Cyfoeth Naturiol Cymru
Natural Resources Wales

Natural Resources Wales permitting decisions

Sensient Flavors Limited Decision Document

Contents

Variation

The variation number is: EPR/BL5644IK/V006

The Operator is: Sensient Flavors Limited

The Installation is located at: Felinfach Food Flavors Factory, Felinfach, Lampeter Ceredigion, SA48 8AG

The Operator has applied for a normal variation to permit number BL5644IK. The application is to add a combined heat and power (CHP) engine to the permit. The installation boundary will be expanded to add a small parcel of land where the CHP will be located.

Currently, electricity is imported from the grid and a Liquefied Petroleum Gas (LPG) boiler is used to supply heat and steam to the manufacturing process. The CHP will support the production of energy which will reduce the load that the existing boilers currently operate at and reduce electricity demand from the grid. This will improve overall efficiency of the site.

The CHP unit will comprise of one spark-ignition LPG (propane gas) fuelled engine (model reference MWM TCG 2020M V12) and;

- have a rated thermal input of approximately 2.079 MWth
- electrical output 856 kWe at 100 % load (although typical operation will be at 83 % load)
- have no limitation to operating hours

The classification of the CHP unit will fall into the following categories in accordance with the requirements of the Medium Combustion Plant Directive (MCPD) and Specified Generator Regulations (SG Regs):

Published by:
Natural Resources Wales
Cambria House
29 Newport Road
Cardiff
CF24 0TP

0300 065 3000 (Mon-Fri, 8am - 6pm)

enquiries@naturalresourceswales.gov.uk
www.naturalresourceswales.gov.uk

- one new medium combustion plant (MCP) between 1 and <50 MWth but aggregated to <50 MWth, which is put into operation on or after 20/12/2018 at a specified location; and
- one Tranche B Specified Generator aggregated to <50 MWth at a specified location

The variation and consolidation will:

- add conditions relevant to the new MCP / SG
- update the introductory note
- update the operating techniques
- update the reporting requirements
- update the site plan to show new installation boundary
- consolidates the changes made via this variation into the most recent permit
- consolidated permit will be issued with up to date modern conditions

We are minded to issue variation for Felinfach Food Flavors Factory operated by Sensient Flavors Limited.

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

Purpose of this document

This decision document:

- explains how the application has been determined
- provides a record of the decision-making process
- shows how all relevant factors have been taken into account
- justifies the specific conditions in the permit other than those in our generic permit template.

Published by:
Natural Resources Wales
Cambria House
29 Newport Road
Cardiff
CF24 0TP

0300 065 3000 (Mon-Fri, 8am - 6pm)

enquiries@naturalresourceswales.gov.uk
www.naturalresourceswales.gov.uk

Unless the decision document specifies otherwise, we have accepted the applicant's proposals.

How we reached our decision

1. Receipt of application

The Application was accepted as duly made on 15/03/2022. This means we considered it was in the correct form and contained sufficient information for us to begin our determination, but not that it necessarily contained all the information we would need to complete that determination.

1.1 Requests for information

Prior to the application being duly made, further information was requested from the applicant. The following was requested on 23/02/2022:

- The correct application to be paid
- A summary of changes to the Environment Management System as a result of the proposed variation
- A valid NACE code
- Assessment of West Wales Marine Special Area of Conservation (SAC) in the Air Quality Assessment
- Clarification regarding nearby human receptors

The applicant provided the requested additional information on 01/03/2022 and paid the correct application fee on 15/03/2022.

Published by:
Natural Resources Wales
Cambria House
29 Newport Road
Cardiff
CF24 0TP

0300 065 3000 (Mon-Fri, 8am - 6pm)

enquiries@naturalresourceswales.gov.uk
www.naturalresourceswales.gov.uk

1.2 Confidential information

No claim for commercial or industrial confidentiality has been made. We have not received information in relation to the Application that appears to be confidential in relation to any party.

2. Consultation

We have not carried out a consultation on the application in accordance with the Environmental Permitting Regulations, our Public Participation Statement and our Working Together Agreements. The MCP is not situated in an Air Quality Management Area (AQMA) therefore there is no requirement to consult the Local Authority.

