

EPR MINOR TECHNICAL VARIATION

**Biomass UK No.2 Ltd
Energy Production Facility
EPR/AB3790ZB**

Prepared by:
Sol Environment Ltd

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NON TECHNICAL SUMMARY

This document has been prepared on behalf of Biomass UK No.2 Ltd ('the Applicant' hereafter) by Sol Environment Ltd and provides supporting evidence as required by Environmental Permit Application Forms Part C2 and C3 issued by Natural Resources Wales (NRW).

The Biomass UK site is located on land at Woodham Road, Barry, CF63 4JE (Grid Reference ST 12610 67683). The site is currently permitted under the conditions established by Environmental Permit EPR/AB3790ZB.

Biomass UK No.2 Ltd ('*Biomass UK*' or '*The Applicant*' hereafter) is making this application to carry out a 'Minor Technical' Variation of their existing EPR permit under The Environmental Permitting (England and Wales) Regulations 2018 (as amended) to amend the monitoring of Hydrogen Fluoride (HF) (stated within Table S3.1 of the existing permit) from 'Continuous' to 'Periodic' as allowed by IED Annex VI Part 6 (2.3). The periodic monitoring of HF has always been proposed at site and was incorrectly stated as being 'Continuous' within the permit in error.

IED Annex VI Part 6 (2.3)) allows the replacement of continuous HF emission monitoring with periodic HF emission monitoring by relying on continuous Hydrogen Chloride (HCl) monitoring. Surrogate HF monitoring through the continuous monitoring of HCl is proposed by the Applicant. Such monitoring is permitted when it can be demonstrated that HCl is controlled at a level below the HCl Emission Limit Value (ELV).

Due to non-hazardous waste wood being processed by the Installation, HCl will always be controlled below the ELV which has been demonstrated in the original permit application (Reference: SOL1605BUK201) and reiterated within this minor technical variation application.

There will be no other amendments to the sites existing permit as a result of this minor technical variation.

The site is permitted as an Installation as defined by Section 5.1 'Incineration and Co-Incineration of Waste' paragraph A(1)(b) namely:

'The incineration of non-hazardous waste in a waste incineration plant or waste co-incineration plant with a capacity exceeding 3 tonnes per hour.'

Emissions to Air

There are no proposed changes or increases in the mass air emissions resulting from this permit variation.

Emissions to Controlled Water and Sewer

There are no changes to water emissions resulting from this permit variation.

Emissions to Land

There are no emissions to land arising from the Installation.

1 INTRODUCTION

This document has been prepared on behalf of Biomass UK No.2 Ltd (*'Biomass UK'* or *'The Applicant'* hereafter) by Sol Environment Ltd and provides supporting evidence as required by Environmental Permit Application Forms Part C2 and C3 issued by Natural Resources Wales (NRW).

The Biomass UK site is located on land at Woodham Road, Barry, CF63 4JE (Grid Reference ST 12610 67683). The site is currently permitted under the conditions established by Environmental Permit EPR/AB3790ZB.

Biomass UK No.2 Ltd (*'Biomass UK'* or *'The Applicant'* hereafter) is making this application to carry out a 'Minor Technical' Variation of their existing EPR permit under The Environmental Permitting (England and Wales) Regulations 2018 (as amended) to amend the monitoring of Hydrogen Fluoride (HF) (stated within Table S3.1 of the existing permit) from continuous to periodic as allowed by IED Annex VI Part 6 (2.3). The periodic monitoring of HF has always been proposed at site and was incorrectly stated as being 'Continuous' within the permit in error.

IED Annex VI Part 6 (2.3) allows the replacement of continuous HF emission monitoring with periodic HF emission monitoring by relying on continuous Hydrogen Chloride (HCl) monitoring. Surrogate HF monitoring through the continuous monitoring of HCl is proposed by the Applicant. Such monitoring is permitted when it can be demonstrated that HCl is controlled at a level below the HCl Emission Limit Value (ELV).

HCl will always be controlled below the ELV which has been demonstrated in the original permit application (Reference: SOL1605BUK201) and reiterated within this minor technical variation application.

