

Clarion Close, Swansea

Environmental Statement  
Non-Technical Summary  
June 2018

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## 1.0 Introduction

### 1.1 Background

- 1.1.1 This document summarises the Environmental Statement (ES) which accompanies the planning application by Biffa Waste Management Ltd (hereafter termed the Client). The Development comprises a small-scale energy recovery facility together with external plant and associated structures on land at Biffa Depot, Clarion Close, Swansea.
- 1.1.2 This document is a summary of the Environmental Impact Assessment (EIA) process in non-technical language. The main Environmental Statement (ES) (Volume 1) and the supporting Appendices (Volume 2) contain detailed information on the project and each of the environmental topics considered.
- 1.1.3 The planning application for the development is being submitted to the City and County of Swansea Council, the relevant Local Planning Authority.

### 1.2 Environmental Assessment

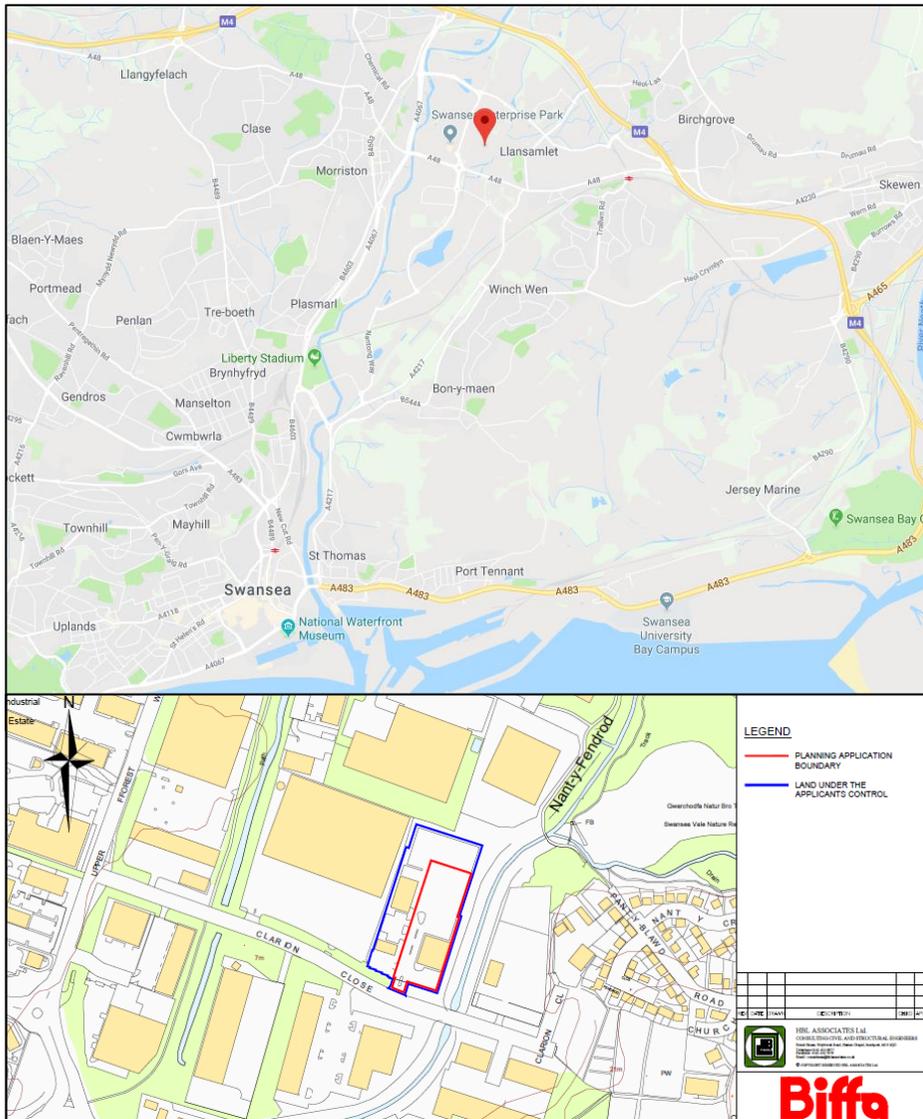
- 1.2.1 EIA is a formal process by which the likely environmental effects of a project are assessed, and where there is potential for a significant negative effect that cannot be avoided, works are identified to lessen the effect (mitigation). The ES reports on the findings of the EIA and sets out those areas where likely significant environmental effects have been identified and the mitigation proposed to lessen predicted effects. It forms an important part of the planning application decision making process.
- 1.2.2 Under the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 the nature of the Proposed Development considers it to require an Environmental Impact Assessment.
- 1.2.3 On this basis, topics to be studied as part of the EIA were decided during the scoping process. No formal scoping exercise was undertaken