3. Operator

We are satisfied that the Operator is the person who will have control over the operation of the facility after the issue of the variation. There is no change to the Operator of the installation as part of this variation. The decision was taken in accordance with EPR RGN 1 Understanding the meaning of operator.

4. The facility

The regulated facility is an installation which comprises the following activities listed in Part 2 of Schedule 1 to the Environmental Permitting Regulations (EPR):

- Section S4.2 A(1)(b) – Manufacturing activity which is likely to result in the release into the air of any hydrogen halide – production of hydrolysed vegetable protein from the reaction of hydrochloric acid and vegetable matter

An installation may also comprise “directly associated activities”, which at this Installation include:

- Storage and handling of raw materials
- Site generated energy supply for process
- Processing of the product

Published by:
Natural Resources Wales
Cambria House
29 Newport Road
Cardiff
CF24 0TP

0300 065 3000 (Mon-Fri, 8am - 6pm)

enquiries@naturalresourceswales.gov.uk
www.naturalresourceswales.gov.uk

- Handling and storage of solid waste
- Handling and storage of liquid wastes
- The operation and control of emission abatement systems
- Handling and storage of fuel on site

There are no changes to any Schedule 1, Part 2 activities. The MCP will be added as a directly associated activity.

The MCP will be subject to Schedule 25A of EPR – Medium Combustion Plant (MCPD) and Schedule 25B of EPR – Specified Generator (SG)*:

- 1x 2079 kWth thermal input LPG fuelled Combined Heat and Power (CHP) engine

*The CHP unit cannot be classed as an excluded specified generator as this installation's listed activity is not defined in Chapter II of the Industrial Emissions Directive (IED).

5. Legislation

NRW is satisfied that this decision is compatible with its general purpose of pursuing the sustainable management of natural resources in relation to Wales and applying the principles of sustainable management of natural resources. All applicable European directives have been considered in the determination of the application.

6. The Site

The Operator has applied to expand the installation boundary as part of this variation. They have provided an updated site plan which we consider is satisfactory, showing the new extent of the site of the installation. This plan also shows the existing and new emissions point. The plan is included in the permit and the Operator is required to carry out the permitted activities within the site boundary.

Published by:
Natural Resources Wales
Cambria House
29 Newport Road
Cardiff
CF24 0TP

0300 065 3000 (Mon-Fri, 8am - 6pm)

enquiries@naturalresourceswales.gov.uk
www.naturalresourceswales.gov.uk

6.1 Site condition report

The Operator has provided a description of the condition of the land being added to the installation. We consider this description is satisfactory. The decision was taken in accordance with our guidance on site condition reports – guidance and templates (H5).

7. Impact on Habitats sites, SSSIs, non-statutory conservation sites

The application is within the relevant distance for protected conservation sites.

7.1 National Site Network[1]/Ramsar sites

The following National Site Network/RAMSAR sites are located within 10 km of the installation:

- Rhos Talglas Special Area of Conservation (SAC)
- Ceredigion Bay SAC
- Afon Teifi SAC
- West Wales Marine SAC

An OGN 200 Form 1 Habitats Regulation Assessment has been completed to assess the potential to affect these sites.

In light of the conclusions of an appropriate assessment and taking account of the advice received from protected sites advisors, it has been established that the project will not adversely affect the integrity of any National Site Network site, taking into account any conditions or restrictions as applicable, either alone or in-combination

[1] As per the amendment to Regulation 3 of the Conservation of Habitats and Species Regulations 2017: The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (legislation.gov.uk). National Site Network means the network of sites in the United Kingdom's territory consisting of such sites as – (a) immediately before exit day formed part of Natura 2000; or (b) at any time on or after exit day are European sites, European marine sites and European offshore marine sites for the purposes of any of the retained transposing regulations.

Published by:
Natural Resources Wales
Cambria House
29 Newport Road
Cardiff
CF24 0TP

0300 065 3000 (Mon-Fri, 8am - 6pm)

enquiries@naturalresourceswales.gov.uk
www.naturalresourceswales.gov.uk

with other plans and projects (as documented in section 4 of OGN 200 form 1, and section 5 if applicable).

