

Energy from Waste Combined Heat and Power Facility, North Yard, Devonport

Planning Application and Environmental Statement Further Information

November 2011





Preface

This document provides Further Information to the Planning Application and Environmental Statement for the proposed Energy from Waste Combined Heat and Power Facility.



Revision Schedule

Planning Application and Environmental Statement Further Information November 2011

Rev	Date	Details	Prepared By	Reviewed By	Authorised By
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The methodology adopted and the sources of information used by URS Scott Wilson in providing its services are outlined in this Report. The work described in this Report was undertaken between September 2011 and November 2011 and is based on the conditions encountered and the information available during the said period of time. The scope of this Report and the services are accordingly factually limited by these circumstances.

Where field investigations are carried out, these have been restricted to a level of detail required to meet the stated objectives of the services. The results of any measurements taken may vary spatially or with time and further confirmatory measurements might need to be made after any significant delay in issuing this Report.

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A.1 Introduction

A.1 Background

- A.1.1 Through a competitive tendering process, MVV Environment Devonport Limited (MVV) was awarded the South West Devon Waste Partnership's (SWDWP) residual waste treatment and disposal contract. The SWDWP is a collaboration that has been established between Plymouth City Council, Torbay Council and Devon County Council to provide a long term solution to deal with waste from the southwest Devon area which is left over after re-use, recycling and composting.
- A.1.2 MVV's proposal is to construct and operate an Energy from Waste (EfW) facility, incorporating Combined Heat and Power (CHP) technology, on land currently situated in the north east of Her Majesty's Naval Base (HMNB) Devonport, Plymouth. The waste will be combusted and the heat will be used to generate steam. The steam will drive a steam turbine and generate renewable electricity for use at the facility, to supply Devonport Dockyard and HMNB, and for export to the grid. Steam will also be extracted from the turbine and fed into the Devonport Dockyard and HMNB steam network to be used for heating purposes.
- A.1.3 The EfW CHP facility project is subject to an environmental impact assessment (EIA). The EIA procedure is set out in the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 (SI No 1824). The EIA procedure requires the developer to undertake certain environmental studies and compile an Environmental Statement (ES) describing the likely significant effects of the proposed development on the environment and proposed measures to mitigate these effects. Scott Wilson Limited was employed by MVV as planning and environmental consultants for this project in March 2009. The Scott Wilson Group has since been acquired by the URS Corporation, so Scott Wilson Limited has changed its name to URS Scott Wilson Limited. URS Scott Wilson Limited prepared the planning application and supporting documents, including the ES, and submitted them on MVV's behalf to Plymouth City Council (PCC) on 23 May 2011 (planning application reference 11/00750/FUL). A package of further information was submitted to PCC in September 2011. An additional package of further information (this document) has been submitted to PCC in November 2011.

A.2 Scope of Further Information Report

A.2.1 The EIA process is continuing during the period of the planning application's consideration, taking into account the ES, the further information submitted in September 2011, the views of PCC officers as the Waste Planning Authority, statutory and non-statutory consultees, and the public. This additional package of further information concerns the following issues:

- Access road drainage;
- Height of the proposed chimney and main building – associated assessments and photomontages;
- Alternative locations for incinerator bottom ash processing; and
- Safety.

Access Road Drainage

A.2.2 In recent months there have been discussions between the Environment Agency, URS Scott Wilson, MVV and MVV's civil engineering contractor Kier Construction concerning specific details of the site access road drainage proposals. Further information is now submitted in this regard.

Height of the Proposed Chimney and Main Building – Associated Assessments and Photomontages

A.2.3 A visit was made to the site of the proposed development and the surrounding area by the PCC Planning Committee on 4 November 2011. For the purposes of this Planning Committee visit, MVV arranged to erect a crane at the site to show the height and location of the proposed chimney and main building.

A.2.4 The top of the crane's jib was located at a position equivalent to the proposed top of the chimney, that being 104 metres above Ordnance Datum (mAOD). The elevation of the existing ground levels at the site varies between approximately 7mAOD and 11mAOD. The ground levels will be made up / down to 9mAOD before the EfW CHP facility main building and chimney are constructed. The height of the chimney above ground level will be 95m, which added to the future ground level of 9mAOD makes 104mAOD.

A.2.5 From the top of the crane's jib, a hook (with lamp and reflective material attached for increased visibility) was lowered on a cable to a position illustrative of the maximum height of the main building, that being 54mAOD. The maximum height of the main building will be 45m, which added to the future ground level of 9mAOD makes 54mAOD.