There will be no other amendments to the sites existing permit as a result of this minor technical variation.

The site is permitted as an Installation as defined by Section 5.1 'Incineration and Co-Incineration of Waste' paragraph A(1)(b) namely:

'The incineration of non-hazardous waste in a waste incineration plant or waste co-incineration plant with a capacity exceeding 3 tonnes per hour.'

All aspects of the Installation will remain unchanged and will operate in the same manner as currently permitted, with the exception of the monitoring of HF taking place periodically rather than continuously, as allowed by the Industrial Emission Directive.

The process description and site information provided in the previous permit variation is unchanged as a result of this proposed variation. The applicant has included the previous Application Support Documents in *Annex A – Original Application Support Document*.

The remainder of this application support document is structured accordingly:

- Section 2: Provides specific nature of the proposed changes associated with the variation application;
- Section 3: Provides specific nature and detailed description of the emissions to air and water associated with the varied Installation; and
- Section 4: Provides an Environmental Impact and Assessment of the varied Installation.

2 DESCRIPTION OF VARIED CHANGES

2.1 Description of the Proposed Changes

Biomass UK No.2 Ltd is making this application under Regulation 20 of The Environmental Permitting (England and Wales) Regulations 2018 (as amended) to carry out a 'Minor Technical' Variation of their existing EPR permit to amend the monitoring of Hydrogen Fluoride (HF) (stated within Table S3.1 of the existing permit) from continuous to periodic as allowed by IED Annex VI Part 6 (2.3).

There will be no other amendments to the sites existing permit as a result of this minor technical variation.

The site is currently permitted under the conditions established by Environmental Permit EPR EPR/AB3790ZB and there will be no amendments to *Schedule 1 – Operations* stated within the sites existing permit. The permitted activities at site are detailed within Table 2.1 below.

Table 2.1: Permitted Activities

| Activity listed in Schedule 1 of the EP Regulations | Description of specified activity | Limits of Specified Activity |
|---|---|---|
| S5.1 A1 (b) | <p>The incineration of non-hazardous waste in a waste co-incineration plant with a capacity of 3 tonnes per hour or more.</p> <p>Co-incineration of waste wood in a single co-incineration line with a 42.84MW rated thermal input.</p> | <p>From receipt of waste to emission of exhaust gas and disposal of waste arising.</p> <p>Waste types and quantities as specified in Table S2.2 of this permit.</p> <p>Total storage capacity of incoming waste wood – 2000m³.</p> <p>Waste reception, storage on-site, waste wood and fuel and air supply systems, boiler, facilities for the treatment of exhaust gases and on-site facilities for treatment or storage of residues and waste water.</p> <p>All waste storage must be indoors, on a concrete surface with sealed drainage.</p> <p>Abnormal operation not permitted</p> |
| Directly Associated Activities | | |
| Electricity Generation | Generation of approximately 10MWe electrical power (using a steam turbine) from energy recovered from the flue gases. | The generation of electricity for export to the grid and for on-site operations. |
| Air Cooled | Air cooled steam condenser to recover water for | |

| | | | |
|------------------------------------|--|--|---|
| Condenser | | recirculation to the boiler steam circuit | |
| Fuel Reception and Storage | | Reception, Storage and handling of recycled wood | |
| Solid residue storage and handling | | Reception, Storage and handling of Ash | Bottom ash to be stored on-site prior to off-site disposal or treatment. Fly ash is to be stored in sealed containers separate to the bottom ash prior to removal from site |
| Water Treatment | | Boiler make up water will be provided from a multi-stage de-mineralisation plant treating mains water | |
| Air Pollution Control | | Flue-gas recirculation, SCNR, SCR treatment, activated carbon treatment, lime injection, fabric particulate filter | Control of gases prior to emission to air |

There are no amendments to the site plans which were submitted as part of the original permit application. The site location and site layout plan are provided below and within *Annex B – Site Plans*.



