

Environment Agency permitting decisions

Bespoke Variation

We have decided to issue the variation for Goosey Lodge operated by Ancillary Components Limited.

The variation number is EPR/NP3338SZ/V005.

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.

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

Structure of this document

- Description of the changes introduced by the variation
- Key issues
- Annex 1 the decision checklist
- Annex 2 the consultation and web publicising responses

Description of the changes introduced by the Variation (for a variation)

This is a Substantial Variation. The operator requested a consolidation and modernisation of the permit as part of this variation. The variation comprises the following:

- addition of four 5,000 m³ digestion tanks to increase the anaerobic digestion process residence time (no change to feedstock types and quantities);
- addition of associated 1,000 m³ buffer tank;
- addition of a 25 MWth spark ignition gas engine to generate electricity from biogas produced by the anaerobic digestion plant to increase the power output from the site;

- addition of an emergency flare; and
- addition of a workshop building and its surroundings to increase the land covered by the installation by filling in a 'hole' in the permitted area.

The rest of the site operations are unchanged.

Key issues of the decision

Air Quality

The operator submitted an air quality assessment that included atmospheric air dispersion modelling. The assessment modelled the current situation (incinerator stack emissions from A1(a) and A1(b) and the emission from the existing 15 MW_{th} biogas/bioliquid compression ignition engine CHP1a) along with the proposed new emission from CHP1b (25 MW_{th} biogas spark ignition engine). The assessment modelled the following parameters: nitrogen dioxide (NO₂), sulphur dioxide (SO₂), particulates (PM₁₀), carbon monoxide (CO), ammonia (NH₃) and volatile organic compounds (VOCs, using benzene as a surrogate).

The following emissions were not screened out as insignificant (i.e. long term process contributions (PCs) > 1% of the corresponding Environmental Standard (ES) or short term PCs > 10% of the corresponding ES):

- NO₂, SO₂, particulates (long-term only) and VOCs (human health).
- NO₂, SO₂, nitrogen deposition and acid deposition (habitats).

Impact from Air Emissions to Human Health

The results are presented in the tables below:

Table 6.1: Maximum annual average NO₂ PCs and PECs (µg/m³)

Year	Objective value	PC				PEC		
		NO _x	NO ₂ ¹⁶	% of objective	Screened out?	Location (x, y)	NO ₂	% of objective
2011	40	10.7	7.5	19	No	496420, 263920	22.1	55
2012		8.0	5.6	14		496420, 263940	20.2	51
2013		7.5	5.3	13		496380, 263920	19.9	50
2014		8.0	5.6	14		496400, 263920	20.2	51
2015		10.5	7.4	19		496420, 263920	22.0	55

Table 6.2: Maximum 99.79th percentile of hourly average NO₂ PCs and PECs (µg/m³)

Year	Objective value	PC				PEC		
		NO _x	NO ₂ ¹⁷	% of objective	Screened out?	Location (x, y)	NO ₂	% of objective
2011	200	189	66	33	No	495980, 263540	95	48
2012		176	62	31		495980, 263540	91	46
2013		210	74	37		496020, 263560	103	52
2014		162	57	29		496480, 263780	86	43
2015		171	60	30		496460, 263800	89	45

Table 6.3: Maximum 99.9th percentile of 15-minute average SO₂ (µg/m³)

Year	Objective value	PC			PEC		
		SO ₂	% of objective	Screened out?	Location (x, y)	SO ₂	% of objective
2011	266	110	41	No	496440, 263760	116	44
2012		105	39		495980, 263540	111	42
2013		118	44		496040, 263580	124	47
2014		101	38		496440, 263760	107	40
2015		102	38		496440, 263780	108	41

Table 6.4: Maximum 99.73rd percentile of hourly average SO₂ concentrations (µg/m³)

Year	Objective value	PC			PEC		
		SO ₂	% of objective	Screened out?	Location (x, y)	SO ₂	% of objective
2011	350	99	28	No	496440, 263760	105	30
2012		92	26		495980, 263540	98	28
2013		102	29		495980, 263540	108	31
2014		87	25		496460, 263800	93	27
2015		91	26		496480, 263800	97	28