A.2.6 As part of the ES submitted in May 2011 and the further information submitted in September 2011 URS Scott Wilson prepared a series of photomontage images which superimposed the proposed development onto photographs taken from an agreed selection of locations in the area. These photomontages were produced by URS Scott Wilson using a 3D computer model provided by the project architects Savage and Chadwick. The erection of the crane at the site on 4 November 2011 provided URS Scott Wilson the opportunity to take a series of photographs of the erected crane from the photomontage locations in order to verify the accuracy of the photomontages. During this exercise it became apparent that there was a discrepancy between the heights of the chimney and main building shown in the photomontages and the heights as

indicated by the crane jib and hook. Upon subsequent investigation it was discovered that the computer model used by URS Scott Wilson to prepare the photomontages had inadvertently assumed that the future ground level of the site was 5mAOD, when it will actually be 9mAOD. The consequence of this is that the photomontages had unintentionally underestimated the height of the chimney and main building by 4m. It has therefore been necessary to update the photomontages and re-submit them, so that PCC officers and Planning Committee Members, statutory and non-statutory consultees and the public have accurate information.

A.2.7 In order to facilitate understanding of the proposed development in relation to the surrounding area, in particular the proximity to the residential properties on Talbot Gardens, additional Landscape Section planning application drawings have been prepared and are submitted with this package of further information.

A.2.8 There are other assessment topics within the ES that are concerned with the height of the proposed chimney and main building, as follows:

- Air quality;
- Ecology and nature conservation;
- Health and wellbeing;
- Noise and vibration; and
- Daylight, sunlight and overshadowing.

A.2.9 In light of the photomontage discrepancy, the calculations and models underlying the aforementioned assessments have also been checked. Each of these assessments used different computer models appropriate to the discipline. Each has been found to be correct, so the information provided in the ES submitted in May 2011 and the further information submitted in September 2011 can be relied upon.

Alternative Locations for Incinerator Bottom Ash Processing

A.2.10 MVV is committed to finding a solution to processing incinerator bottom ash (IBA) in an environmentally responsible manner which maximises the substitution of naturally won mineral aggregates, increases recycling of metals and avoids landfill. Other than the facility proposed at Buckfastleigh there are other sites which are capable of handling IBA within or with minor modifications to their current planning consents and environmental permits, and which do not change the basis of the statements made in the EfW CHP facility planning application. These cannot be disclosed at the present time for commercially confidential reasons.

Safety

A.2.11 In October 2011 Network Rail wrote to PCC objecting to the planning application on the grounds of safety. Discussions have subsequently taken place with Network Rail, and further assessment has been undertaken to supplement the safety assessments which were appended to ES Chapter 6: Description of the Proposed Development, such that the risks to Network Rail are not considered to be significant. Further information is submitted in this regard.

A.3 Structure of Further Information Report

A.3.1 This Planning Application and Environmental Statement Further Information report is divided into the following sections:

- A. Introduction
- B. Planning Application Drawings Further Information
- C. Planning Application Supporting Statement Further Information
- D. Environmental Statement Further Information

A.3.2 This Further Information report is a supplement to the documents submitted with the planning application in May 2011 and the Further Information report submitted in September 2011 and should be read in conjunction with them; where no amendments are made in this Further Information report, the text in either the May 2011 or September 2011 documents (as appropriate) remains valid.

A.4 Availability

A.4.1 This Further Information report can be viewed on the MVV website at: www.mvv-environment.co.uk.

A.4.2 A hard copy can be purchased at a cost of £40.00. Electronic copies can be purchased at a cost of £5.00. Cheques should be made out to MVV Environment Devonport Ltd. Copies are available from:

Ian Roach
URS Scott Wilson
3rd Floor, Mayflower House
Armada Way
Plymouth
PL1 1LD

A.4.3 Copies are also available for viewing by the public in the Department of Development of Plymouth City Council at the following address:

Plymouth Civic Centre
Plymouth
PL1 2AA

A.4.4 The offices are open Monday to Friday, between 08:30 and 17:00.

A.4.5 Comments can be made to PCC at the address above.