The assessment was reviewed by an NRW conservation technical specialist who confirmed agreement with the conclusion. The assessment is available to view on the public register.

7.2 Sites of Scientific Interest (SSSI)

No SSSIs have been identified within 2 km of the site.

7.3 National Nature Reserves, Local Nature Reserves, Local Wildlife Sites and Ancient Woodland (AW)

No National Nature Resources, Local Nature Reserves or Local Wildlife Sites were identified within 2 km of the site. 35 AW sites were identified within 2 km of the site nearest being approx. 5m to the south west of the existing site boundary. There is no anticipated impact on the identified AW as a result of this variation. Please see section 8.1 for impact assessment.

8. Environmental Risk Assessment

8. 1 Air

This section of the decision document deals primarily with the dispersion modelling of emissions to air from the proposed new stack and its impact on local air quality.

The Applicant has assessed the Installation's potential emissions to air against the relevant air quality standards, and the potential impact upon human health and ecologically sensitive receptors. The assessment predicts the potential effects on local air quality from the new CHP unit.

Published by:
Natural Resources Wales
Cambria House
29 Newport Road
Cardiff
CF24 0TP

0300 065 3000 (Mon-Fri, 8am - 6pm)

enquiries@naturalresourceswales.gov.uk
www.naturalresourceswales.gov.uk

The pollutants that have been assessed by the Applicant are:

- Oxides of nitrogen (NO and NO_2 expressed as NO_2 – collectively expressed as NO_X)
- Sulphur dioxide (SO_2)
- Carbon monoxide (CO)

The air impact assessment and dispersion modelling has been based on the Installation operating continuously at the relevant long-term or short-term emission limit values (ELVs), i.e. the maximum permitted emission rate. The Applicant has modelled 8760 operational hours per year (24/7/365) although the plant is expected to be operated for 8000 hours per year on average allowing for maintenance down-time. The Applicant has modelled over 5 years of meteorological data and has presented the impact results for the worst-case meteorological scenario. This recognised approach provides a conservative assessment as the plant is expected to emit pollutants below the requested ELVs and to operate slightly under the modelled number of hours annually.

The assumptions underpinning the model have been checked and are reasonably precautionary. We agree with the way in which the Applicant used dispersion models, its selection of input data, use of background data and the assumptions it made. We also agree with the sensitive receptors identified. The installation is not situated within an AQMA nor an area identified in the 'Clean Air Plan for Wales 2020'.

Three modelling scenarios have been provided by the Applicant:

1. "Operational Installation" – existing emissions from the installation without the new CHP unit
2. "Varied Installation" – existing emissions from the installation plus the new CHP unit
3. "CHP Unit" – predicted contributions from the CHP unit only (i.e., the change associated with the proposed variation)

Published by:
Natural Resources Wales
Cambria House
29 Newport Road
Cardiff
CF24 0TP

0300 065 3000 (Mon-Fri, 8am - 6pm)

enquiries@naturalresourceswales.gov.uk
www.naturalresourceswales.gov.uk

For the purposes of the below assessment, figures from the “Varied Installation” scenario have been used unless otherwise stated as this provides a conservative assessment.

8.1.1 Impact upon human health

The applicant has calculated maximum process contributions (PC) and predicted environmental concentrations (PEC) within the model domain and at all identified sensitive receptor locations. We have reviewed the locations of chosen sensitive receptor locations and agree with those chosen for the assessment. Short-term and long-term PC and PEC have been compared to all relevant environmental standards (ES) in line with the following guidance: Air emissions risk assessment for your environmental permit - GOV.UK (www.gov.uk). We consider emissions insignificant if at receptors:

- the short-term PC is less than 10 % of the short-term ES
- the long-term PC is less than 1 % of the long-term ES

If these thresholds are not met, the Applicant must calculate the PEC, which is the PC plus the background concentration. The Applicant has considered the emissions not significant

- if the PEC is less than 100 % of the relevant ES

The Applicant must take further action if the PC could cause a PEC to exceed an ES or the PEC is already exceeding an environmental standard.