Table 6.6: Maximum annual average PM₁₀ PCs and PECs (µg/m³)

Year	Objective value	PC			PEC		
		PM ₁₀	% of objective	Screened out?	Location (x, y)	PM ₁₀	% of objective
2011	40	0.9	2	No	496440, 263920	17.0	43
2012		0.6	2		496420, 263940	16.7	42
2013		0.6	2		496380, 263920	16.7	42
2014		0.6	2		496400, 263920	16.7	42
2015		0.8	2		496420, 263920	16.9	42

Table 6.12: Maximum annual average benzene concentration ($\mu\text{g}/\text{m}^3$)

Year	Objective value	PC			PEC		
		Benzene	% of objective	Screened out?	Location (x, y)	Benzene	% of objective
2011	5	1.2	24	No	496440, 263920	1.5	30
2012		0.9	18		496420, 263940	1.2	24
2013		0.9	18		496380, 263920	1.2	24
2014		0.9	18		496400, 263920	1.2	24
2015		1.2	24		496420, 263920	1.5	30

Table 6.13: Maximum hourly average benzene concentration ($\mu\text{g}/\text{m}^3$)

Year	EAL value	PC			PEC		
		Benzene	% of objective	Screened out?	Location (x, y)	Benzene	% of objective
2011	195	23.1	12	No	496380, 263740	23.7	12
2012		39.0	20		496380, 263740	39.6	20
2013		24.1	12		496380, 263760	24.7	13
2014		22.5	12		496380, 263740	23.1	12
2015		30.5	15		496380, 263740	31.1	16

Impact from Air Emissions to Habitats and Local Conservation Sites

Impacts from NO₂, SO₂, ammonia, nitrogen deposition and acid deposition to the Upper Nene Valley Gravel Pits Ramsar & SPA (4.5 km northwest of the site) were all screened out as insignificant, i.e. PCs were less than 1% of the corresponding critical level or critical load.

Impacts from NO₂, SO₂, nitrogen deposition and acid deposition to the local conservation and heritage sites were assessed. These values were not all screened out as insignificant for all of the sites considered, however the process contributions (PCs) were all less than 100% of the appropriate environmental criterion, so we have concluded that there will be no significant impact on the local conservation and heritage sites from the proposed activities.

Discussion

The stack height and inclusion of SCR NO_x abatement for the new CHP engine is considered BAT (according to the AD Technical Guidance Note v1.0 dated November 2013 and BREF for Waste Treatments Industries dated August 2006). The air quality assessment modelling demonstrates the proposed ELVs for NO₂, SO₂, particulates and VOCs will not result in exceeding the corresponding AQOs.

The operator proposed a decreased ELV of 300 mg/m³ for SO₂ for both engine stacks (CHP1a currently permitted at 350 mg/m³) to ensure that the addition of CHP1b allows the site to continue to meet air quality standards at receptors.

However, we were concerned at the amount of 'headroom' being used between local background and the ES by the increased emissions from the new CHP1b with respect to NO₂ and SO₂ (see PECs in the tables above). We therefore reviewed the annual monitoring data from 2016.

The SO₂ result was two orders of magnitude below the modelled ELV, therefore we consider the resulting environmental risk from the two CHP engines stacks for SO₂ to be acceptable and that the proposed operating techniques represent BAT for SO₂ emissions from CHP1a and CHP1b.

The NO₂ result showed that the current CHP engine, CHP1a meets the ELV of 500 mg/m³: the result was 490 mg/m³ but had an uncertainty of ± 200 mg/m³.

There are two recognised techniques for secondary measures to reduce emissions of NO_x. These are Selective Catalytic Reduction (SCR) and Selective Non-Catalytic Reduction (SNCR). For each technique, there is a choice of urea or ammonia reagent.

The operator reports that both the current engine and proposed CHP engine will incorporate SCR as a secondary measure to reduce NO_x emissions.

SCR can reduce NO_x levels to below 70 mg/m³ and can be applied to all plant. It is generally more expensive than SNCR and requires reheating of the waste gas stream which reduces energy efficiency, periodic replacement of the catalysts also produces a hazardous waste.