B.1 Planning Application Drawings Further Information

Stages of Construction

B.1.1 There will be two main stages to the construction of the proposed development:

- Stage 1 – comprising the main site access road, Bull Point access road, construction compound, and erection of a new security fence on the inner boundary of the site which will become the MoD Dockyard security fence during construction.
- Stage 2 – comprising the EfW CHP facility.

B.1.2 Assuming planning permission is granted, Stage 1 of construction would commence at the end of January 2012 and be completed at the end of April 2012. Stage 2 would then commence at the end of April 2012 and be completed in approximately September 2014. This is shown on Drawing 009-02-D123356-406 found in Appendix B.1.1 of this report.

Drainage Drawings

B.1.3 In recent months there have been discussions between the Environment Agency, URS Scott Wilson, MVV and Kier Construction concerning specific details of the site access road drainage proposals. Further planning application Drawings PA19D, PA19E and PA20C are now submitted in this regard at Appendix B.1.1 which provide information on the proposed site drainage in greater detail.

Landscape Section Drawings

B.1.4 In order to facilitate understanding of the proposed development in relation to the surrounding area, in particular the proximity to the residential properties on Talbot Gardens, additional Landscape Section planning application Drawings PA18D and PA18E have been prepared and are submitted with this package of further information.

B.1.5 The opportunity has also been taken to submit a minor revision to Drawing PA18A. The amendment concerns the section lines on the key plan.

B.1.6 The revised Planning Application Drawings are provided at Appendix B.1.1.

C.1 Planning Application Supporting Statement Further Information

C.1 Planning Application Supporting Statement

C.1.1 No further information is submitted in relation to the Planning Application Supporting Statement. In particular, the conclusions on landscape and visual effects in paragraphs 9.1.10 to 9.1.24, 11.2.30, 11.2.52 and 11.2.109 of the Planning Application Supporting Statement remain valid.

C.2 Design and Access Statement

C.2.1 Page 52 of the Design and Access Statement shows four photomontages taken from Savage Road. These should be disregarded for reasons explained in Paragraph A.2.7 of this further information report. They are replaced by Figures 8.9.45.A and 8.9.45.A.1 at Appendix D.8.1.

C.3 Statement of Community Involvement

C.3.1 No further information is submitted in relation to the Statement of Community Involvement.

C.4 Climate Change and Sustainability Statement

C.4.1 No further information is submitted in relation to the Climate Change and Sustainability Statement.

C.5 Energy, Economy, Employment and Education Benefits Statement

C.5.1 No further information is submitted in relation to the Energy, Economy, Employment and Education Benefits Statement.

C.6 Health and Wellbeing

C.6.1 The 'Health and Well-being' paper presented at Appendix 5 to the Planning Application Supporting Statement is a summary of ES Chapter 18. In turn, ES Chapter 18 presents calculations which are based upon the atmospheric dispersion model used for the air quality assessment (ES Chapter 13 and supporting Figures and Appendices). In light of the information in paragraph A.2.7 above concerning the height of the chimney, the atmospheric dispersion model has been checked and been found to be correct. In particular, attention is drawn to the following statement from ES Appendix 13.1, paragraph 5.3.3: "*The point of release from the main chimney is 104 mAOD.*" The correct ground level of 9mAOD was therefore used in the model.

C.7 Habitats Regulations Assessment

- C.7.1 The Habitats Regulations Assessment presented at Appendix 6 to the Planning Application Supporting Statement is based partly upon the atmospheric dispersion model used for the air quality assessment (ES Chapter 13 and supporting Figures and Appendices). In light of the information in paragraph A.2.7 above concerning the height of the chimney, the atmospheric dispersion model has been checked and been found to be correct. In particular, attention is drawn to the following statement from ES Appendix 13.1, paragraph 5.3.3: *"The point of release from the main chimney is 104 mAOD."* The correct ground level of 9mAOD was therefore used in the model.

C.8 Planning Policy Analysis

- C.8.1 No further information is submitted relating to the planning policy analysis.

C.9 Section 106 Agreement

- C.9.1 No further information is submitted in relation to the Section 106 Agreement.

D.1 Environmental Statement Further Information

D.1 Introduction

D.1.1 No Further Information is submitted in relation to ES Chapter 1: Introduction.

D.2 EIA Legislation and General Methodology

D.2.1 No Further Information is submitted in relation to ES Chapter 2: EIA Legislation and General Methodology.

D.3 The Need for the Proposed Development

D.3.1 No Further Information is submitted in relation to ES Chapter 3: The Need for the Proposed Development.

