not be feasible in all areas, i.e. high level gantries, plant rooms etc</p> <p>Rating √</p>	<p>The Disability Discrimination Act makes such provision necessary in any event. The provisos mentioned are simply realism.</p> <p>Though we rate this positively, it should also be a feature of any alternative scheme, wherever situated.</p> <p>Rating √</p>
<p>The existing site is an operational quarry adjacent to a landfill facility, and is not therefore accessible to members of the public. The development would not affect the level of existing access to the open countryside/green space.</p> <p>Rating √</p>	<p>The fact that people could still move around the nearby open countryside if they wanted to is not the point. The issue is that the overwhelming presence of the AWRP brings industrial-style buildings and functions to an entirely inappropriate rural setting It is this that affects both the level and desirability of access.</p> <p>Rating **</p>
<p>A commitment has been made to the implementation of a Landscape and Cultural Heritage Fund to allow for both mitigation and improvements to the local countryside e.g. footpath/bridleway improvements, hedgerow replacement and off-site planting</p> <p>Rating √</p>	<p>This could be done for any of the cleaner and cheaper alternative technologies that could and should have been chosen.</p> <p>Rating ~</p>

Table 2.2: Skills, education & learning / Community participation in decision making

SP2 To improve skills, education and learning opportunities and provide for community participation in decision making

2. AmeyCespa View	3. Comment / Rating
<p>Educational facilities would be provided in the form of exhibitions and classrooms displays covering a range of related subjects, i.e. the importance of waste management, how the facility works, the local environment and how this is incorporated into the development. The facility includes the provision of to support school visits and guided tours of the facility</p> <p>Rating √</p>	<p>Education would only be of use if it were properly balanced, presenting a true picture of alternative technologies including those run by rival organisations. We have no confidence that this would be the case.</p> <p>Rating ? / ~</p>
<p>A commitment has been made to undertake liaison with local schools and community</p>	<p>So be it, but again a balanced view should be presented.</p>

Rating √	Rating ? / ~
A conference facility would be available for use by the local community. This would provide an opportunity for on-going community engagement Rating √	There are already good facilities in village halls and other venues. This proposed conference facility is of little relevance. We have seen little sign of community engagement, so how can it be “ongoing”. Community engagement is more represented by those opposing the scheme. Rating ~
The facility would provide opportunity for the skilling/re-skilling of local persons during both construction and operational phases Rating √	To what extent will this opportunity lead to net benefits? As stated above, the jobs created at AWRP are likely to be offset by losses elsewhere in the local economy. Rating ~
The local community has been afforded opportunity to contribute to the design development through consultation events held during the pre-application process. The design has been developed considering comments made and resulting in significant design iterations. Rating √	In our experience there has been little sign of anyone listening to public concerns. This was exemplified in the break-up of the community liaison group. The only sign that real notice was taken of public concern was over the height of the EfW stack. Sadly, this led to it being reduced in height from the original 80m down to 70m, thus increasing health and environmental risks Rating *
A commitment has been made for on-going liaison with the local community, through a format yet to be determined. Local community involvement will be key to refining operational and development changes and opportunities Rating √	On the evidence to date we do not believe that any such engagement is possible in the sense that those objecting to the scheme have not been listened to. Rating ~
The facility supports the attainment of a sustainable lifestyle by communities within the waste catchment, albeit indirectly through the sustainable management of waste Rating √	The AWRP does not manage waste in a sustainable manner, as evidenced by the facts presented in this chapter and in other chapters which accompany it. Rating **

Table 2.3: Improved Health and Sense of Well-being

SP3: To improve the health and sense of well-being of people

4. AmeyCespa View	Comment / Rating of AmeyCespa Proposal
The operation of the facility would not have an adverse effect on the health of the local community its employees or the living environment and has been fully assessed in accordance with the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 (see Environmental Statement) In order to specifically address concerns regarding the health of the local community Rating ~	Municipal Solid Waste (MSW) incinerators are fed by 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 (these can act synergistically with Polycyclic Aromatic Hydrocarbons (PAHs) which can deposit on particulates, providing a path for longer term deposition in the body. Some particulates are sufficiently small to enter the sensitive lung tissue and damage it, causing premature death in extreme cases. Further, there are acid gas emissions; NO _x reacts with ammonia, moisture, and other compounds to
A Human Health Assessment has been undertaken (see Chapter 12 of the Environmental Statement) which concluded residual impacts on health would not be significant	

<p>Rating ~</p>	<p>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.</p> <p>There is a substantial body of opinion that holds that objective scientific evaluation 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.</p> <p>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 heavy metals. Calculations of the risks of modern incinerators that meet current emission standards show that they exceed the generally accepted risk criterion for cancer. However, official UK bodies do not share this scientific consensus. Under the law of the EU, the application of the Precautionary Principle has been made a statutory requirement. We very strongly object both to the harm that this plant would do to the health of the local area and beyond and to the health costs it would burden the NHS with.</p> <p>Rating **</p>
<p>The operation of the facility would be strictly controlled through its operation in accordance with the requisite Environmental Permit issued and enforced by the Environment Agency</p> <p>Rating ~</p>	<p>We have presented evidence that monitoring of incinerators is inadequate. Monitoring of pollution from incinerators 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.</p> <p>Rating *</p>

Table 2.4: Provision for Sub-Regional Self-Sufficiency

SP4 To provide for sub-regional self-sufficiency and for communities to take more responsibility for their own waste (Local needs met locally).