Figure 1.1: Site Location Plan

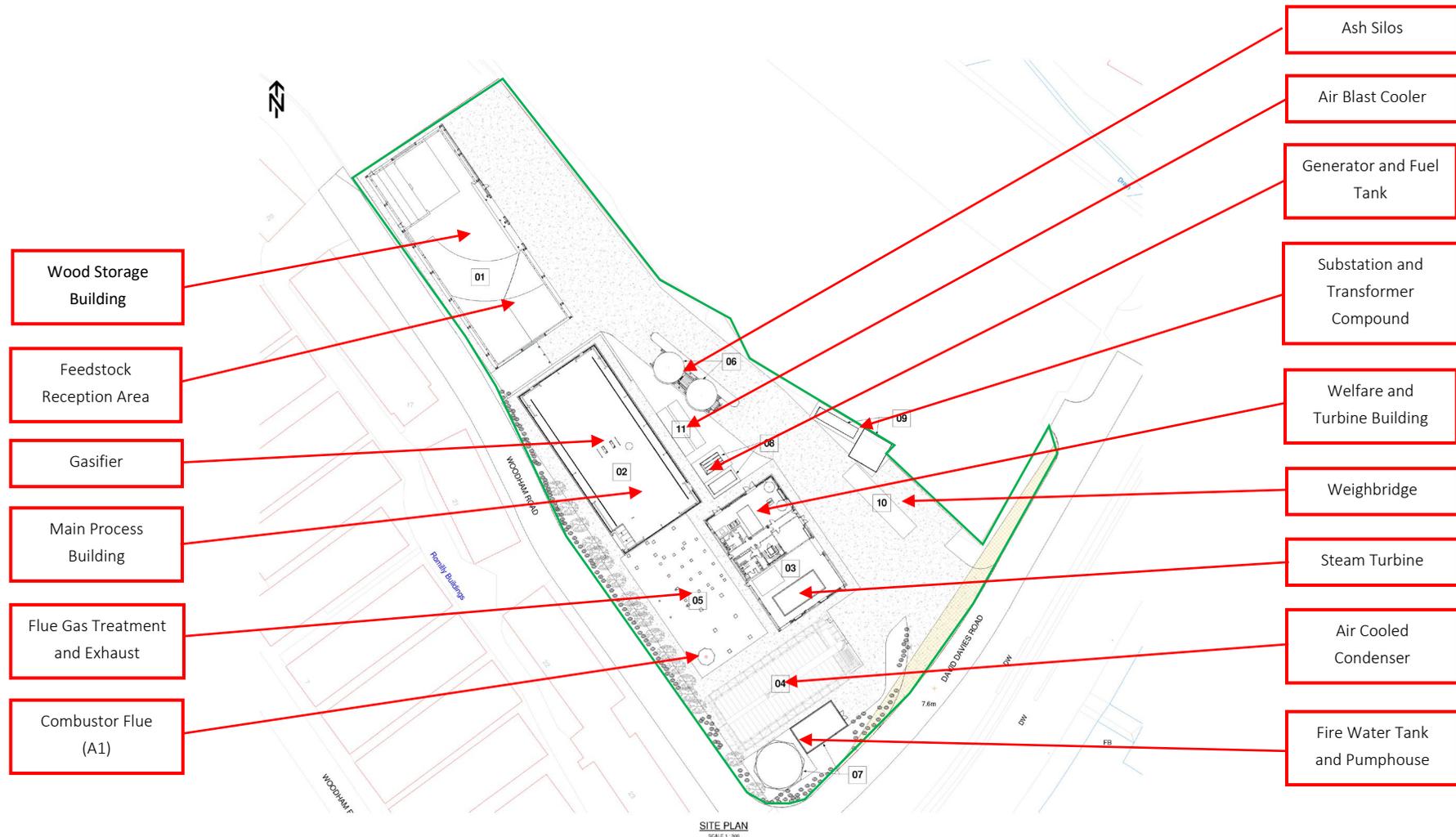


Figure 2.2: Site Layout and Installation Boundary

2.2 Details of the Variation

IED Annex VI Part 6 (2.3)) allows the replacement of continuous HF emission monitoring with periodic HF emission monitoring by relying on continuous Hydrogen Chloride (HCl) monitoring. Surrogate HF monitoring through the continuous monitoring of HCl is proposed by the Applicant. Such monitoring is permitted when it can be demonstrated that HCl is controlled at a level below the HCl Emission Limit Value (ELV).