D.4 Land Use: the Site and Surrounding Area

D.4.1 A planning application was made by MVV on 11 August 2011 for the installation of three trial piles to provide information to support potential development of land at North Yard, Devonport for future uses. Three rotary bored piles (each surrounded by four supporting reactive piles) will be installed. Temporary portacabins will be installed on site to provide office and welfare facilities.

D.4.2 Planning permission was granted by PCC on 12 October 2011.

D.4.3 Site set-up for the test piling works commenced in early November 2011 and the test piling itself is expected to commence in late November 2011.

D.5 Alternatives to the Proposed Development

D.5.1 MVV is committed to finding a solution to processing incinerator bottom ash (IBA) in an environmentally responsible manner which maximises the substitution of naturally won mineral aggregates, increases recycling of metals and avoids landfill. Other than the facility proposed at Buckfastleigh there are other sites which are capable of handling IBA within or with minor modifications to their current planning consents and environmental permits, and which do not change the basis of the statements made in the EfW CHP facility planning application. These cannot be disclosed at the present time for commercially confidential reasons.

D.6 Description of the Proposed Development

D.6.1 There will be two main stages to the construction of the proposed development:

- Stage 1 – comprising the main site access road, Bull Point access road, construction compound, and erection of a new security fence on the inner boundary of the site which will become the MoD Dockyard security fence during construction.
- Stage 2 – comprising the EfW CHP facility.

- D.6.2 Assuming planning permission is granted, Stage 1 of construction would commence at the end of January 2012 and be completed at the end of April 2012. Stage 2 would then commence at the end of April 2012 and be completed in approximately September 2014. This is shown on Drawing 009-02-D123356-406 (found in Appendix B.1.1 of this report).
- D.6.3 In October 2011 Network Rail wrote to PCC objecting to the planning application on the grounds of safety. Discussions have subsequently taken place with Network Rail, and further analysis has been undertaken to supplement the safety analysis which was appended to ES Chapter 6: Description of the Proposed Development, such that the risks to Network Rail are not considered to be significant. Further information is submitted in this regard and can be found at Appendix D.6.1 to this report.

D.7 Ecology and Nature Conservation

- D.7.1 ES Chapter 7: Ecology and Nature Conservation is based partly upon the atmospheric dispersion model used for the air quality assessment (ES Chapter 13 and supporting Figures and Appendices). In light of the information in paragraph A.2.7 above concerning the height of the chimney, the atmospheric dispersion model has been checked and been found to be correct. In particular, attention is drawn to the following statement from ES Appendix 13.1, paragraph 5.3.3: *"The point of release from the main chimney is 104 mAOD."* The correct ground level of 9mAOD was therefore used in the model.
- D.7.2 To secure a net gain in biodiversity in line with Planning Policy Statement 9 and Plymouth Core Strategy Policy CS19 it has been agreed that off site biodiversity enhancement works will be secured through the Section 106 Agreement.

D.8 Landscape and Visual

- D.8.1 In light of the information in paragraph A.2.7 above concerning the height of the chimney and main building, ES Chapter 8: Landscape and Visual, has been reviewed in detail. A revised set of photomontages shown alongside photographs of the crane is provided in Appendix D.8.1 to this report (Figures 8.9.44a to 8.9.54). The Zone of Visual Influence remains as previously shown. The previous photomontages should be disregarded (see list in Appendix D.8.2).
- D.8.2 For the closest residential properties more of the chimney and main building will be visible than as indicated in the previous photomontages. However, it is important to state that the photomontages are only one of the tools used in the landscape and visual impact assessment, along with photographs, zone of visual influence analysis and professional judgement of the Landscape Architect. There were some locations at which 'major' significant effects were predicted in the landscape and visual impact assessment; 'major' being the highest category of significance. The new photomontages do not alter the impact assessment in this respect. There are therefore no changes to the conclusions of the landscape and visual impact assessment, specifically the significance of the effects, as a result of the revised photomontages. However, the following observations are made.
- D.8.3 With regard to residents of Carlton Terrace, the analysis in ES Appendix 8.1 Table C (right hand column) stated that *"the upper elements of the building will be visible as one element of the built forms of the dockyard which dominate the panoramic views."* The new photomontage (Figure 8.9.47) shows that the majority of the building will be visible, not the upper elements of the building.