however specific consultation on environmental topics was undertaken where necessary. The outcome of the scoping process was that the following topics should be included within the assessment:

- Ecology;
  - Noise and Vibration;
  - Air Quality;
  - Ground Conditions;
  - Water Resources and Flood Risk; and
  - Landscape and Visual Impact.
- 1.2.4 The EIA project team has been led by EIA co-ordinators from WYG, with input from other specialists within the company.



**Figure 1 – Site Location and Application Boundary**



### 1.3 Site Description

- 1.3.1 The Proposed Development is located within the district of Llansamlet, north east Swansea. The site (Fig.1) comprises an area of approximately 1.3 hectares of previously developed land on Clarion Close, within the built-up area of Swansea.
- 1.3.2 The Site forms part of an existing waste management and transport depot operated by Biffa Waste Services Ltd situated circa 5km to the north-east of Swansea City Centre and with direct access to the A48, M4 and A4067.
- 1.3.3 The Site is located at the eastern edge of Swansea Enterprise Park which occupies the flat land in the bottom of the Tawe Valley between central Swansea and the M4 to the north. The Enterprise Park consists of large industrial units which are separated by bands of mature trees, which also line many of the roads in the area. The topography of the site is complex; generally sloping downwards from north to south towards the River Enborne.
- 1.3.4 The closest residential properties are located 165m to the east of the Site and situated on the western edge of Llansamlet. The residential properties are located on higher ground which rises in a small hill, topped by St. Samlet’s Church, a prominent landmark in the surrounding area.





## 3.0 Environmental Effects

### 3.1 Noise and Vibration

- 3.1.1 Noise effects associated with the Proposed Development have been determined as part of the EIA.
- 3.1.2 The assessment has considered existing receptors in the vicinity of the Application Site and also new receptors forming part of the Proposed Development.
- 3.1.3 The noise climate across the Application Site has been established through a baseline noise survey in April 2018, with six monitoring positions which measured the noise levels over day, evening and night-time periods. The main noise contribution in the area of the Site was found to be road traffic noise along the A48 and other roads as well as frequent trains and planes and some residential noise. At night, a distant generator/humming sound could be heard (from the generator unit within the Biffa site) as well as distant road traffic noise from M4.
- 3.1.4 The assessment of effects has considered both construction and operational phases of the Proposed Development, assuming methods to minimise noise from the site will be introduced as necessary.
- 3.1.5 The assessment of noise within the construction phase has identified that noise levels are not expected to exceed recommended construction noise levels. With the implementation of standard noise control measures, no residual adverse noise impacts are expected.
- 3.1.6 During operation, the proposed plant will generate a very slight increase in noise of 1.1dB in comparison to typical existing background noise. Such a level of increase is not considered to result in substantial changes to nearby receptors.

### 3.2 Air Quality

- 3.2.1 An air quality impact assessment of the likely environmental effect of the Proposed Development has been undertaken. It considered the likely effects of pollutant sources, dust and particulate matter arising during the construction phase and exhaust emissions from vehicles travelling to and from the Site during the construction and operational phases.
- 3.2.2 Air quality monitoring across the Swansea Council Local Authority area showed that emissions of nitrogen dioxide (NO<sub>2</sub>) and particulate matter (PM<sub>10</sub>) exceed UK air quality standards. Swansea Air Quality Management Area (AQMA) was therefore declared within the borough however is not within close proximity to the proposed development.
- 3.2.3 Sensitive air quality receptors identified within the assessment include residential receptors, one school and two Sites of Special Scientific Interest (SSSIs).
- 3.2.4 Best practice construction mitigation measures included within the design include the implementation of industry standard best practice mitigation the implementation of a Construction Management Plan to ensure dust generation will be kept to a minimum during the construction period, good stakeholder communications and regular site inspections. These measures should ensure no air quality impacts occur to properties in the vicinity of the Proposed Development during its construction.
- 3.2.5 During operation of the proposed development, a small increase in vehicle movements will generate limited additional NO<sub>2</sub> and particulate matter emissions however this has been predicted to be negligible in comparison to annual pollutant concentrations at surrounding receptors.