The emission limit values used for the periodic monitoring of Hydrogen Fluoride (HF) and the continuous monitoring of Hydrogen Chloride (HCl) for a co-incineration plant, as stated within the Industrial Emissions Directive (IED), are detailed within the table below.

| Table 2.2: Emission Limit Values for HF and HCL | |
|---|---|
| Parameter | ELV (referenced to 6% O ₂) |
| Hydrogen chloride (HCl) | 90 mg/m ³ (1/2 -hour average) |
| | 15 mg/m ³ (daily average) |
| Parameter | ELV (referenced to 6% O ₂) |
| Hydrogen fluoride (HF) | 3 mg/m ³ (periodic over minimum 1-hour period) |

2.2.1 Gas Clean Up

The plant has been designed to ensure compliance with the IED ELVs, which is achieved by the flue gas cleaning system.

The gas clean-up process has already been determined by Natural Resources Wales and is considered BAT. There are no changes to the gas clean-up process on site. The information provided below is as per the original permit application.

A brief summary of the flue gas cleaning system is provided below:

- Lime stone and Urea injection into the combustion chamber;
- Lime and Powdered Activated Carbon (PAC) injection into the scrubber;
- Bag house filter, complete with APC ash tank;
- Induced draft (ID) fan with speed-controlled electric motor driver;
- 44m high chimney; and
- Continuous Flue Gas Monitoring system to monitor all dust and gas emissions.

The main systems that ensure that the HCl and HF ELV's will not be exceeded are the bed additive system and use of lime and Powdered Activated Carbon (PAC) injection into the scrubber.

The bed additive system introduces limestone into the fluidised bed energy system which abates sulphur and acid gas constituents by introducing lime into the fluidised bed. Additionally, hydrated

lime and PAC is injected into the scrubber which reacts with acid gases and is discharged as APC residue from the bag filter. All APC residue will be transferred off site.

It is also important to note that due to the site using waste wood as the feedstock, the plant will not release HF emissions.

2.2.2 Monitoring Methods

The periodic monitoring of Hydrogen Fluoride will be carried out in accordance with *ISO 15713:2006 Stationary Source Emissions – Sampling and Determination of Gaseous Fluoride Content* and the Technical Guidance Note (Monitoring) *M2 – Monitoring of Stack Emissions to Air*. The monitoring will be carried out quarterly in the first year of operation and then bi-annually from the second year of operation.

Please refer to the Table 2.3 below which is a copy of *Table S3.1 Point Source Emissions to Air – Emission Limits and Monitoring Requirements* provided within the sites existing permit. The proposed changes to HF monitoring are depicted in **RED**.

Table 2.3: Table S3.1 Point source emissions to air – emission limits and monitoring requirements