The site is not located within an Air Quality Management Area (AQMA) nor is there any AQMAs located within 5 km of the site. The site is not located within an area identified in the ‘Clean Air Plan for Wales (2020)’.

Published by:
Natural Resources Wales
Cambria House
29 Newport Road
Cardiff
CF24 0TP

0300 065 3000 (Mon-Fri, 8am - 6pm)

enquiries@naturalresourceswales.gov.uk
www.naturalresourceswales.gov.uk

The modelling results for NO_x, SO_2, CO will be discussed separately below. The results discussed below relate to the point of maximum impact beyond the installation boundary and do not specifically relate to a receptor location. The PEC calculated includes the biomass boiler emissions from neighbouring installation (Volac Felinfach) which provides an accurate assessment of the background.

Oxides of nitrogen (NOx)

A long-term ES of 40 µg/m^3 (annual) was identified for NO_x. The maximum predicted long-term PC was 19.56 µg/m^3 which represents 48.91 % of the long-term ES. The maximum long-term PEC was 25.09 µg/m^3 which represents 62.72 % and below 70 % of the long-term ES. Therefore, in accordance with current NRW guidance the long-term impacts from NO_x can be considered not significant and unlikely to lead to an exceedance of the ES.

A short-term ES of 200 µg/m^3 (hourly) was identified for NOx. The maximum predicted short-term PC was 67.94 µg/m^3 which represents 33.97 % of the short-term ES. The maximum predicted short-term PEC was 77.66 µg/m^3 which represents 38.83 % and below 100 % of the short-term ES. Therefore, in accordance with current NRW guidance the short-term impacts from NO_x can be considered not significant and unlikely to lead to an exceedance of the ES.

Sulphur dioxide (SO_2)

The following short-term ESs were identified for SO_2:

- 350 µg/m^3 – 1 hour mean
- 125 µg/m^3 – 24 hour mean
- 266 µg/m^3 – 15-minute mean

There is no long term ES available for SO_2.

Published by:
Natural Resources Wales
Cambria House
29 Newport Road
Cardiff
CF24 0TP

0300 065 3000 (Mon-Fri, 8am - 6pm)

enquiries@naturalresourceswales.gov.uk
www.naturalresourceswales.gov.uk

A short term ES of 350 µg/m^3 (1 hour mean) was identified for SO_2. The maximum predicted short term PC was 63.56 µg/m^3 which represents 18.16 % of the short term ES. The maximum short term PEC was 67.09 µg/m^3 which represents 19.17 % of the short term ES.

A short term ES of 125 µg/m^3 (24 hour mean) was identified for SO_2. The maximum predicted short term PC was 26.26 µg/m^3 which represents 21.01 % of the short term ES. The maximum short term PEC was 30.06 µg/m^3 which represents 24.05 % of the short term ES.

A short term ES of 266 µg/m^3 (15-minute mean) was identified for SO_2. The maximum predicted short term PC was 76.68 µg/m^3 which represents 28.83 % of the short term ES. The maximum short term PEC was 80.65 µg/m^3 which represents 30.32 % of the short term ES.

Therefore, in line with current NRW guidance the short term impacts from SO_2 are considered not significant and unlikely to lead to an exceedance of the ES.

Carbon Monoxide (CO)

Carbon Monoxide has two short-term ES, 1 hour and 8 hour rolling average. There is no long-term ES for CO. A short-term ES of 30,000 µg/m^3 (1 hour) was identified for CO. The maximum predicted short-term PC (1 hour) was 599.10 µg/m^3 which represents 2.0 % and below 10 % of the short term ES. A short term ES of 10,000 µg/m^3 (8 hour running average) was identified for CO. The maximum predicted short-term PC (8 hour running average) was 356.49 µg/m^3 which represents 3.56 % and below 10 % of the short term ES. Therefore, in accordance with current NRW guidance the short-term impacts from CO can be considered insignificant.