5. AmeyCespa View	Comment / Rating of AmeyCespa Proposal
<p>The need for the development was the subject of a detailed assessment (see Part 1, Section 1.10: Need) which concluded that there exists a demonstrable need for AWRP in the context of strategic policy documentation, and the current waste management position of NYCC and CYC</p> <p>Rating vv</p>	<p>Our chapter on need and Technology Choices demonstrates that the assessment was not adequately carried out and that, while there is a need to replace landfill, the volume/mass of waste that would need to be treated at AWRP has been seriously over-estimated. Moreover, the need for a plant such as the proposed AWRP plant was not demonstrated; cleaner and cheaper options should have been chosen in its place.</p> <p>Rating **</p>
<p>The facility has been specifically designed to accommodate the identified waste arisings</p>	<p>The waste arisings have been overestimated and the technology choice is wrong. In consequence the facility has</p>

from within North Yorkshire and the City of York Rating vV	been designed based on wrong choices and is inappropriate. Rating **
A site search assessment was undertaken (see Part 5 of the Planning Statement Folder) to determine the most appropriate location for the facility in the context of a wide range of technical, economic and environmental constraints. It was concluded that the chosen site location offers the best option for delivery of the most sustainable solution Rating vV	WE do not accept that a single –site solution for the whole of NYCC/York is appropriate. The choice of a rural site means that a large industrial plant is being placed in an otherwise rural setting to the damage of the local communities, their health and their well-being. The technology choice is wrong, being based primarily on a technology that is uniquely polluting among waste management options is the worst from a climate change perspective and imposes high financial costs and risks on the community. Rating **
The solution has been designed to ensure compliance with the fundamental principles of the Waste Framework Directive to deliver a facility at the nearest appropriate installation and PPS10 by providing a facility of the right type, in the right place and at the right time allowing communities to take responsibility for their waste Rating vV	AWRP does not “ <i>deliver a facility at the nearest appropriate installation</i> ” – as described above, a single-site solution is inappropriate. It runs counter to the proximity principle. AWRP provides a facility of the wrong type, in the wrong place and at the wrong time. By burning their waste and keeping recycling down to a mere 50% it prevents communities from taking responsibility for their waste, for example through recycling to 75% and beyond. Rating **
The facility has been designed such that it is flexible to the changing needs of the waste arisings catchment community; changes in volumes of specific waste streams and priorities for their management can be accommodated by modifications to the layout and design of the site Rating vV	The facility only offers limited flexibility and this is reflected in the fact that councils must guarantee a certain minimum tonnage of MSW. The high capital costs make an inflexible contract almost inevitable to the detriment of council tax payers and local businesses. Rating **

Table 2.5: Climate Change

SP5: To minimise greenhouse gas emissions and provide a managed response to the effects of climate change

6. AmeyCespa View	Comment / Rating of AmeyCespa Proposal
The facility would generate circa 28 megawatts of electricity gross through combined operation of the EfW and AD. Approximately 4 megawatts would be used to support the facility. The facility would be a net exporter of energy which would be transferred to the grid thereby providing for a source of renewable (non-fossil fuel) electricity Rating v	No doubt the figures on electricity generation and net export to the grid are broadly correct. However, a technology is only qualifies as an electricity-producing renewable energy technology if it uses renewable resources (hydro, wind, wave tide) or the fuel that it uses is renewable (biomass). This is clearly the case for the AD plant but markedly less so for the EfW incineration plant since by no means all of the waste it burns is renewable. Rating ~
Methane is a greenhouse gas which has an effect thirty times greater than the main greenhouse gas carbon dioxide. Landfill sites are a major contributor to the global greenhouse effect through the production of methane. The solution has been developed in order to divert waste away from landfill which could otherwise be managed in a more	Methane is about 24 times more powerful a greenhouse gas (GHG) than CO ₂ (not 30 times). CO ₂ and methane emissions make up over 98% of GHG emissions from waste management (about 3% of total UK GHG emissions), largely made up of methane emissions from organic waste degrading in landfill. Even before the Waste (England and Wales) Regulations 2011 came into force, alternatives to landfill of biodegradable

<p>sustainable manner either by recycling and re-using waste or by creating energy from that waste which cannot for economic and environmental reasons be recycled or re-used.</p> <p>Rating √</p>	<p>waste are commonly seen as having a major advantage over landfill. However, the extent of such advantage depends greatly on the technology chosen even at the “other recovery” level in the waste hierarchy in which incineration with energy recovery lies. Most studies show that the advantage over landfill is markedly less for incineration (especially without CHP) than for any other technology. Incineration is the worst alternative to landfill from a climate change standpoint. It releases high levels of CO₂; nearly all the carbon content in the waste is emitted as CO₂. The carbon dioxide emissions from AWRP and especially the EfW incineration plant are markedly higher than indicated by AmeyCespa in their planning application. Indeed, incineration is the worst alternative to landfill in terms of greenhouse gas emissions.</p> <p>Rating **</p>
<p>The facility maximises the opportunity for recycling from both waste arisings at both the front-end (MT) and from operational process outputs i.e. recycling/re-use of bottom ash etc</p> <p>Rating √</p>	<p>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. However, the AWRP facility, far from maximising the opportunity for recycling actually sets an effective upper limit of only 50%. This is because it is necessary to run the incinerator at close to 100% load factor for commercial and financial reasons. Without AWRP, re-use and recycling could easily reach and exceed 70% as has been both in the UK and overseas.</p> <p>Rating **</p>
<p>The facility has been subject of WRATE modelling (see Appendix 2A of the Planning Statement) which concluded that AmeyCespa's solution would have a climate change saving of circa 130 200 tonnes of CO₂e compared to the current baseline scenario of landfilling waste</p> <p>Rating √</p>	<p>The apparently favourable results from studies carried out for the AWRP proposal using the WRATE model which purport to indicate that incineration is a good choice from a climate change standpoint are a consequence of known methodological flaws in the model (see our Climate Change chapter). The fact that incineration is actually a bad option from a climate change standpoint (see above and our Climate Change chapter) means that much of the material in AmeyCespa's Planning Statement pertaining to GHG and the alleged benefits of incineration is wrong. In reality incineration is uniquely damaging from a climate standpoint.</p> <p>Rating **</p>
<p>The location of the facility reduces the need for travel by road when considered in the context of feasible alternative solutions to deliver the identified need. Drive time mapping was used within the site selection exercise to sieve and assess the suitability of sites from which it was concluded that the site is centrally located within the ‘Area of Search’ zone in terms of drive times and volumes of waste received from Waste Transfer Stations. Alternative transport modes i.e. transport by rail were considered. However in the absence of suitable existing infrastructure and in the context of the rural nature of the catchment it was concluded that the construction of rail infrastructure to serve the facility would be both economically and environmentally prohibitive and would not</p>	<p>The site is badly located for East-West traffic and will lead to increased congestion, especially at peak times, on overcrowded roads such as the A59 and York ring road. Since the heavy lorries will move relatively slowly, their presence will increase delays for other road users. This has an economic cost.</p> <p>This could have the damaging effect of causing other road users to divert to local (i.e. not A) roads, thus increasing traffic through villages, especially in the vicinity of the A59 and A168.</p>