Urea solution is generally the reduction agent of choice for SCR systems applied to engines. For applications with varying loads, the engine emissions are measured at different load levels during commissioning. The measured emissions values are then entered into the system controls, which ensures that the reduction agent is injected into the exhaust gas stream in the correct quantities for varying NO_x levels. The catalyst type and the SCR reactor size are tailored to the pressure drop constraints of each particular application so that the engine performance is not affected by any changes.

We have therefore included an improvement condition (IC10) which requires the operator to submit a written report to the Environment Agency describing the performance and optimisation of the Selective Catalytic Reduction (SCR) system and combustion settings for the CHP1a engine to minimise oxides of nitrogen (NO_x) emissions. The report will include site procedures (including replacement and/or regeneration of catalysts) which will enable the SCR to be managed efficiently to reduce NO_x emissions even further.

Given that the NO_x PEC is approaching the ES, we have inserted an improvement condition (IC11) which requires the operator to propose additional measures to reduce NO_x emissions even further and to implement the measures as approved by the Environment Agency.

Improvement condition (IC12) requires a post-commissioning optimisation of the CHP1b engine (similar to that required for CHP1a in IC 10) to ensure that it runs as predicted (or better than predicted) in the air quality assessment.

Annex 1: decision checklist

This document should be read in conjunction with the Duly Making checklist, the application and supporting information and permit/ notice.

Aspect considered	Justification / Detail	Criteria met
Receipt of submission		
Confidential information	A claim for commercial or industrial confidentiality has not been made.	✓
Identifying confidential information	We have identified no information provided as part of the application that we consider to be confidential. The decision was taken in accordance with our guidance on commercial confidentiality.	✓
Consultation		
Scope of consultation	<p>The consultation requirements were identified and implemented. The decision was taken in accordance with our Public Participation Statement and our Working Together Agreements.</p> <p>For this application we consulted the following bodies:</p> <ul style="list-style-type: none"> • Bedford Borough Council (Environmental Health) • Bedford Borough Council (Environmental Protection) • Health & Safety Executive • Food Standards Agency • Public Health England • Animal and Plant Health Agency • Natural England 	✓
Responses to consultation and web publicising	<p>The web publicising and consultation and newspaper advertising responses (Annex 2) were taken into account in the decision.</p> <p>The decision was taken in accordance with our guidance.</p>	✓
European Directives		
Applicable directives	All applicable European directives have been considered in the determination of the application.	✓
The facility		
The regulated	We considered the extent and nature of the	✓