- D.8.4 With regard to residents from Saltash Road (North) the new photomontage (Figure 8.9.51) now shows that the skyline will be broken by the tallest part of the Boiler House, whereas this was not the case with the previous photomontage. However, it remains the case that the lower elements of the building will be set behind the existing dockyard buildings. It also remains the case that, due to the proximity to the site, there will still be a major adverse effect resulting in a significant deterioration in the existing view. As previously acknowledged, to address this the building has been designed to a high standard and quality, to create a strong feature in the landscape with design concepts relating to the surrounding dockyard and estuary location.
- D.8.5 With regard to users of Cove Jetty, the new photomontage (Figure 8.9.53) now shows that the skyline will be broken by the tallest part of the Boiler House, whereas this was not the case with the previous photomontage. However, viewed in the context of the distance from the receptor, the vast cluttered Dockyard buildings and cranes, the transient ships, the dominance of the residential properties, and given the alternative views, it will still result in a noticeable but not significant deterioration in the existing view.

D.9 Cultural Heritage

- D.9.1 In its consultation response dated 30 June 2011, English Heritage identified that the EfW CHP facility has the potential to impact on the setting of the group of listed buildings at HMS Drake and the adjacent parade ground. English Heritage stated that whilst the information presented in ES Chapter 9 suggests that there are already some sizeable structures between HMS Drake and the site of the proposed EfW CHP facility, English Heritage sought confirmation of the precise relationship between the two so that the impact can be fully assessed. English Heritage suggested that this could be in the form of a photomontage showing key views looking towards HMS Drake with the site of the EfW CHP facility behind.
- D.9.2 A photomontage was prepared and presented at Appendix D.9.1 to the further information report submitted in September 2011. Because of the photomontage discrepancy described above in paragraph A.2.7, the photomontage from HMS Drake has been amended and is now re-submitted in Appendix D.8.1 to this further information report, Figure 8.9.54.
- D.9.3 Our Cultural Heritage assessment identified a visual link between the EfW CHP facility and HMS Drake; however, based on the September 2011 photomontage, we did not consider the significance of the setting of the listed buildings to be impacted. This is not because of the level of the visibility, but rather the nature of the historic site as an enclosed complex with historic and evidential value as a group. We identified the relationship of the buildings to one another to be of importance, rather than their relationship with elements outside the complex, which has already been eroded by modern development. The September 2011 photomontage provided an idea of the impact of existing modern development surrounding the site. Our conclusion in September 2011 was that the proposed development will not impact on views of one building to another or the parade ground and therefore on the significance of the historic structures as a group. In September 2011, English Heritage acknowledged receipt of the photomontage and concluded that it does not think it likely that the proposed development will have a harmful impact on the setting of HMS Drake.
- D.9.4 Based on the corrected November 2011 photomontage, our conclusion remains that the proposed development will not impact on views of one building to another or the parade ground and therefore on the significance of the historic structures as a group.

D.10 Contamination: Land and Water Quality

D.10.1 No further information is submitted in relation to ES Chapter 10: Contamination: Land and Water Quality.

D.11 Hydrology, Hydrogeology and Flood Risk

D.11.1 In recent months there have been discussions between the Environment Agency, URS Scott Wilson, MVV and Kier Construction concerning specific details of the site access road drainage proposals. The Environment Agency requested the following information:

- Details of the drainage during the construction phase;
- Details of the final sustainable drainage scheme;
- Provision for exceedance pathways and overland flow routes;
- A timetable of construction;
- A construction quality control procedure; and
- A plan for the future maintenance and management of the system and overland flow routes.

D.11.2 Each of these items is dealt with in turn below.

Details of Drainage During the Construction Phase

D.11.3 A sketch prepared by Kier Construction showing the proposals can be found in Appendix D.11.1 to this document.

Details of the Final Sustainable Drainage Scheme

D.11.4 A calculation sheet validating the sizing of the grip can be found in Appendix D.11.2 to this document. The calculations have been based on a 100-year storm event with 30% allowance for climate change. Reference should also be made to Drawing PA19E in Appendix B.1.1 to this document, which shows a detail for the construction of the grip. This detail is to be implemented at the locations previously indicated on Drawing PA19A for the main access road into the EfW CHP facility. For the Bull Point Access Road, this detail does not apply as the intention is to make use of the existing gullies; this strategy is indicated on Drawing PA PA20C which can also be found in Appendix B.1.1 to this document.