be able to meet the entire transport needs i.e. movements of recyclate are variable in location/quantity and could not be feasibly be replaced by transport by rail. Rating √	Rating *
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Table 3: Effective Protection of the Environment

Table 3.1 Protect and Enhance Biodiversity and the Natural Environment

EN1: To protect and enhance biodiversity and the natural environment

AmeyCespa View	Comment / Rating of AmeyCespa Proposal
The ecological and nature conservation sensitivity of the development was a consideration in the site selection exercise (see Part 5 of the Planning Statement Folder). A Phase 1 Habitat Survey has been undertaken (see Chapter 5 of the ES) from which it was concluded that the site is of limited ecological value Rating √√	One has to look further than the immediate AWRP site. There are harmful effects environmental and ecosystem effects arising from incinerator emissions. Some of these have been summarised by the European Environment Agency in their 2011 report ^x . These and other emissions not covered by it, have environmental consequences since they impact on ecosystems. Some of these affect both wildlife and agriculture. In addition, particulate matter (PM) also contributes to soiling and can have a corrosive effect on material and cultural heritage, depending on the PM composition. Rating *
An ecological assessment (see Chapter 5 of the ES) concluded that there are no habitats of international, national or county importance that would be directly affected by the proposals Rating √√	As explained above, effects cover both agriculture and local ecosystems. AmeyCespa's claim that that there are no habitats of international, national or county importance that would be directly affected by the proposals" ignores these areas and is not the whole story Rating √
A commitment has been made to the implementation of a range of mitigation measures during construction and of a landscaping scheme during operation incorporating provision for both mitigation and improvements to habitat and potential for biological diversity Rating √√	Mitigation measures acknowledge the possibility of damage and seek to go some way to ameliorating it. However, the landscaping scheme does little to ameliorate the overwhelmingly negative visual impact. Rating ~

Table 3.2: Preserve, Enhance and Manage Landscape Quality and Character

EN2: To preserve, enhance and manage landscape quality and character for future generations.

7. AmeyCespa View	Comment / Rating of AmeyCespa Proposal
The potential visual intrusion of the site and the landscape sensitivity of the surrounding area was a key suitability criteria considered as part of the site selection exercise (see Part 5 of the Planning Statement Folder). The site was considered preferable given existing quarry/landfill operations and the context of the A1M motorway.	The overwhelmingly negative visual impact of an industrial facility inappropriately situated in a rural shows that the visual sensitivity of AWRP was not well appreciated. If it had been, the site should not have been given serious consideration. The fact that the site is an existing quarry/ landfill site is largely irrelevant in the sense that Condition 2 of their planning permission grants time-limited mineral extraction until July 2008, and limited the disposal of waste until July

Rating v	2013 and restoration by 17 July 2014. Thus the existing operations should be over by the time the proposed facility would be completed. Rating **
A landscape and visual impact (LVIA) assessment has been undertaken (see Chapter 4 of the ES) which concluded that the proposed AWRP facility has been designed to sit naturally in its landscape and involves a carefully considered landscape strategy, with re-contouring of ground within the site to enhance screening, extensive native planting and a long term landscape management plan Rating v	We do not agree with this assessment. Indeed many people have commented to us that the visual impact of the site is unacceptable. To say that it “fits naturally in its landscape” is about as far from the truth as it is possible to get. The screening etc is of only marginal value given that the facility would be visible and intrusive for miles around Rating **
A commitment has been made to the implementation of a Landscape and Cultural Heritage Fund to allow for tree and hedgerow planting, designed in sympathy and to enhance the character of the surrounding countryside Rating v	This is of relatively little value and fits oddly with the claim that it “fits naturally in its landscape”. Rating ~

Table 3.3: Protect and Enhance the Historic Environment

EN3: To protect and enhance the historic environment.

8. AmeyCespa View	Comment / Rating of AmeyCespa Proposal
An Archaeology and Cultural Heritage assessment has been undertaken (see Chapter 3 of the ES) from which it was concluded that there would be, at most slight adverse impacts on below ground archaeology but the development would result in some significant effects on the nearby registered park and garden and listed buildings at Allerton Park Rating ~	If these claims are correct (and time has not yet permitted us to assess them) then it is reasonable to give it the same rating as did AmeyCespa Rating ~
A commitment has been made to the implementation of a Landscape and Cultural Heritage Fund to allow for the restoration and improvement of Cultural Heritage assets in Allerton Park and Gardens Rating ~	No comment at this stage Rating ~

Table 3.3: Improve the Quality of the Built Environment

EN4: To improve the quality of the built environment

9. AmeyCespa View	Comment / Rating of AmeyCespa Proposal
The layout of the site and design of built environment has been the subject of an iterative design process both internally within the project team including environmental specialists and externally through engagement	We consider this to be something of an overstatement. In our view, the public consultation, such as it was, was deeply flawed and inadequate. To us, who wish to see planning permission refused there are many remaining “concerns and issues in the design concept”.

with the client body and the public to proactively resolve concerns and issues in the design concept Rating √	Rating *
The facility is to be constructed within the boundary of an existing quarry, approximately 7m below current quarry floor level with landscaped earth bunds constructed around the perimeter of the site, thereby reducing the scale of main building Rating √	Doing this may have some advantages from a visual impact perspective but this does not alter the fact that the visual impact is unacceptable. Rating *
The development retains the existing Claro House which is to be refurbished for use as the office and visitor's facilities Rating √	Noted Rating ~
The Design and Access Statement (Part 3 of the Planning Statement Folder) provides details of the facility design and confirms that it reflects, not only the requirements of the process technologies, but also includes best practice to minimise the visual impact. The statement also confirms that AC has responded to stakeholder input throughout the design process Rating √	One of our (and other peoples) reasons for asking for planning permission to be refused is the unacceptable visual impact. Rating **

Table 3.4: Safeguard Public Amenity, Minimising Pollution

EN5: To safeguard public amenity, minimising pollution.