Published by:
Natural Resources Wales
Cambria House
29 Newport Road
Cardiff
CF24 0TP

0300 065 3000 (Mon-Fri, 8am - 6pm)

enquiries@naturalresourceswales.gov.uk
www.naturalresourceswales.gov.uk

8.1.2. Impact upon ecological receptors

8.1.2.1 Statutory conservation sites

An OGN 200 Form 1 (Habitats Regulations Assessment) was completed to assess the potential to affect the National Site Network Sites identified within 10 km of the site. This included a full assessment of possible air quality impacts. As detailed in Section 7, this concluded the proposal will not adversely affect the integrity of any National Site Network site. Please refer to the assessment for more information.

8.1.2.2 Non-statutory conservation sites

As detailed in Section 7 there are several ancient woodland sites within 2 km of the installation. The closest of these lie immediately to the east of the installation boundary, the closest point being approximately 11 metres away.

The Applicant has assessed impacts from emissions at the closest Ancient Woodland site to the installation. This is appropriate because at other sites further away impacts are expected to be less.

Airborne Oxides of Nitrogen (NO_x) emissions – long term

The maximum predicted long-term process contribution was 27.95 µg/m^3 which represents 93.15 % and <100 % of the long-term critical level (30 µg/m^3), therefore in line with current NRW guidance, impacts of long-term airborne NO_x emissions are considered insignificant and no further assessment is required.

Airborne Oxides of Nitrogen (NOx) emissions – short term

The maximum predicted short-term process contribution is 121.10 µg/m^3 which represents 156 % and >100 % of the short-term critical level (75 µg/m^3). This result is

Published by:
Natural Resources Wales
Cambria House
29 Newport Road
Cardiff
CF24 0TP

0300 065 3000 (Mon-Fri, 8am - 6pm)

enquiries@naturalresourceswales.gov.uk
www.naturalresourceswales.gov.uk

when considering the 'Varied Installation' modelling scenario which includes existing emissions at the installation. These existing emissions can be considered as within the background as have been operational for a considerable amount of time. When we consider the 'CHP Unit' modelling scenario the maximum predicted short-term process contribution is 39 µg/m^3 which represents 21.5 % and <100 % of the short-term critical level (75 µg/m^3). Given that without the CHP contribution the 'Varied Installation' PC would still exceed the critical level and taking into account the conservative nature of the modelling, we consider the short term airborne NO_x emissions not significant.

Airborne SO_2 emissions

The maximum predicted long-term process contribution is 5.91 µg/m^3 which represents 59.07 % and <100 % of the long-term critical level (10 µg/m^3), therefore in line with current NRW guidance, impacts of long-term airborne SO_2 emissions are considered insignificant and no further assessment is required.

Nutrient Enrichment

The maximum predicted process contribution is 12.52 kgN/ha/yr which is 125% and >100 % of the minimum critical load for woodland habitats (10 kgN/ha/yr). This result is when considering the 'Varied Installation' modelling scenario which includes existing emissions at the installation. As discussed, these existing emissions can be considered as within the background. When we consider the 'CHP Unit' modelling scenario the maximum predicted process contribution is 1.30 kgN/ha/yr which is 13.00% and <100 % of the minimum critical load and therefore in line with current NRW guidance, can be considered not significant.

Published by:
Natural Resources Wales
Cambria House
29 Newport Road
Cardiff
CF24 0TP

0300 065 3000 (Mon-Fri, 8am - 6pm)

enquiries@naturalresourceswales.gov.uk
www.naturalresourceswales.gov.uk

Acidification

The maximum process contribution is 2.28 keq/ha/yr which represents 225.5% and >100% of the minimum critical load function for Broadleafed/Coniferous unmanaged woodland (0.438 keq/ha/yr (Min N), 1.011 keq/ha/yr (Max N) and 0.43 keq/ha/yr (Max S). This result is when considering the 'Varied Installation' modelling scenario which includes existing emissions, already considered in background, at the installation. When we consider the 'CHP Unit' modelling scenario the maximum predicted process contribution is 0.21 keq/ha/year which represents 28.1% and <100 % of the minimum critical load function and therefore in line with current NRW guidance, can be considered insignificant.

8.1.3 Emission limits

We have decided that emission limits should be set for the parameters listed in the permit. Emission limit values for the new CHP unit are in line with those contained with the Medium Combustion Plant Directive (MCPD). In line with current internal interim NRW guidance, for individual combustion units at installations subject to the Industrial Emissions Directive (IED) with a thermal input of <15 MW the emission limits value contained within the MCPD are considered indicative Best Available Techniques (BAT).