Aspect considered	Justification / Detail	Criteria met Yes
facility	<p>facility/facilities at the site in accordance with RGN2 'Understanding the meaning of regulated facility', Appendix 2 of RGN 2 'Defining the scope of the installation' and Appendix 1 of RGN 2 'Interpretation of Schedule 1'.</p> <p>The extent of the facility is defined in the site plan and in the permit. The activities are defined in table S1.1 of the permit.</p> <p>The Operator informed us that there are no storage facilities for biogas between the anaerobic digesters and biogas treatment plant, or between the biogas treatment plant and the CHP engines where it is combusted. We therefore removed reference to the directly associated activity of waste storage pending operations numbered R1 to R12 which was 'From receipt of biogas to despatch of product and waste.' The remaining directly associated activities were reordered and renumbered accordingly.</p>	
The site		
Extent of the site of the facility	<p>The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility including emission points.</p> <p>A plan is included in the permit and the operator is required to carry on the permitted activities within the site boundary.</p>	✓
Site condition report	<p>The operator has provided a description of the condition of the site.</p> <p>We consider this description is satisfactory. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under IED – guidance and templates (H5).</p>	✓
Biodiversity, Heritage, Landscape and Nature Conservation	<p>The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat.</p> <p>A full assessment of the application and its potential to affect the following sites has been carried out as part of the permitting process:</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	<ul style="list-style-type: none"> • Upper Nene Valley Gravel Pits Ramsar & SPA (4.5 km northwest of the site) • Sharnbrook Summit CWS (50 m south of the site) • Wymington Meadow CWS (100 m south of the site) • Great Hayes Wood CWS (1.3 km south of the site) • Great Hayes Wood Ancient Woodland (1.3 km south of the site) • Forty Foot Lane CWS (1.6 km south of the site) • Knapwell Bank CWS (1.7 km southwest of the site) • Unnamed potential local wildlife site comprising woodland (1.1 km east of the site) • Unnamed potential local wildlife site comprising woodland (1.3 km east of the site) • Unnamed potential local wildlife site comprising woodland (1.9 km north of the site) • Great Lodge moated site, Higham Park (1.8 km east of the site). <p>An Appendix 11 form has been completed and sent to Natural England for information only. A review of the potential impact on local conservation and heritage sites has been completed and saved on our public register.</p> <p>We consider that the application will not affect the abovementioned sites and their associated species and habitats.</p> <p>We have not formally consulted on the application. The decision was taken in accordance with our guidance.</p>	
Environmental Risk Assessment and operating techniques		
Environmental risk	<p>We have reviewed the operator's assessment of the environmental risk from the facility.</p> <p>The operator's risk assessment is satisfactory.</p> <p>The assessment shows that, applying the conservative criteria in our guidance on Environmental Risk Assessment, all emissions may be categorised as environmentally insignificant, with the exception of the following:</p> <ul style="list-style-type: none"> • Emissions to air of NO_x, SO₂, particulates and VOCs (human health) – see key issues section above. • Emissions to air of NO_x, SO₂, nitrogen deposition and 	✓

Aspect considered	Justification / Detail	Criteria met Yes
	<p>acid deposition (habitats).</p> <p>These emissions are discussed in detail in the Key Issues section above.</p> <p>The variation will not affect or significantly change the following existing emissions from the site:</p> <ul style="list-style-type: none"> • Point source emissions to water – no change. • Odour emissions – there is the potential for odour from the new processes, though they are simply an extension to the existing processes; an improvement condition has been added which requires the operator to provide an updated OMP (see Operating Techniques section for more details). • Noise – there is the potential for noise from the new processes, though they are simply an extension to the existing processes. It is considered unlikely that there will be any significant noise impact on the local population or habitats sites. • Fugitive emissions – an extension to the existing processes is considered not to present an additional risk from fugitive emissions as current operational controls are effective. • Visible Plumes – not generated by the new point source emissions to air. • Pests – an extension to the existing processes is considered not to present an additional risk from pests, though the standard permit condition for pests has been added since the site accepts biodegradable waste. • Accident risks – an extension to the existing processes is considered not to present an additional accident risk as current operational controls are effective. • Waste generation – no change to the overall tonnage throughput for the site. Insignificant amounts of additional waste likely to be generated through maintenance of the new AD tanks, CHP and flare. <p>There are no point source emissions to land from the site.</p>	
Operating techniques	We have reviewed the techniques used by the operator and compared these with the relevant guidance notes –	✓

Aspect considered	Justification / Detail	Criteria met Yes
	<p>Environment Agency's Draft Technical Guidance Note for Anaerobic Digestion (Reference LIT 8737).</p> <p>Operating techniques relating to the control of air emissions are discussed in the Key Issues section above.</p> <p>Odour Management Plan We have not reviewed and approved the current Odour Management Plan (OMP) as part of this application. Following a site visit and discussions with the Area Compliance Officer, we ascertained that odour control from the current site operations is effective and therefore the current OMP is fit for purpose. Given that the proposed additional operations are merely an extension of existing operations and the operator has confirmed that the existing OMP will be extended to cover them, we have included an improvement condition for an updated OMP which specifically includes the new plant items.</p> <p>Operating Techniques for insignificant emissions Emissions of carbon monoxide and ammonia to air, odour, noise and emissions to surface water have been previously screened out as insignificant, and so the Environment Agency agrees that the Applicant's proposed techniques are BAT for the installation. We consider that the emission limits included in the installation permit reflect the BAT for the sector.</p> <p>Operating Techniques for NON-insignificant emissions Emissions to air of NOx, SO₂, particulates and VOCs cannot be screened out as insignificant. The Environment Agency has therefore assessed whether the proposed techniques are BAT. Operating techniques relating to the control of air emissions and their BAT assessment are discussed in the Key Issues section above.</p> <p>The proposed techniques/emission levels for priorities for control are in line with the benchmark levels contained in the Draft Technical Guidance Note for Anaerobic Digestion and we consider them to represent appropriate techniques for the facility. The permit conditions ensure compliance with relevant BREFs (Waste Treatments</p>	