10. AmeyCespa View	11. Comment / Rating of AmeyCespa Proposal
The facility would be strictly controlled through its operation in accordance with the requisite Environmental Permit issued and enforced by the Environment Agency Rating vV	Our Health Risks chapter shows that even plant operated within the Environment Agency limits lead to a cancer risk that exceeds the de minimis internationally accepted level. Moreover, the standards in EU/UK fall short of international best practice. Rating *
Consideration has been given to the potential for nuisance with regards to noise; air quality and light pollution (see Chapters 8 10 & 9 respectively of the ES). The impact on air quality arising from the transportation of waste and recycle is included within the Air Quality Odour and Dust assessment (see Chapter 10 of the ES) Rating vV	Air quality is less good than AmeyCespa suggest for a number of reasons set out in our Critique of their Chapters 10 and 12. Dust is a potentially significant environmental risk and there are the usual risks of road accidents during transport of wastes. This is greater than need be due to the failure to take due account of the proximity principle. In addition, there is a low risk but high impact event: a road accident leading to the release of toxic fly ash into the environment. Rating *

EN6: To safeguard water quality and water resources

12. AmeyCespa View	13. Comment / Rating of AmeyCespa Proposal
The facility would be strictly controlled through its operation in accordance with the requisite	Our Health Risks chapter shows that even plant operated within the Environment Agency limits lead to a cancer risk

Environmental Permit, issued and enforced by the Environment Agency Rating vV	that exceeds the de minimis internationally accepted level. Moreover, the standards in EU/UK fall short of international best practice. Rating *
The development has been designed to reduce the effect on water resources with the incorporation of rainwater harvesting from the roof and use of the captured water within operational processes Rating vV	This is a useful design feature. Rating V
The surface water drainage scheme has been designed in liaison with the Environment Agency and in accordance with their requirements such that all waters would be fed into an attenuation pond within the site prior to a discharge Rating vV	Is there any testing of water quality prior to it leaving the attenuation pond? What is the possibility of accidental release or over-topping? Provisional Rating V
A Hydrological and Flood Risk Assessment has been undertaken (see Chapter 7 of the ES) which concluded that AWRP is located in an area which falls outside the extent of extreme flooding, and the chance of flooding each year from rivers or the sea is considered to be 0.1% (1 in 1000) or less. AWRP therefore lies within the area of lowest risk and is therefore appropriate from this perspective Rating vV	We have not been able to examine this issue due to lack of time. If true, it must be a good thing. Provisional Rating vV

Table 4: Sustainable Use and Management of Natural Resources

Table 4.1: Sustainable Design, Construction and Operation

NR1: To ensure sustainable design, construction and operation, minimising the use of natural resources.

14. AmeyCespa View	15. Comment / Rating of AmeyCespa Proposal
The development provides for the re-use of a quarry/landfill site Rating v	The development provides for an inappropriate the re-use of a quarry/landfill site, with concomitant adverse impacts. Rating **
The iterative design process has sought to minimise the impact of the developed footprint, as evidenced through the relocation of the Incinerator Bottom Ash (IBA) treatment facility, to within the core application area Rating V	The “developed footprint” may have been reduced compared with some notional original design, However, it brings with it various unacceptable impacts and risks Rating *
A BREEAM Assessment has been undertaken to assess the sustainability of both Claro House as a visitor/education centre and of the main facility plant (see Appendix 2C of the Planning Statement). This considers building materials, transportation of materials, waste management and energy/resource efficiency and confirmed that both sections of the facility will have a rating of ‘Very Good’	A BREEAM score of “very good” may sound impressive but it is only the middle of five grades. Moreover, it is only provisional at this stage. The BEEAM score for Claro House is only a marginal issue. We do not have the facilities to re-run BREEAM for AWRP but a look at the scoring system is instructive. They are Management (12%), <u>Health and Wellbeing</u> (15%), Energy (19%), <u>Transport</u> (8%), Water (6%), Materials (12.5%), Waste (7.5%), <u>Land Use and Ecology</u> (10%), <u>Pollution</u> (10%). It is

Rating v	obvious from our various chapters covering health and environmental issues that we would score AWRP very badly on each of the underlined criteria. We therefore consider that a BREEAM score of “very good” is not justified. Rating *
The improvement works to Claro House would utilise locally sourced materials. Use of local materials is not appropriate to the construction of the main facility given the need for technological solutions to meet the structural and operational requirements of the building Rating v	Noted Rating v
The facility would be CHP enabled thereby ensuring the opportunity for combined heat and power off-take should it become economically viable at any point during the life of the development. A heat assessment has been undertaken and is reported at Appendix 2B of the Planning Statement , which concludes that the facility is off-take ready and that potential opportunities exist which may be deliverable as implementation constraints are relaxed Rating v	The location is in open countryside so there is no demand for the heat output of an EFW plant. This is contrary to government policy to encourage EFW plant of all types to be CHP plant There is no industry and no large housing estates near to AWRP. The nearest small conurbation is Knaresborough 6 km to the west, Harrogate is 11.7 km to the west and York is 20.5 km to the east. In terms of heat demand, none of these are close enough to be effective locations for the use of the heat generated by the planned incinerator. Moreover, any attempt to transport heat, even if technically viable, would add substantially to costs Rating *
The facility would be run on energy produced within it, and as such would be self supporting in terms of energy requirement (there would be a requirement for back-up power in the case of emergencies). The facilities provide for the net export of electricity to the grid, thereby reducing the country’s reliance on fossil-fuels Rating v	Noted However, there is currently no realistic prospect of CHP. Rating ~

Table 4.2: Drive Waste up the Waste Hierarchy

NR2: To drive waste up the waste hierarchy thereby minimising disposal of waste at landfill.