### 3.3 Ground Conditions

- 3.3.1 The ground conditions assessment considers land contamination, ground conditions and hydrogeological features of the site in relation to effects on environmental receptors and human health.
- 3.3.2 The site is located within an existing waste management and transport depot however the risk of contamination is considered to be low as no landfilling or waste processing occurs on site. There are no concerns within the site area in relation to radon, ground stability or hydrogeology.
- 3.3.3 During construction, a standard Construction Drainage Design Plan will be in place to prevent impacts to soil and water quality, surface water and groundwater from pollution. Particular attention will also be given to the storage and use of fuels on site.
- 3.3.4 A site drainage system will be developed to mitigate pollution of soils and groundwater underlying the site whilst in operation. It is understood that all fuels and chemicals required for on-site operations will be stored and handled according to best management practices.
- 3.3.5 Following the implementation of these mitigation measures, it is not considered that there would be a risk to ground contamination during construction or scheme operation.

### 3.4 Water Resources and Flood Risk

- 3.4.1 This assessment considers impacts on watercourses, drainage and flood risk as a result of the development. The nearest main river to the site is the River Nant-y-Fendrod, adjacent to the eastern boundary of the site approximately 20m away. A topographical and utility survey were undertaken on the site, identifying that ground levels were generally flat with a number of private foul and surface water drains serving the site.
- 3.4.2 The site lies within an area which benefits from a flood defence scheme on the River Tawe, which was completed in 2013. There

remains a residual risk of flooding at the site in the event of a flood defence breach or overtopping during the extreme event. As the proposed development is an energy recovery facility which will involve the incineration of commercial waste, this land use is categorised as 'highly vulnerable development' and is considered to be of high sensitivity in respect to flood risk.

- 3.4.3 A Flood Consequences Assessment has identified mitigation measures to be implemented within the scheme design and construction. Measures include the design of the bunkers storing the waste (which would typically be open to allow waste deposit and collection) to be adapted to be fitted with stop logs in the event of a flood event to contain waste and prevent contamination of flood water.
- 3.4.4 In addition, a Flood Evacuation Protocol has been produced and procedures for flood monitoring on site will be set out within a site flood management plan.
- 3.4.5 Following the implementation of the mitigation measures, residual risks are considered in relation to climate change and the risk of accidental spillages during remediation and construction however site specific emergency planning will reduce these impacts as far as possible.

### 3.5 Landscape and Visual Impact

- 3.5.1 The landscape of the Site consists of the existing waste management and transport depot at Clarion Close. The depot is located within the Clarion Close industrial estate circa 5kms to the north-east of Swansea City centre. The depot extends to 1.3 hectares and comprises site offices, maintenance building, a large unused storage building and on-site parking for the company's fleet of waste collection vehicles. The depot is bounded to the north and west by existing industrial units. The eastern boundary is defined by the Nant-y-fendrod, a tributary of the River Tawe, with further industrial units beyond.



- 3.5.2 A Landscape and Visual Impact Assessment (LVIA) has been carried out to consider the effects of the Proposed Development on landscape. There are no landscape designations within the site area however Swansea Vale Site of Interest for Nature Conservation covers Nant-y-fendrod and its banks as it passes through the eastern site boundary.
- 3.5.3 Llansamlet conservation area is located 200m east of the site and Six Pit, Swansea Vale and White Rock SSSI is located 900m to the south. Within 2km of the site there is a Scheduled Monument, Llewelyn Park which is Registered Park and Garden of Special Historical Interest and an area of ancient woodland.
- 3.5.4 Construction activities would have a direct effect on the landscape features of the site such as on the landscape character and setting of the site however following the completion of construction, this impact would reduce as the setting of the site returns to its existing appearance.
- 3.5.5 When the scheme is in operation, the views available to visitors to the nearby St Samlet's Church and Llansamlet conservation area would be affected. This is due to the proximity of the development to the receptors and the addition of the stack to the view however the majority of the other features of the nearby enterprise park will be screened from view.