Aspect considered	Justification / Detail	Criteria met Yes
	industries dated August 2006) and ELVs deliver compliance with BAT-AELs.	
The permit conditions		
Updating permit conditions during consolidation.	<p>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(s).</p> <p>The operator has agreed that the new conditions are acceptable.</p>	✓
Use of conditions other than those from the template	Based on the information in the application, we consider that we do not need to impose conditions other than those in our permit template, which was developed in consultation with industry having regard to the relevant legislation.	✓
Waste types	<p>We have specified the permitted waste types, descriptions and quantities, which can be accepted at the regulated facility.</p> <p>The permitted waste tables were amended by the operator to define which of the permitted waste streams are suitable for each activity. We reviewed the submission and the following wastes are excluded from each activity as follows:</p> <ul style="list-style-type: none"> • Wastes not suitable for incineration, determined in accordance with knowledge of the practical limits of incineration: <ul style="list-style-type: none"> 02 04 01 soil from cleaning and washing beet 15 01 04 metallic packaging 15 01 07 glass packaging 17 02 02 glass 20 02 02 soil and stones 20 07 07 bulky waste • Wastes not suitable for anaerobic digestion, determined in accordance with reference to our anaerobic digestion permit template permitted waste list: <ul style="list-style-type: none"> 02 01 04 waste plastics (except packaging) 02 01 09 agrochemical waste other than those 	✓

Aspect considered	Justification / Detail	Criteria met Yes
	<p>mentioned in 02 01 08</p> <p>02 03 02 wastes from preserving agents</p> <p>02 03 03 wastes from solvent extraction</p> <p>02 04 01 soil from cleaning and washing beet</p> <p>02 04 02 off-specification calcium carbonate</p> <p>02 06 02 wastes from preserving agents</p> <p>02 07 03 wastes from chemical treatment</p> <p>04 01 09 wastes from dressing and finishing</p> <p>04 02 15 wastes from finishing other than those mentioned in 04 02 14</p> <p>04 02 17 dyestuffs and pigments other than those mentioned in 04 02 16</p> <p>04 02 20 sludges from on-site effluent treatment other than those mentioned in 04 02 19</p> <p>04 02 21 wastes from unprocessed textile fibres</p> <p>04 02 22 wastes from processed textile fibres</p> <p>08 03 08 aqueous liquid waste containing ink</p> <p>15 01 06 mixed packaging</p> <p>15 01 09 textile packaging</p> <p>16 03 04 inorganic wastes other than those mentioned in 16 03 03</p> <p>16 03 06 organic wastes other than those mentioned in 16 03 05</p> <p>16 10 04 aqueous concentrates other than those mentioned in 16 10 03</p> <p>19 07 03 landfill leachate other than those mentioned in 19 07 02</p> <p>19 08 01 screenings</p> <p>19 08 02 waste from desanding</p> <p>19 08 05 sludges from treatment of urban waste water</p> <p>19 08 14 sludges from other treatment of industrial waste water other than those mentioned in 19 08 13</p> <p>19 09 01 solid waste from primary filtration and screenings</p> <p>19 09 02 sludges from water clarification</p> <p>19 09 03 sludges from decarbonation</p> <p>19 09 04 spent activated carbon</p> <p>19 09 05 saturated or spent ion exchange resins</p> <p>19 09 06 solutions and sludges from regeneration of ion exchangers</p>	