8.2 Water

There are no new emissions to water as a result of this variation. There will be a foul drain adjacent to the external enclosure for condensate from the CHP unit which will connect to the overall site process effluent drainage system and be processed in the Effluent Treatment Plant. Volumes of water will be small and are not anticipated change the amount or quality of process effluent discharge via the existing discharge point (E1).

Published by:
Natural Resources Wales
Cambria House
29 Newport Road
Cardiff
CF24 0TP

0300 065 3000 (Mon-Fri, 8am - 6pm)

enquiries@naturalresourceswales.gov.uk
www.naturalresourceswales.gov.uk

8.3 Soil

The Operator has provided a description of the condition of the extended installation boundary. We consider this description is satisfactory. The decision was taken in accordance with our guidance on site condition reports – guidance and templates (H5).

The existing LPG storage on the site will be used, and as such he proposed changes will not result in any new risk to ground as a result of changes to the quantities or storage arrangements for the CHP fuel.

8.4 Odour

Odour is not expected to be an emission of significant concern for the CHP engine. Permit conditions 3.3.1 and 3.3.2 require that emissions from the activities are free from odour at levels likely to cause pollution outside the site. We are satisfied this condition will be sufficiently protective for the proposed variation to the installation.

8.5 Noise

A noise risk assessment was completed by the applicant. This assessment was completed in line with British Standard 'BS 4142:2014+A1:2019' and multi-organisational guidance 'Noise and Vibration Management Environment Permit'. When compared to the existing noise levels measured at the closest Noise Sensitive Receptors (NSR), the new equipment will theoretically be not perceptible. Though the noise predictions show a potential to give rise to an increase the ambient level by +1 dB(A), this is not deemed to be perceptible in a day-to-day environment and it was concluded that there will be no significant noise impact as a result of this proposal.

Permit conditions 3.4.1 and 3.4.2 requires that emissions from the activities are free from noise and vibration at levels likely to cause pollution outside the site. We are

Published by:
Natural Resources Wales
Cambria House
29 Newport Road
Cardiff
CF24 0TP

0300 065 3000 (Mon-Fri, 8am - 6pm)

enquiries@naturalresourceswales.gov.uk
www.naturalresourceswales.gov.uk

satisfied this condition will be sufficiently protective for the proposed variation to the installation.

8.6 Fugitive emissions

Based upon the information in the application we are satisfied that the appropriate measures will be in place to prevent or where that is not practicable to minimise fugitive emissions and to prevent pollution from fugitive emissions.

This includes the container floor of the CHP (internal to the enclosure) acting as secondary containment in the event of an oil spill. This satisfies all bunding requirements (i.e., it will be bunded to 110 % of the capacity of the oil that is stored). The secondary containment will be emptied by tanker if required and as part of regular maintenance. Therefore, there will be negligible risk of oil being discharged off-site.

9. Monitoring

We have decided that monitoring should be carried out for the parameters listed in Schedule 3 of the permit using the methods and to the frequencies specified in those tables. These monitoring requirements have been imposed in order to demonstrate compliance with the emissions limits in the permit, as per the ELV and monitoring frequency requirements specified within the MCP Directive and/or EPR Schedule 25B Regulations.

For a new Medium Combustion Plant that is fuelled by ‘gaseous fuels other than natural gas’ the monitoring requirements are as follows:

Published by:
Natural Resources Wales
Cambria House
29 Newport Road
Cardiff
CF24 0TP

0300 065 3000 (Mon-Fri, 8am - 6pm)

enquiries@naturalresourceswales.gov.uk
www.naturalresourceswales.gov.uk

Pollutant	Type of MCP/SG	Fuel Type	Emission Limit Value (mg/Nm^3)	Monitoring Required
SO_2	Engine	Gaseous fuels other than natural gas	15	Periodic – every 3 years
NOx			190 (at 5% oxygen, equivalent to 95mg/Nm^3 at reference conditions)	Periodic – every 3 years
CO			No limit set	Periodic – every 3 years

Emission limit values are defined at a temperature of 273.15 K, a pressure of 101.3 kPa and after correction for the water vapour content of the waste gases and at a standardised O_2 content of 15 % for engines and gas turbines.