| Emission point ref. & location | Parameter | Source | Limit (including unit) | Reference Period | Monitoring Frequency | Monitoring Standard(s) or Method(s) |
|--------------------------------|---|------------------------|--|--|---|-------------------------------------|
| A1 (43m Stack) | Particulate Matter | Cleaned | 45 mg/m ³ | 1/2 - hr average | Continuous measurement | BS EN 14181 |
| | Particulate Matter | exhaust gas | 15 mg/m ³ | Daily average | Continuous measurement | BS EN 14181 |
| | Total Organic Carbon (TOC) | from | 30 mg/m ³ | 1/2 - hr average | Continuous measurement | BS EN 14181 |
| | Total Organic Carbon (TOC) | combustion | 15 mg/m ³ | Daily average | Continuous measurement | BS EN 14181 |
| | Hydrogen Chloride | furnace | 90 mg/m ³ | 1/2 - hr average | Continuous measurement | BS EN 14181 |
| | Hydrogen Chloride | | 15 mg/m ³ | Daily average | Continuous measurement | BS EN 14181 |
| | Carbon Monoxide | | 150 mg/m ³ | 1/2 - hr average | Continuous measurement | BS EN 14181 |
| | Carbon Monoxide | | 75 mg/m ³ | Daily average | Continuous measurement | BS EN 14181 |
| | Sulphur Dioxide | | 300 mg/m ³ | 1/2 - hr average | Continuous measurement | BS EN 14181 |
| | Sulphur Dioxide | | 75 mg/m ³ | Daily average | Continuous measurement | BS EN 14181 |
| | Oxides of nitrogen (NO and NO ₂ expressed as NO ₂) | | 600 mg/m ³ | 1/2 - hr average | Continuous measurement | BS EN 14181 |
| | Oxides of nitrogen (NO and NO ₂ expressed as NO ₂) | | 300 mg/m ³ | Daily average | Continuous measurement | BS EN 14181 |
| | Hydrogen Fluoride | | 3 mg/m ³ | periodic over minimum 1-hour period | Quarterly in first year then Bi-annual | BS ISO 15713 |
| | Cadmium & thallium and their compounds (total) | | 0.05 mg/m ³ | periodic over minimum 30 minute, maximum 8-hour period | Quarterly in first year. Then Bi-annual | BS EN 14385 |
| Mercury and its compounds | | 0.05 mg/m ³ | periodic over minimum 30 minute, maximum 8-hour period | Quarterly in first year. Then Bi-annual | BS EN 13211 | |
| Sb, As, Pb, Cr, Co, Cu, Mn, Ni | | 0.5 mg/m ³ | periodic over minimum | Quarterly in first year. Then Bi-annual | BS EN 14385 | |

| | | | | |
|--|-------------------------|--|---|-----------------------------|
| and V and their compounds (total) | | 30 minute, maximum 8-hour period | | |
| Ammonia (NH ₃) | 5 mg/m ³ | Daily average | Continuous measurement | BS EN 14181 |
| Nitrous oxide (N ₂ O) | No Limit Set | Daily average | Continuous measurement | BS EN 14181 |
| Dioxins / furans (I-TEQ) | 0.01 ng/m ³ | periodic over minimum 6 hours, maximum 8-hour period | Quarterly in first year. Then Bi-annual | BS EN 1948 Parts 1, 2 and 3 |
| Dioxins / furans (WHO-TEQ Humans / Mammals) | No Limit Set | periodic over minimum 6 hours, maximum 8-hour period | Quarterly in first year. Then Bi-annual | BS EN 1948 Parts 1, 2 and 3 |
| Dioxins / furans (WHO-TEQ Fish) | | | | |
| Dioxins / furans (WHO-TEQ Birds) | | | | |
| Dioxin-like PCBs (WHO-TEQ Humans / Mammals) | No Limit Set | periodic over minimum 6 hours, maximum 8-hour period | Quarterly in first year. Then Bi-annual | BS EN 1948-4 |
| Dioxin-like PCBs (WHO-TEQ Fish) | | | | |
| Dioxin-like PCBs (WHO-TEQ Birds) | | | | |
| Specific individual poly-cyclic aromatic hydrocarbons (PAHs), as B[a]P | 0.001 mg/m ³ | periodic over minimum 6 hours, maximum 8-hour period | Quarterly in first year. Then Bi-annual | BS ISO 11338 Parts 1 and 2. |

2.2.3 Air Quality Impacts

The Air Quality Assessment which was carried out as part of the original permit application has been provided within *Annex C – Original Air Quality Assessment*.

As a worst-case, the emissions from the site used within the Air Quality Assessment have been assumed to occur at the Industrial Emissions Directive (IED) ELV's with actual emissions from the site anticipated to be significantly lower.