Aspect considered	Justification / Detail	Criteria met Yes
	<p>19 12 01 paper and cardboard 19 12 08 textiles 20 01 10 clothes 20 01 11 textiles 20 01 28 paint, inks, adhesives and resins other than those mentioned in 20 01 27 20 01 30 detergents other than those mentioned in 20 01 29 20 01 32 medicines other than those mentioned in 20 01 31 20 01 41 wastes from chimney sweeping 20 02 03 other non-biodegradable wastes 20 03 03 street-cleaning residues 20 03 04 septic tank sludge 20 03 06 waste from sewage cleaning 20 03 07 bulky waste</p> <p>Waste types also had constraints placed upon them to ensure they are suitable for the activity:</p> <ul style="list-style-type: none"> Wastes for anaerobic digestion: <ul style="list-style-type: none"> 02 01 01 sludges from washing and cleaning – vegetables, fruit and other crops 02 01 06 animal faeces, urine and manure (including spoiled straw) only 15 01 01 paper and cardboard packaging - not allowed if any non biodegradable coating or preserving substance is present. Excludes laminates such as Tetrapaks. 15 01 03 untreated wooden packaging - not allowed if any non biodegradable coating or preserving substance is present 15 01 05 composite packaging - must conform to BS EN 13432 and not allowed if any non biodegradable coating or preserving substance is present 16 10 02 aqueous liquid wastes other than those mentioned in 16 10 01 – limited to liquor/leachate from a composting process that accepts waste input types listed in this table only 19 02 03 premixed wastes composed only of non-hazardous wastes – comprising only waste types listed within this table that have been mixed together 19 02 06 sludges from physico/chemical treatment 	

Aspect considered	Justification / Detail	Criteria met Yes
	<p>other than those mentioned in 19 02 05 – comprising only sludge types from waste listed within this table that have been heat treated only</p> <p>19 02 10 combustible wastes other than those mentioned in 19 02 08 and 19 02 09- comprising only non hazardous glycerol</p> <p>19 06 03 liquor from anaerobic treatment of municipal waste (from a process that treats wastes which are listed in this table only)</p> <p>19 06 04 digestate from anaerobic treatment of source segregated biodegradable waste (from a process that treats wastes which are listed in this table only)</p> <p>19 06 05 liquor from anaerobic treatment of animal and vegetable waste (from a process that treats wastes which are listed in this table only)</p> <p>19 06 06 digestate from anaerobic treatment of animal and vegetable waste (from a process that treats wastes which are listed in this table only)</p> <p>19 12 12 other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11 – comprising waste types listed in this table subject to mechanical treatment only</p> <p>20 01 01 paper and cardboard - not allowed if any non biodegradable coating or preserving substance is present. Excludes laminates such as Tetrapaks.</p> <p>20 03 01 mixed municipal waste – comprising only separately collected biodegradable wastes of types listed within this table</p> <p>20 03 02 waste from markets – comprising only source segregated biodegradable fractions e.g. plant material, fruit and vegetables</p> <p>We have excluded the following wastes for the following reasons:</p> <ul style="list-style-type: none"> No longer included in Technical Guidance WM3: Waste Classification – Guidance on the classification and assessment of waste: <ul style="list-style-type: none"> 19 08 03 sludges from decarbonation 19 08 04 spent activated carbon 	
Improvement	Based on the information in the application, we consider	✓

Aspect considered	Justification / Detail	Criteria met Yes
conditions	that we need to impose improvement conditions. We have imposed improvement conditions, as described in the Key Issues above.	
Incorporating the application	<p>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.</p> <p>These descriptions are specified in the Operating Techniques table in the permit.</p>	✓
Emission limits	<p>We have decided that emission limits should be set for the parameters listed in the permit.</p> <p>Emission limit values have been specified for the new flare FL2 and engine CHP1b. Emission limit values have been changed for the existing flare FL1 and existing engine CHP1a.</p> <p>Note that the surface water discharge point from this permit has been renamed SW1 to distinguish it from W1, which is for a different emission point from the site controlled by another permit.</p> <p>The following substances have been identified as being emitted in significant quantities and ELVs have been set for those substances:</p> <ul style="list-style-type: none"> • Oxides of nitrogen (NO and NO₂ expressed as NO₂): 500 mg/Nm³ • Sulphur dioxide: 300 mg/Nm³ • Carbon monoxide: 1400 mg/Nm³ • Total VOCs: 1000 mg/Nm³ <p>The operator is proposing to use SCR to reduce NO₂ emissions for CHP1a and CHP1b.</p> <p>The operator has proposed a stricter ELV of 300 mg/Nm³ in respect of sulphur dioxide than that currently permitted for CHP1a for both CHP1a and CHP1b, so that the site can meet the 15-minute mean UK air quality objective for SO₂.</p>	✓