For emissions to air, the methods for continuous and periodic monitoring are in accordance with the Environment Agency's Technical Guidance Note M5 for monitoring of stack gas emissions from medium combustion plants and specified generators.

10. Reporting

We have specified the reporting requirements in Schedule 4 of the Permit to ensure data is reported to enable timely review by Natural Resources Wales to ensure compliance with permit conditions.

Published by:
Natural Resources Wales
Cambria House
29 Newport Road
Cardiff
CF24 0TP

0300 065 3000 (Mon-Fri, 8am - 6pm)

enquiries@naturalresourceswales.gov.uk
www.naturalresourceswales.gov.uk

11. Operating techniques

We have reviewed the operating techniques used by the Operator and compared these with the relevant guidance notes. The relevant guidance notes for this plant are:

- How to comply with your environmental permit
- Technical Guidance Note (TGN) M5: Monitoring of stack emissions from medium combustion plants and specified generators
- Medium combustion plant and specified generator permits how to comply (July 2019)

Monitoring of point source emissions to air will be carried out in line with the monitoring requirements contained within TGN M5 and will have MCERTS accreditation.

As the CHP engine is a Medium Combustion Plant (MCP) and SG, the site must adhere to the following operating techniques:

- Each MCP must be operated in accordance with the manufacturer's instruction and records must be made and retained to demonstrate this.
- The Operator must keep periods of start-up and shut down of each MCP as short as possible.
- There must be no persistent emission of 'dark smoke' as defined in Section 3(1) of the Clean Air Act 1993
- Where secondary abatement is required to ensure compliance with the NOx ELV it must be met within 10 minutes from when the generator comments operation or within 20 minutes when the generator was a Tranche A and is now a Tranche B
- The stack must be vertical and unimpeded by cowls or caps

Published by:
Natural Resources Wales
Cambria House
29 Newport Road
Cardiff
CF24 0TP

0300 065 3000 (Mon-Fri, 8am - 6pm)

enquiries@naturalresourceswales.gov.uk
www.naturalresourceswales.gov.uk

12. The permit conditions

12.1 Updating permit conditions during consolidation

We have updated previous permit conditions to those in the new generic permit template as part of permit consolidation. The new conditions have the same meaning as those in the previous permit. We have also incorporated a number of new conditions specific to Medium Combustion Plants into the permit. These conditions have been taken from our MCP/SG permit template.

12.2 Raw materials

There are no changes to the specified limits and controls on the use of raw materials and fuels as part of this variation.

12.3 Waste types

No waste types have been added to the permit as part of this variation.

12.4 Incorporating the application

We have specified that the applicant must operate the permit in accordance with descriptions in the application, including all additional information received as part of the determination process.

These descriptions are specified in the Operating Techniques table in the permit. As the CHP engine is an MCP, the site must adhere to a number of additional operating techniques these have been specified in the Operating Techniques table in the permit (See Section 11).

Published by:
Natural Resources Wales
Cambria House
29 Newport Road
Cardiff
CF24 0TP

0300 065 3000 (Mon-Fri, 8am - 6pm)

enquiries@naturalresourceswales.gov.uk
www.naturalresourceswales.gov.uk

14. Environment management system

There is no known reason to consider that the Operator will not have the management systems to enable it to comply with the permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence.

15. MCPD/SG Charges and Subsistence Fees

The type of application regarding MCPD and SG will have an associated charge. The MCPD/SG application type and number of plants will also form the basis for ongoing subsistence fees. More information on this can be found in our charging scheme on our website. Due to the out current charging systems, the MCP/SG will attract a separate tier 2 fixed fee.

Published by:
Natural Resources Wales
Cambria House
29 Newport Road
Cardiff
CF24 0TP

0300 065 3000 (Mon-Fri, 8am - 6pm)

enquiries@naturalresourceswales.gov.uk
www.naturalresourceswales.gov.uk