All HCl and HF concentrations from the plant will be in line with those ELV's specified in the IED as shown in Table 2.4 below. This table also provides details of the predicted emissions parameters, concentrations and source.

| Table 2.4: Stack Technical Data | | |
|--|----------------|------------|
| Source ID | ATT Stack (A1) | |
| Stack Height (m) | 43 | |
| Stack diameter (m) | 1.6 | |
| Temperature of release (K) | 419 | |
| Actual flow rate (Am ³ /s) | 35.7 (a) | |
| Emission velocity at stack exit (m/s) | 17.8 | |
| Normalised flow rate (Nm ³ /s) | 21.6 (b) | |
| Emission Concentration (mg/Nm ³) | Long-Term | Short-Term |
| HCl | 10 | 60 |
| HF | 1 | 4 |
| Emission Rate (g/s) | Long-Term | Short-Term |
| HCl | 0.22 | 1.3 |
| HF | 0.022 | 0.086 |

(a) Actual flow rate at 419 K and 10.1% O₂, 101.3 kPa, 15% H₂O

(b) Reference conditions: 273 K and 11% O₂, 101.3 kPa, dry gas

The assessments used the sensitive human health receptors provided within Table 2.5 below.

| Table 2.5: Location of Sensitive Receptors | | | | |
|--|-----------------------|-------------|---------|----------|
| ID | Receptor | Type | Easting | Northing |
| 1 | Vistamar House | Residential | 312199 | 167543 |
| 2 | Docks Office | Industrial | 312243 | 167664 |
| 3 | Phillipa Freeth Court | Residential | 312162 | 167836 |
| 4 | Barry Dock Station | Station | 312359 | 167806 |
| 5 | 54 Dock View Road | Residential | 312368 | 167918 |
| 6 | 89 Dock View Road | Residential | 312528 | 168111 |

| | | | | |
|----|---------------------------|--------------------|--------|--------|
| 7 | 131 Dock View Road | Residential | 312724 | 168359 |
| 8 | Wimbourne Buildings | Industrial | 313155 | 167691 |
| 9 | Bendrick Road | Residential | 313437 | 167606 |
| 10 | Public Recycling Facility | Recycling Facility | 313445 | 167271 |
| 11 | Atlantic Crescent | Industrial | 312983 | 167416 |
| 12 | Port Office | Industrial | 312659 | 167100 |
| 13 | Queens Way | Industrial | 312414 | 167253 |
| 14 | Dyfrig Street | Residential | 312037 | 166947 |

Dispersion modelling using Breeze AERMOD 7 dispersion model was used to predict ground-level concentrations of pollutants at sensitive human and habitat receptor locations, using the relevant ELV's from the IED. The following sections summaries the results from the assessment which relate to HCl and HF.

Hydrogen Chloride (HCl)

The maximum predicted 1-hour mean ground-level HCl process concentrations are presented in Table 2.6 below.

| Table 2.6: Predicted HCl Concentrations ($\mu\text{g}/\text{m}^3$) | | |
|--|----------------------------|-----------------------------------|
| Receptor | 1-Hour Mean | |
| | Process Concentration (PC) | Process Concentration (PC) (% GV) |
| Maximum Off-Site | 14.8 | 2.0% |
| Vistamar House | 4.8 | 0.64% |
| Docks Office | 4.6 | 0.61% |
| Phillipa Freeth Court | 4.4 | 0.59% |
| Barry Dock Station | 4.5 | 0.59% |
| 54 Dock View Road | 4.6 | 0.62% |
| 89 Dock View Road | 4.4 | 0.59% |
| 131 Dock View Road | 3.6 | 0.48% |
| Wimbourne Buildings | 4.4 | 0.58% |
| Bendrick Road | 3.3 | 0.44% |
| Public Recycling Facility | 3.1 | 0.41% |
| Atlantic Crescent | 4.1 | 0.55% |
| Port Office | 3.1 | 0.42% |
| Queens Way | 4.6 | 0.61% |
| Dyfrig Street | 3.1 | 0.41% |
| EAL Guideline Value | 750 | |
| Background | 0.24 | |

The predicted 1-hour mean off-site ground level HCl concentrations are less than 10% of the EPAQS guideline value for protection from irritant and respiratory effects at all of the identified receptor locations, therefore the significance of the impact is negligible.