Provision for Exceedance Pathways and Overland Flow Routes

D.11.5 Reference should be made to Drawing PA19D and Drawing PA20C in Appendix B.1.1 to this document. Both indicate where runoff waters would flow in extreme storm events. The majority of water would runoff to the creek. It should be noted that the location of the acoustic barrier has been allowed for in this analysis – it would impede flows on the main access road so the barrier is indicated with flows routed around it. It should also be noted that there are two 'low points' indicated where flood water storage can take place in the case of extreme weather events.

Timetable of Construction

D.11.6 The construction timetable prepared by Kier Construction can be found in Appendix D.11.3.

Construction Quality Control Procedure

- D.11.7 A Water Management Plan prepared by Kier Construction can be found in Appendix D.11.4. Also, a checklist is provided on the sketch in Appendix D.11.1.

Plan for Future Maintenance and Management of the System and Overland Flow Routes

- D.11.8 The management plan for the EfW CHP facility will include an annual inspection of all drainage-related features. This will include: a general inspection and cleaning process (where necessary) for the gullies; and a general inspection and cleaning process (where necessary) for the grips. For the latter, this will include a check on the level of siltation and removal of any biological matter (e.g. leaves) or refuse within the grips to ensure that they remain free-flowing and efficient in conveying runoff to the outfall points. Beyond this, the annual inspection will also include a review of fence lines and other linear features that may present a blockage to exceedance pathways and overland flows should they become clogged with any biological matter (e.g. leaves) or refuse – any such materials will be removed as part of the inspection / maintenance process.

D.12 Traffic and Transport

- D.12.1 No further information is submitted in relation to ES Chapter 12: Traffic and Transport.

D.13 Air Quality

- D.13.1 The Air Quality assessment presented in ES Chapter 13 is based partly upon an atmospheric dispersion model. In light of the information in paragraph A.2.7 above concerning the height of the chimney, the atmospheric dispersion model has been checked and been found to be correct. In particular, attention is drawn to the following statement from ES Appendix 13.1, paragraph 5.3.3: *"The point of release from the main chimney is 104 mAOD."* The correct ground level of 9mAOD was therefore used in the model.

D.14 Noise and Vibration

- D.14.1 The Noise and Vibration assessment presented in ES Chapter 14 is based partly on a noise propagation model. The model consists of a detailed three dimensional representation of the proposed EfW CHP facility and the surroundings and has been employed to calculate noise levels at surrounding sensitive locations due to noise breakout from the facility buildings, noise emission from external sources and noise emission from HGVs on site. In light of the information in paragraph A.2.7 above concerning the height of the chimney and main building, the noise propagation model has been checked and been found to be correct, in particular that the ground level of the site was set at 9mAOD.

D.15 Construction Waste

- D.15.1 No further information is submitted in relation to ES Chapter 15: Construction Waste.

D.16 Daylight, Sunlight and Overshadowing

- D.16.1 The Daylight, Sunlight and Overshadowing assessment presented in ES Chapter 16 is based on a computer model consisting of a detailed three dimensional representation of the proposed EfW CHP facility and the surroundings. In light of the information in paragraph A.2.7 above concerning the height of the chimney and main building, the daylight, sunlight and overshadowing model has been checked and been found to be correct. In particular the ground level of the site was set at 9mAOD.
- D.16.2 For clarification, 55 ground floor windows at properties on Talbot Gardens, Savage Road, Wolseley Road and Hamoaze Avenue were included in the assessment. A table showing the full list can be found in ES Appendix 16.2, sub-appendix 2.

D.17 Socio-economics

- D.17.1 No further information is submitted in relation to ES Chapter 17: Socio-economics.

D.18 Health and Wellbeing

- D.18.1 The Health and Well-being assessment presented in ES Chapter 18 presents calculations which are based upon the atmospheric dispersion model used for the air quality assessment (ES Chapter 13 and supporting Figures and Appendices). In light of the information in paragraph A.2.7 above concerning the height of the chimney, the atmospheric dispersion model has been checked and been found to be correct. In particular, attention is drawn to the following statement from ES Appendix 13.1, paragraph 5.3.3: *"The point of release from the main chimney is 104 mAOD."* The correct ground level of 9mAOD was therefore used in the model.

D.19 Inter-relationships and Cumulative Effects

- D.19.1 No further information is submitted in relation to ES Chapter 19: Inter-relationships and Cumulative Effects.