16. AmeyCespa View	17. Comment / Rating of AmeyCespa Proposal
The over-riding objective of the development seeks to divert waste from disposal at landfill, by maximising recycling opportunities (3rd tier of the waste hierarchy) and the treatment and recovery of energy from residual waste (4th tier of the waste hierarchy) Rating vV	As noted in Section 3.1, the EFW incineration plus electricity generation plant should be regarded as “disposal” so the waste that enters it is not being driven up the waste hierarchy. Moreover, the plan for AWRP is predicated on a very modest re-use/recycle target of 50%, well short of best practice. Without AWRP 70% or more recycling is attainable so it can truthfully be said that AWRP would hold waste down the waste hierarchy and inhibit moving it up. Rating **

Table 4.3: Reduce the Need for Travel by Road during Construction and Operation

NR3: To reduce the need for travel by road during construction and operation, thereby minimising the use of fossil fuels.

18. AmeyCespa View	19. Comment / Rating of AmeyCespa Proposal
<p>The location of the facility reduces the need for travel by road when considered in the context of feasible alternative solutions to deliver the identified need. Drive time mapping was used within the site selection exercise to assess the suitability of sites from which it was concluded that the site is centrally located within the in terms of drive times and volumes of waste received. Alternative modes of transport such as rail were considered; however in the absence of suitable existing infrastructure and in the context of the rural nature of the catchment it was concluded that the construction of rail infrastructure to serve the facility would be both economically and environmentally prohibitive and would not be able to meet the entire transport needs i.e. movements of recycilate are variable in location/quantity and could not be feasibly be replaced by transport by rail</p> <p>Rating √</p>	<p>The concept of a single site to deal with North Yorkshire’s waste is contrary both to the proximity principle and common sense. In the first place there should be much higher re-use and recycling, much of it taking place locally. Secondly, residual waste should be treated closer to source. This would eliminate much of the distance driven and the time spent doing so. It would also eliminate unnecessary pollution from transport of waste.</p> <p>The council’s own public consultation reveals residents would prefer to have smaller local facilities – including at Allerton Park – to reduce the number of lorries on the roads. But the EfW (incinerator) proposal would put many tens of thousands of lorries on to our roads bringing in waste from all over the county. As well as adding to traffic congestion and to road deaths and injuries, lorry fumes will add to pollution and increase our carbon footprint.</p> <p>Rating *</p>

Table 5: Building a Sustainable Economy in which all can prosper

Table 5.1: Retain Existing Jobs and Create New Employment Opportunities

EC1: To retain existing jobs and create new employment opportunities

20. AmeyCespa View	21. Comment / Rating of AmeyCespa Proposal
<p>The facility provides for the employment of approximately 400 workers during the 37 month construction and commissioning programme</p> <p>Rating √</p>	<p>The figure of 400 jobs may be a peak and not all of them would be local people. While there could be some benefits to the local economy in the short term, this effect is likely to be offset by jobs losses in the two councils (with concomitant loss of services to the public), loss of jobs in leisure as people are put off visiting the area by the overwhelming negative visual impact of AWRP, especially during the later stages of its construction. In addition, even construction of AWRP will constrain creation of jobs in re-use and recycling. Moreover, the presence of AWRP will discourage investment in new leisure facilities in the area.</p> <p>Rating *</p>
<p>It is proposed to use local construction companies where technically and economically feasible in the construction of the facility</p> <p>Rating √</p>	<p>The term “technically and economical feasible” clearly implies that many tasks will not go to local companies.</p> <p>Rating ~</p>
<p>The facility would provide for approximately 70</p>	<p>The roughly 70 jobs during operation are likely to be more</p>

<p>employees during operation; it is aimed to maximise local employment opportunity where possible. Opportunities would be available for both the skilled and un-skilled labour force</p> <p>Rating √</p>	<p>than offset by jobs losses in the two councils (with concomitant loss of services to the public), loss of jobs in leisure as people are put off visiting the area by the overwhelming negative visual impact of AWRP and loss of jobs in re-use and recycling that would otherwise have been created. Moreover, the presence of AWRP will detract not only from existing leisure facilities but discourage investment in new ones.</p> <p>Given that AWRP and the EfW plant in particular are oversized then there will probably be some negative effect on employment in relation to landfill of commercial and industrial waste.</p> <p>Rating *</p>
<p>There is potential for some limited indirect positive effect to the economy of nearby Knaresborough, attributable to use by construction and operational employees, increasing the need and provision of services, with potential increasing in employment and training opportunity</p> <p>Rating √</p>	<p>While this is possible the effect will be offset by the negative employment effects discussed above.</p> <p>We are at a loss to understand why Knaresborough has been singled out as the sole beneficiary. Boroughbridge is just as easy to get to from the AWRP site, if not easier.</p> <p>Rating ~</p>
<p>There would be negligible effect on employment at existing landfill facilities currently receiving waste given their limited workforce required to operate, and the on-going requirement for landfill facilities to support the remaining fraction of waste arisings (i.e. commercial and industrial) in North Yorkshire and the City of York.</p> <p>Rating √</p>	<p>Since the AWRP facility and the EfW plant in particular are oversized then there will probably be some effect, though how large this will be is difficult to assess. It is just one more example of potential job losses induced by AWRP to add to those discussed above.</p>