As a worst-case, the emissions from the site used within the modelling assessment have been assumed to occur at the IED limits with actual emissions from the site anticipated to be significantly lower. The above shows that even at the maximum IED limits, the significance of the impact from HCl is screened out as negligible.

This demonstrates that HCl will be controlled at a level below the HCl Emission Limit Value, allowing the replacement of continuous HF emission monitoring with periodic HF emission monitoring by relying on continuous Hydrogen Chloride (HCl) monitoring.

Hydrogen Fluoride (HF)

The maximum predicted monthly mean and 1-hour mean ground-level HF process concentrations are presented in Table 2.7 below. For the monthly mean an emission concentration value of 1mg/m³ was used and for the 1-hour mean an emission concentration value of 4mg/m³ was used (as shown in Table 2.4).

| Table 2.7: Predicted HF Concentrations (µg/m ³) | | | | |
|---|----------------------------|-----------------------------------|----------------------------|-----------------------------------|
| Receptor | Monthly Mean | | 1-Hour Mean | |
| | Process Concentration (PC) | Process Concentration (PC) (% GV) | Process Concentration (PC) | Process Concentration (PC) (% GV) |
| Maximum Off-Site | 0.024 | 0.15% | 0.98 | 0.61% |
| Vistamar House | 0.022 | 0.14% | 0.32 | 0.20% |
| Docks Office | 0.013 | 0.081% | 0.31 | 0.19% |
| Phillipa Freeth Court | 0.0087 | 0.054% | 0.30 | 0.18% |
| Barry Dock Station | 0.0079 | 0.049% | 0.30 | 0.19% |
| 54 Dock View Road | 0.0074 | 0.046% | 0.31 | 0.19% |
| 89 Dock View Road | 0.0076 | 0.048% | 0.29 | 0.18% |
| 131 Dock View Road | 0.0043 | 0.027% | 0.24 | 0.15% |
| Wimbourne Buildings | 0.021 | 0.13% | 0.29 | 0.18% |
| Bendrick Road | 0.013 | 0.080% | 0.22 | 0.14% |
| Public Recycling Facility | 0.010 | 0.065% | 0.20 | 0.13% |
| Atlantic Crescent | 0.013 | 0.081% | 0.27 | 0.17% |
| Port Office | 0.0031 | 0.019% | 0.21 | 0.13% |
| Queens Way | 0.0072 | 0.045% | 0.30 | 0.19% |
| Dyfrig Street | 0.0052 | 0.033% | 0.20 | 0.13% |
| Guideline Value | 16 | | 160 | |
| Background | 0.5 | | 1.0 | |

The report concludes that the maximum predicted ground level monthly mean and 1-hour mean HF concentrations are less than 1% and 10% of the long and short-term EPAQS guideline values, therefore the significance of the impact is negligible.

Due to the ELV used for periodically monitoring HF being 3mg/m³ (in accordance with Annex 6 of the IED) and the monthly mean in Table 2.7 above using an emission concentration of 1mg/m³, to demonstrate that the impact will still be negligible at the periodic monitoring ELV, Table 2.8 below shows the monthly mean process concentrations using an emission concentration of 3mg/m³. The 1-hour mean has not been considered further due to using an emission concentration of 4mg/m³.

Table 2.8: Monthly Mean HF Concentrations Corrected to an Emission Concentration of 3mg/m³

| Receptor | Monthly Mean | |
|---------------------------|--------------|-----------|
| | PC | PC (% GV) |
| Maximum Off-Site | 0.072 | 0.45% |
| Vistamar House | 0.066 | 0.41% |
| Docks Office | 0.039 | 0.244% |
| Phillipa Freeth Court | 0.0261 | 0.163% |
| Barry Dock Station | 0.0237 | 0.148% |
| 54 Dock View Road | 0.0222 | 0.139% |
| 89 Dock View Road | 0.0228 | 0.143% |
| 131 Dock View Road | 0.0129 | 0.081% |
| Wimbourne Buildings | 0.063 | 0.394% |
| Bendrick Road | 0.039 | 0.244% |
| Public Recycling Facility | 0.03 | 0.188% |
| Atlantic Crescent | 0.039 | 0.244% |
| Port Office | 0.0093 | 0.058% |
| Queens Way | 0.0216 | 0.135% |
| Dyfrig Street | 0.0156 | 0.098% |
| Guideline Value | 16 | |
| Background | 0.5 | |

This shows that even at an emission concentration of 3mg/m³, the concentrations are still less than 1% of the long-term EPAQS guideline values, therefore the significance of the impact is negligible.