Aspect considered	Justification / Detail	Criteria met Yes
	<p>An Agency-led variation to one ELV for point source emissions to water was made; the ELV for hydrocarbon oils in SW1 were changed from 5 mg/l to “No visible oil”.</p> <p>It is considered that the ELVs described above will ensure that significant pollution of the environment is prevented and a high level of protection for the environment secured.</p>	
Monitoring	<p>We have decided that monitoring should be carried out for the parameters listed in the permit, using the methods detailed and to the frequencies specified.</p> <p>Additional monitoring has been specified for the new emergency flare FL2 and engine CHP1b. Additional monitoring for emergency flare FL1 has been specified if it operates for more than 10% of the year. The monitoring of CO has been added for engine CHP1a. No other monitoring requirements have been changed.</p> <p>The IED requirement for soil and groundwater monitoring has been added.</p> <p>We made these decisions in accordance with How to comply with your environmental permit. Additional guidance for: Anaerobic Digestion, AD Technical Guidance Note, v1.0, November 2013.</p> <p>Based on the information in the application, we are satisfied that the operator’s techniques, personnel and equipment have either MCERTS certification or MCERTS accreditation as appropriate.</p>	✓
Reporting	<p>We have specified reporting in the permit. The reporting requirements have been updated to reflect the new generic permit template as part of permit consolidation.</p> <p>We made these decisions in accordance with How to comply with your environmental permit. Additional guidance for: Anaerobic Digestion, AD Technical Guidance Note, v1.0, November 2013.</p>	✓

Aspect considered	Justification / Detail	Criteria met Yes
Operator Competence		
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 our guidance on what a competent operator is.	✓
Technical competence	Technical competency is required for activities permitted. The operator is a member of an agreed scheme.	✓
Growth Duty		
Section 108 Deregulation Act 2015 – Growth duty	<p>We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to vary this permit.</p> <p>Paragraph 1.3 of the guidance says:</p> <p>“The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation.”</p> <p>We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections.</p> <p>We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This also promotes growth amongst legitimate operators because the standards applied to the operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.</p>	✓

Annex 2: Consultation and web publicising responses

Summary of responses to consultation and web publication and the way in which we have taken these into account in the determination process.

Response received from
Animal and Plant Health Agency
Brief summary of issues raised
“APHA has no comment to make as this is a purely EA matter. The anaerobic digester is not suitable for APHA Approval, as there is no pasteurization stage. The material is incinerated instead.”
Summary of actions taken or show how this has been covered
Confirmed with operator that residues from the AD tanks are incinerated on-site.

Response received from
Public Health England
Brief summary of issues raised
<p>“The main emissions of concern are stack emissions from the new CHP engine. However, modelling included by the applicants has concluded that emissions are within air quality standards under normal plant operation, although sulphur dioxide may be exceeded during maximum loading conditions. There is no data provided however to support this assertion and whether this may impact the local residential properties in Wymington.</p> <p>Based on the information contained in the application supplied to us, Public Health England has no significant concerns regarding the risk to the health of the local population from the installation under normal plant operation, however PHE recommend that the regulator ascertains that the installation does not contribute significantly to existing background pollutant concentrations.</p> <p>This consultation response is based on the assumption that the permit holder shall take all appropriate measures to prevent or control pollution, in accordance with the relevant sector guidance and industry best practice.”</p>
Summary of actions taken or show how this has been covered
The Applicant's air quality impact assessment has been audited and a lower ELV for sulphur dioxide was agreed to ensure that the site does not breach the relevant Environmental Standard.