Table 5.2: Diversify and Strengthen the Local Economy

EC2: To diversify and strengthen the local economy

22. AmeyCespa View	23. Comment / Rating of AmeyCespa Proposal
<p>Evidence suggests that the presence of an EfW facility does not detract from alternative development and regeneration initiatives (e.g. Eastcroft EfW located within Nottingham city centre surrounding by regeneration development)</p>	<p>The presumption here is that an agricultural and rural environment is somehow in need of regeneration which is something normally associated with city centres. The information given here by AmeyCespa is irrelevant.</p> <p>In addition, there are better alternatives. The development of a recycling or secondary resources industry offers enormous potential for sustainable job creation, in other words re-generation. By contrast incinerators offer just a few jobs during construction, and even less for maintenance once they are built.</p> <p>Sustainable 'green collar' jobs can play a vital part in local economic development, and reprocessing plants for the materials collected, such as paper, plastics and metals, can encourage regional regeneration. In Germany where the recycling industry is huge, the merchant bankers Dresdner Kleinwort Benson commented that "By 1995, recycling had become a giant industry...on a par with the insurance industry in Germany and well ahead of sectors, such as telecommunications and engineering. It dwarfs the</p>

Rating v	retail and steel sectors.” Incineration will cut off these benefits. Rating ~
The development has been subject of an Socio-Economic study (see Chapter 13 of the ES) which concluded that proposed development is expected to give rise to positive socio-economic impacts particularly in the local area, relating to employment opportunities and visitor centre that would not only provide an educational purpose, but also a community function providing a facility that could be used by local groups as a meeting place Rating v	As stated above the roughly 70 jobs during operation are likely to be more than offset by jobs losses in the two councils (with concomitant loss of services to the public), loss of jobs in leisure as people are put off visiting the area by the overwhelming negative visual impact of AWRP and loss of jobs in re-use and recycling that would otherwise have been created. The presence of AWRP will detract not only from existing leisure facilities but discourage investment in new ones. Some loss of jobs in relation to landfill of commercial and industrial waste can be expected. None of this looks remotely like “ <i>positive socio-economic impacts</i> ” Why should a visitor centre at AWRP provide any community function when there are facilities in local villages that are in a much more pleasing environment? Rating *
There is potential for some limited indirect positive effect to the economy of nearby Knaresborough, attributable to use by construction and operational employees, increasing the need and provision of services Rating v	While this is possible the effect will be offset by the negative employment effects discussed above. We are at a loss to understand why Knaresborough has been singled out as the sole beneficiary. Boroughbridge is just as easy to get to from the AWRP site, if not easier. Rating ~

Table 5.3: Ensure Infrastructure and Services are provided to offer the best Vfm

EC3: To ensure that infrastructure and services are provided to offer the best value for money

24. AmeyCespa View	25. Comment / Rating of AmeyCespa Proposal
Development delivers a solution to the waste management needs for the Waste Disposal Authorities of North York's and the City of York Rating vV	There are cheaper, cleaner and more environmentally friendly alternatives that would deliver a better and more sustainable solution Rating **
The need for the development was the subject of a detailed assessment (see Section 1.10, Part 1 of the Planning Statement) which concluded that the proposed solution provides an economically beneficial solution to the Waste Disposal Authorities, thereby meeting the needs of local communities for the disposal of their waste and reducing the burden on the tax-paying public Rating vV	Our chapter on Need and Technology Choices shows that the need has been seriously over-estimated and that several of the cheaper, cleaner and more environmentally friendly alternatives would alone or in combination offer a better solution at less cost. Thus the AmeyCespa proposal is not economically beneficial; indeed it carries substantial opportunity costs that mean council services would be unnecessarily constrained for a generation. Rating **
The selection of this solution has been the subject of extensive scrutiny as part of a Private Finance Initiative (PFI) bidding processes in competition with other alternative solutions/providers and deemed to be the preferred bid Rating vV	While it may be the preferred bid, it is not a good scheme. Faults in the PFI process are well known after a recent Panorama program and are explored in more detail in our chapter on Need and Technology Choices. Rating **

7: DISCUSSION OF AMEYCESPA'S SUMMARY AND CONCLUSION

39. AmeyCespa wrongly claimed that their sustainability appraisal demonstrated that the proposed AWRP is generally very positive or positive in meeting the sustainability objectives. In our view this is overly optimistic. Indeed our appraisal using the same scoring system demonstrates that it is generally negative or very negative.

40. AmeyCespa saw the key sustainability benefits of AWRP as including:

- *“Meeting an identified need for waste management facilities to serve the local communities of North Yorkshire and The City of York”* However, their Planning Statement, while showing that some alternative to landfill is needed, overestimates the residual waste tonnage and fails to show that a plant such as AWRP is needed – there are cheaper, cleaner alternatives.
- *“Maximising recycling and recovery of energy from waste and achieving the diversion of waste from disposal at landfill”*. Incineration actually discourages re-use and recycling as we have stated at various places in Tables 2 to 5 above. This is because incinerators must be fed at something close to full capacity for economic reasons. Otherwise the modest 50% target assumed in the AWRP proposal could be greatly exceeded. Best current practice suggests around 70-75% is readily achievable provided AWRP is not built. In addition the EfW plant, being incineration with electricity generation only, is a disposal option.
- *“Utilising a site that has been identified as the most appropriate location when set in the context of wide range of technical, economic and environmental constraints, delivering a facility at the nearest appropriate installation”* As will be evident from Tables 2 to 5 above, we do not accept many of the criteria used and believe that both a single site solution and the choice of site are inappropriate.
- *“Utilising a site that reduces the need for travel by road when set in the context of feasible alternative locations”*. A single site solution is inappropriate in terms of road travel as it necessitates excessive movement of waste with concomitant traffic problems (congestion, accidents, emissions etc).
- *“Generation of electricity to serve both the plant and export to the grid through combined operation of EfW and AD thereby reducing the load on existing electricity generating infrastructure and providing for a source of renewable (non-fossil fuel) electricity”* Electricity sold onto the grid does displace other electricity generation. However, a technology only qualifies as an electricity-producing renewable energy technology if it uses renewable resources (hydro, wind, wave tide) or the fuel that it uses is renewable (biomass). This is clearly the case for the AD plant but markedly less so for the EfW incineration plant since by no means all of the waste it burns is renewable. This AmeyCespa's conclusion is something of an exaggeration.
- *“Reduction of greenhouse gases through diversion of waste from landfill”* Alternatives to landfill of biodegradable waste are commonly seen as having a major advantage over landfill. However, the extent of such advantage depends greatly on the technology chosen even among “other recovery” technologies. Most studies show that the advantage over landfill is markedly less for incineration (especially without CHP) than for any other

technology. Incineration is the worst alternative to landfill from a climate change standpoint. It releases high levels of CO₂ - nearly all the carbon content in the waste is emitted as CO₂. (The CO₂ emissions from AWRP and especially the EfW incineration plant are markedly higher than indicated by AmeyCespa in their planning application).