Summary

The Air Quality Assessment concludes that predicted maximum off-site process concentrations are well within the relevant air quality standards for all pollutants considered. The significance of the impacts has been assessed as negligible, in accordance with the NRW risk assessment guidance.

Please refer to the original Air Quality Assessment provided within *Annex C – Original Air Quality Assessment* for more information.

2.2.4 Description of the Process

There will be no changes to the permitted process resulting from this permit variation.

3 ENVIRONMENTAL MANAGEMENT SYSTEM

The site shall be operated in accordance with corporate standards and procedures as part of a wider Environmental Management System. The system will be designed to meet the requirements of ISO14001:2004.

A summary of the working plan procedures is provided in Table 3.1 below. This will **remain exactly the same** once the permit has varied.

| Table 3.1: Working Plan | | |
|-------------------------|--|--|
| Ref No: | Title | Purpose |
| BUK-E01 | Waste Pre-Acceptance | This procedure defines the upstream screening, checking and pre-acceptance of all incoming fuel feedstocks prior to its arrival on site. |
| BUK-E02 | Waste Acceptance | This procedure outlines the onsite controls and considerations that need to be applied when fuel feedstock materials arrive on site for processing. |
| BUK-E03 | Waste Rejection | This procedure outlines the waste rejection process for all non-conforming feedstocks that cannot be processed on site. Acceptance of non-conforming wastes will be a direct breach of the permitted conditions of the sites Environmental Permit. |
| BUK-E04 | Off Site Waste Transfers | This procedure provides the necessary information to enable the assessment and off site transfer of non-conforming or untreatable waste streams. |
| BUK-E05 | Waste Reception and Storage | This procedure outlines the fuel reception and storage processes for all incoming waste. |
| BUK-E06 | Environmental Records | This procedure defines the necessary Environmental Permit and Waste Records that are required to be managed by the site to ensure compliance. |
| BUK-E07 | Environmental Management and Monitoring Programme | This procedure provides an overview of all of the necessary environmental monitoring procedures and controls to ensure compliance with the Permit. |
| BUK-E08 | Infrastructure Management and Monitoring Programme | This procedure provides an outline of the inspection and cleaning requirements for the site. |
| BUK-E09 | Accident Management Plan | This procedure refers to the sites emergency plans and response requirements. |
| BUK-E10 | Fire Prevention Plan | This procedure refers to the sites fire prevention measures. |

4 EMISSIONS AND THEIR ABATEMENT

4.1 Emissions to Air

There will be no change to the mass emissions to air as a result from this proposed variation.

4.2 Emissions to Controlled Water

There will be no change to emissions to controlled water as a result from this proposed variation.

4.3 Emissions to Sewer

There will be no change to emissions to sewer as a result from this proposed variation.

4.4 Emissions to Land

There are no emissions to land arising from the Installation.

5 IMPACTS TO THE ENVIRONMENT

5.1 Impacts to Air

There will be no changes to emission impacts to air from the proposed permit variation.

5.2 Impacts to Controlled Water

There will be no changes to emission impacts to controlled water from the proposed permit variation.

5.3 Impacts to Sewer

There will be no changes to emission impacts to sewer from the proposed permit variation.

5.4 Impacts to Land

There are no impacts to Land arising from this variation.

ANNEX A – ORIGINAL APPLICATION SUPPORT DOCUMENT

ANNEX B – SITE PLANS

ANNEX C – ORIGINAL AIR QUALITY ASSESSMENT