D.20 Summary

- D.20.1 No further information is submitted in relation to ES Chapter 20: Summary, but a Non-Technical Summary of all of the Environmental Statement Further Information (November 2011) presented above is provided overleaf.

D.21 Non-Technical Summary

D.21.1 The Environmental Impact Assessment (EIA) process is continuing during the period of the planning application's consideration, taking into account the Environmental Statement (ES), the further information submitted in September 2011, the views of Plymouth City Council (PCC) officers as the Waste Planning Authority, statutory and non-statutory consultees, and the public. This additional package of further information submitted in November 2011 concerns the following issues:

- Access road drainage;
- Height of the proposed chimney and main building – associated assessments and photomontages;
- Alternative locations for incinerator bottom ash processing; and
- Safety.

Access Road Drainage

D.21.2 In recent months there have been discussions between the Environment Agency, URS Scott Wilson, MVV and MVV's civil engineering contractor Kier Construction concerning specific details of the site access road drainage proposals. Further information is now submitted in this regard.

Height of the Proposed Chimney and Main Building – Associated Assessments and Photomontages

D.21.3 A visit was made to the site of the proposed development and the surrounding area by the PCC Planning Committee on 4 November 2011. For the purposes of this Planning Committee visit, MVV arranged to erect a crane at the site to show the height and location of the proposed chimney and main building. The top of the crane's jib was located at a position equivalent to the proposed top of the chimney. As part of the ES submitted in May 2011 and the further information submitted in September 2011 URS Scott Wilson prepared a series of photomontage images which superimposed the proposed development onto photographs taken from an agreed selection of locations in the area. The erection of the crane provided URS Scott Wilson the opportunity to take a series of photographs of the erected crane from the photomontage locations in order to verify the accuracy of the photomontages. During this exercise it became apparent that there was a discrepancy between the heights of the chimney and main building shown in the photomontages and the heights as indicated by the crane jib and hook. Upon subsequent investigation it was discovered that the computer model used by URS Scott Wilson to prepare the photomontages had inadvertently assumed that the future ground level of the site was 5 metres above sea level, when it will actually be 9 metres above sea level. The consequence of this is that the photomontages had unintentionally underestimated the height of the chimney and main building by 4 metres. It has therefore been necessary to update the photomontages and re-submit them, so that PCC officers and Planning Committee Members, statutory and non-statutory consultees and the public have accurate information.

D.21.4 For the closest residential properties more of the chimney and main building will be visible than as indicated in the previous photomontages. However, it is important to state that the photomontages are only one of the tools used in the landscape and visual impact assessment, along with photographs, zone of visual influence analysis and professional judgement of the

Landscape Architect. There were some locations at which 'major' significant effects were predicted in the landscape and visual impact assessment; 'major' being the highest category of significance. The new photomontages do not alter the impact assessment in this respect. There are therefore no changes to the conclusions of the landscape and visual impact assessment, specifically the significance of the effects, as a result of the revised photomontages.

D.21.5 In order to facilitate understanding of the proposed development in relation to the surrounding area, in particular the proximity to the residential properties on Talbot Gardens, additional drawings have been prepared and submitted.

D.21.6 There are other assessment topics within the ES that are concerned with the height of the proposed chimney and main building, as follows:

- Air quality;
- Ecology and nature conservation;
- Health and wellbeing;
- Noise and vibration; and
- Daylight, sunlight and overshadowing.

D.21.7 In light of the photomontage discrepancy, the calculations and models underlying the aforementioned assessments have also been checked. Each of these assessments used different computer models appropriate to the discipline. Each has been found to be correct, so the information provided in the ES submitted in May 2011 and the further information submitted in September 2011 can be relied upon.

Alternative Locations for Incinerator Bottom Ash Processing

D.21.8 MVV is committed to finding a solution to processing incinerator bottom ash (IBA) in an environmentally responsible manner which maximises the substitution of naturally won mineral aggregates, increases recycling of metals and avoids landfill. Other than the facility proposed at Buckfastleigh there are other sites which are capable of handling IBA within or with minor modifications to their current planning consents and environmental permits, and which do not change the basis of the statements made in the EfW CHP facility planning application. These cannot be disclosed at the present time for commercially confidential reasons.

Safety

D.21.9 In October 2011 Network Rail wrote to PCC objecting to the planning application on the grounds of safety. Discussions have subsequently taken place with Network Rail, and further assessment has been undertaken such that the risks to Network Rail are not considered to be significant.