- *“A design that is flexible to changing needs in waste arisings within the catchment, to accommodate changes in volumes of arisings and priorities for the foreseeable future”* Actually the inclusion of an incinerator and the existence of a long-term inflexible contract means that the plant is highly inflexible and locks out customers from benefitting from advances in waste treatment for a period of 25 years.
- *“Opportunity for employment of approximately 400 workers during the construction programme / Opportunity for employment of approximately 70 employees during operation / Opportunity for the skilling/re-skilling of local persons during both construction and operational phases”*. It seems that AmeyCespa have failed to consider the wider implications of the scheme and are therefore claiming benefits that are more than offset elsewhere in the local economy. The 400 jobs may be a peak value and not all of them would be local people. Any benefits to the local economy would be short term, and offset by job losses in the two councils (with concomitant loss of services to the public), loss of jobs in leisure as people are put off visiting the area by the overwhelming negative visual impact of AWRP (especially during the later stages of its construction). Even construction of AWRP will constrain creation of jobs in re-use and recycling and its presence will discourage investment in new leisure facilities in the area. The roughly 70 jobs during operation would be more than offset by jobs losses in the two councils and in leisure as people are put off visiting the area by the overwhelming negative visual impact of AWRP. Moreover, the presence of AWRP will also discourage investment in new ones. Given that AWRP and the EfW plant in particular are oversized, there will probably be some negative effect on employment in relation to landfill of commercial and industrial waste. Jobs would be lost in re-use and recycling (both tend to be labour-intensive) that would otherwise have been created.
- *“A design that has been mindful of comments made during public consultation”* If AmeyCespa had listened to public consultation they would have picked up the idea that there is widespread public opposition to incineration and proposed a more acceptable technology choice.
- *“The reuse of land previously developed as quarry and the retention of Claro House, thereby reducing use of land and building material resources”* The fact that the site is an existing quarry/ landfill site is largely irrelevant in the sense that Condition 2 of their planning permission grants time-limited mineral extraction until July 2008, and limited the disposal of waste until July 2013 and restoration by 17 July 2014. Thus the existing operations should be over by the time the proposed facility would be completed. Restoration of the site to its former use is then in order.
- *“A facility that delivers value for public funds, achieved through the extensive scrutiny as part of a Private Finance Initiative (PFI) bidding process in competition with other alternative solutions/providers.”* It is no part of our objection to planning permission to comment on the bidding process that led to the selection of AmeyCespa as preferred bidder – our objection is to the proposal they are putting forward at AWRP. However, value for money is a reasonable ground for objection and we would point out that the use of PFI frequently fails to deliver good value for money.

- *“a separate BREEAM Assessment has been undertaken to assess the sustainability of the built infrastructure including building materials, transportation of materials, waste management and energy/resource efficiency and confirmed that a rating of “very good” would be possible for the Claro House Visitor and Education Centre redevelopment and for the Industrial complex of buildings that make up AWRP”*. A BREEAM score of “very good” may sound impressive but it is only the middle of five grades. Also, it is only provisional at this stage. The BEEAM score for Claro House is only a marginal issue. Looking at the scoring system for BREEAM is instructive. They are: Management (12%), Health and Wellbeing (15%), Energy (19%), Transport (8%), Water (6%), Materials (12.5%), Waste (7.5%), Land Use and Ecology (10%), Pollution (10%). It is obvious from our various chapters covering health and environmental issues that we would score AWRP very badly on each of the underlined criteria. A BREEAM score of “very good” is not justified.
- *“Focusing the use of local construction companies where technically and economically feasible during construction”* This has nothing to do with sustainability.
- *“Ensuring accessibility of the facility by disabled staff and visitors as applicable”* Strictly, this is not a sustainability issue; it has more to do with meeting the requirements of the Disability Discrimination Act.
- *“Preparation of a Green Travel Plan to support opportunities for sustainable transport for staff and visitors”* There is no commitment to actually implementing such a plan. Bearing in mind the vast mileage that
- *“Implementation of local highway improvements at the site entrance”* While this would be necessary, it has nothing to do with sustainability.

41. AmeyCespa’s commitments have been made to support the sustainability of the AWRP (paragraph 2.5.3) either have nothing to do with sustainability (i.e. do not accord with the Brundtland definition of sustainability) or are at best marginal. Thus:

- *“Use of locally sourced materials for the development of the Visitors and Education Centre at Claro House”* Other than saving on transport for materials from a greater distance, this has nothing to do with sustainability.
- *“Maximising employment opportunities for local communities for the operation of the AWRP facility where possible”* This is an illusion, as explained above the few jobs created at AWRP would be more than lost elsewhere in the local economy. Also, employment is not a sustainability issue; after all jobs can result in unsustainable activities being undertaken (as they would at AWRP).
- *“Undertaking liaison/education with the local community/local schools, including guided tours”* If this “education” is simply propaganda promoting incineration and the other activities which would be undertaken at AWRP then it is promoting an unsustainable method of waste management, In that case it would itself be an unsustainable activity since it would be directing people away from sustainable solutions.
- *“Providing conference facilities/classrooms for use by the local community”* This has little if anything to do with sustainability.