### **3.6 Ecology**

- 3.6.1 The habitats and species within the site and its immediate vicinity have been identified and assessed in line with the Chartered Institute of Ecology and Environmental Management's Guidelines for Ecological Impact Assessment in the UK and Ireland.
- 3.6.2 Desk based and field surveys were carried out on the site in April 2018, identifying one SSSI, Six Pit, Swansea Vale and White Rock, and Crymlyn Bog SSSI, Special Area of Conservation and Ramsar site within 2km of the site. Non-statutory designations include seven SINCs within 1km of the site.

- 3.6.3 Habitats were identified on the site were limited to areas of amenity grassland however additional adjacent habitats to the site included scattered broadleaved trees, scrub, species-poor semi improved grassland and running water. Species identified on site and within protected species records included bats, breeding birds, reptiles, otter, a number of invasive species, one badger and one dormouse. No records great crested newts or water vole were returned.
- 6.2.1 Existing vegetation will not be impacted along the southern and eastern boundary of the Site, and this will therefore provide the current levels of screening to the construction and operational phase of the development.
- 3.6.4 The project will be constructed in accordance with industry standard techniques and mandatory minimum standards. A construction environmental management plan (CEMP) will be produced detailing all construction standards and techniques. In addition, no additional lighting above current levels is proposed with no night time construction, to avoid disturbance to bats.
- 3.6.5 Following these mitigation measures, there is not considered to be any effects on the Statutory and non-statutory designated sites during the construction of the proposed development. No impacts to water quality and aquatic mammals are predicted as the current site surface water is connected to the local sewer network in Clarion Close and therefore no offsite water quality impacts are likely to occur.
- 3.6.6 Potential operational impacts of the proposed development largely relate to emissions of the plant. The predicted nitrogen dioxide (NO<sub>2</sub>) concentrations both for annual and daily levels at ecological locations are all below the relevant critical loads for the protection of vegetation and ecosystems.



## 4.0 Summary

### 4.1 Conclusions

- 4.1.1 The ES has considered how the environment and the local community would be affected by the development.
- 4.1.2 A range of potential environmental effects have been predicted to occur as a result of the development, both positive and negative. However, mitigation measures have been identified to appropriately reduce, minimise or offset any potential negative environmental effects.

### 4.2 Management of Environmental Effects

- 4.2.1 The effects of the construction activities will be managed through a Construction Environmental Management Plan (CEMP). This will ensure that working hours, traffic management, control of pollution, waste management, noise, dust and vibration are all managed and controlled. Other mitigation includes a Construction Drainage Design Plan and a flood management plan.

### 4.3 What happens next?

- 4.3.1 Prior to formally submitting the planning application to the City and County of Swansea Council the applicant will undertake a pre-application consultation on the draft planning submission for a period of 28 days commencing on the 22<sup>nd</sup> June 2018.
- 4.3.2 All comments received on the draft submission during the pre-application consultation period will be reviewed and the documentation, including the Environmental Statement, updated accordingly.
- 4.3.3 The updated planning application will be formally submitted to the City and County of Swansea Council as Planning Authority. The Council will seek advice from statutory and non-statutory consultees as part of the determination process for the submitted planning application.

**Printed copies of the Non-technical Summary and ES (including figures and appendices) may be obtained from:**

**WYG  
Executive Park,  
Avalon Way,  
Anstey,  
Leicester,  
LE7 7GR**

**Tel: 0116 234 8000**

**The Non-technical Summary is available free of charge, and a limited number of hard copies of the Environmental Statement are available for £400\* per copy (plus p&p). Alternatively, these documents are available as adobe acrobat files on CD from the same address at £25 (plus p&p) per copy.**

**Copies of the ES may also be viewed online  
([https:// www.wyg.com/consultation/clarion-close-swansea](https://www.wyg.com/consultation/clarion-close-swansea))**

**\* Includes VAT @20%**