- “Providing a commitment for on-going community engagement” This has nothing to do with sustainability. Moreover the comments above concerning “Undertaking liaison/education” also apply here.
42. AmeyCespa contention that their sustainability appraisal demonstrated that the proposed AWRP is generally very positive or positive in meeting the sustainability objectives is completely wrong. Indeed, even on the criteria they use it is generally negative or very negative. Many of their so-called sustainability commitments have nothing to do with sustainability and some would result in damage (e.g. those concerning *liaison/education*).
43. This means that the planning policies listed in Table 6 would be contravened by granting planning permission to AWRP. Planning permission should therefore be refused.

Table 6: Planning Policies Contravened on Sustainability grounds

Policy	AmeyCespa Sustainability Objective (see Tables 2 to 5)
PPS1	SP2, EN1-6, EC1
PPS4	EC2, SP4, NR3, SP2
PPS5	EN3
PPS7	EN2, EN4, EC2
PPS9	EN1, EN2,
PPS10	NR2, EC3, EN4, NR1
PPG13	NR3, SP5, SP1
PPS22	SP5, NR1, EC1, EC2
PPS23	SP3, EN6
PPG24	EN5
PPS25	EN6

8: CONCLUSIONS

44. There are EU national and local policies that have a bearing on sustainability issues. Existing policies at both national and local level emphasise the role that sustainable development must play in planning decisions. The same is true of the policies which appear likely to replace them
45. Whether viewed against the Brundtland definition or against the criteria in national or local planning, AWRP is not a sustainable development; indeed it would cause harm in a variety of ways (environmental, health, economic, social etc). The EfW plant is the most damaging element of AWRP and should probably be regarded as a disposal technology.
46. **Since sustainable development is now central to the planning process and sustainable development criteria are not met, any presumption in favour of SD must be set aside. According to Art 4(2) of the Waste Framework Directive, Member States should encourage**

those waste management options that deliver the best overall environmental outcome. Bearing in mind the damaging effects that developing AWRP would have, it is not in the public interest and planning permission should be refused.

ANNEX 1: ENERGY RECOVERY EFFICIENCY

1. The new Waste Framework clarified the “recovery” and “disposal” definitions. According to the new waste hierarchy, incineration can be qualified as a recovery operation rather than a disposal one, when the **energy recovery efficiency** is higher than a designated threshold. The threshold for incineration facilities dedicated to the processing of municipal solid waste in order to be classified as recovery operations is equal to or above 0.60, for installations in operation and permitted before 1 January 2009, and 0.65 for installations permitted after 31 December 2008.
2. The energy recovery efficiency is calculated according to the following formula, frequently called the “R1 formula”:

$$\text{Energy efficiency} = \frac{E_p - (E_f + E_i)}{0.97 - (E_w + E_f)}$$

Where

E_p is the annual energy produced as heat or electricity. It is calculated with energy in the form of electricity (E_{el}) being multiplied by 2.6 and heat produced for commercial use (E_{th}) multiplied by 1.1 (GJ/year). In formula it results:

$$E_p = 1.1 \times E_{th} + 2.6 \times E_{el}$$

Where

E_f is the annual energy input to the system from fuels, contributing to the production of steam (GJ/year); it is obtained by summing the products of each fuel flow by its net calorific value (NCV):

$$E_f = \sum X_{mfuel;i} \times NCV_{fuel;i}$$

And

E_w is the annual energy contained in the treated waste calculated using its lower net calorific value (GJ/year):

$$E_w = \sum m_{waste} \times NCV_{waste}$$

E_i is the annual energy imported, excluding E_w and E_f (GJ/year); 0.97 is a factor accounting for energy losses due to bottom ash and radiation.

3. The threshold for incineration facilities dedicated to the processing of municipal solid waste in order to be classified as recovery operations is equal to or above 0.60, for installations in operation and permitted before 1 January 2009, and 0.65 for installations permitted after 31 December 2008.
4. With the introduction in E_p of the coefficients 2.6 and 1.1, which are respectively the reciprocal of the average electricity and heat production efficiencies in conventional power plants, the R1 formula expresses the ratio between the energy recovery efficiency of an incinerator and that of a traditional power plant. As an example, an R1 formula result equal to 0.60 means that the WTE plant operates at 60% of the energetic yield of an average conventional facility.

5. Almost 60% (160 out of the 279) of European incinerators exceed the 0.6 threshold and are thus considered “recovery”. The remaining 119 do not comply with this requirement, and they are therefore classified as “disposal”: most of them have an efficiency included between 0.4 and 0.5. Some 36% of plants the investigated plants were highly efficient, with R1 exceeding 0.8. Typically these were CHP plants, benefitting from a favourable size effect and located in Northern Europe.
6. By contrast the “disposal” plants produce only electricity or, if CHP treat less than 200,000 t/y. In general, CHP plants have better efficiencies than plants producing the same quantity of heat and electricity separately.

Source: Mario Grosso, Astrid Motta, Lucia Rigamonti, *Efficiency of energy recovery from waste incineration, in the light of the new Waste Framework Directive*, Waste Management 30 (2010) 1238–1243

GLOSSARY

AWRP	Allerton Waste Recovery Park
CHP	Combined Heat and Power
CO ₂	Carbon dioxide
DECC	Department of Energy and Climate Change
DEFRA	Department for Environment, Food and Rural Affairs
EA	Environment Agency
EfW	Energy from Waste
EU	European Union
GHG	Greenhouse gas
kms	kilometres
MSW	Municipal Solid Waste
NHS	National Health Service
NO _x	Oxides of nitrogen
NYCC	North Yorkshire County Council
PAH	Polycyclic Aromatic Hydrocarbons
PBDE	Polybrominated diphenyl ethers
PCB	Polychlorinated biphenyls
POPs	Persistent Organic Pollutants
RSS	Regional Spatial Strategy
SD	Sustainable development
SEPA	Scottish Environmental Protection Agency
UK	United Kingdom
US	United States
vfm	Value for money
WFD	Waste Framework Directive - DIRECTIVE 2008/98/EC

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