

# OGN 200 Form 1B

## Record of a Habitats Regulations Assessment

All staff using this form should be familiar with [OGN200](#) and should have had appropriate training in HRA.

A separate version of this form is available with guidance notes on how to complete it. You should refer to those notes when using this form.

<b>Plan or project name, brief description or application reference number</b>	PAN-025645 (EPR/AB3093CA/V004) Permit variation for Tremorfa Anaerobic Digestion Facility
--	---

<b>HRA iteration/version</b>	1.0
------------------------------	-----

## 1 Plan or Project Details

Information about the plan or project		
1	<b>Date application received</b>	Application Duly made 04/12/2024
2	<b>Applicant details</b>	PAN-025645 (EPR/AB3093CA/V004) Welsh Water Organic Energy Limited
3	<b>NRW team responsible for carrying out, or requiring to be carried out, the plan or project, and name of lead officer</b>	N/A
4	<b>Activities proposed</b>	<p>The application is to vary the permit for Tremorfa Anaerobic Digestion Facility to reflect the following changes to the site:</p> <ul style="list-style-type: none"> <li>• Addition of a backup biogas boiler which is to be used when the main combined heat and power plant is non-operational due to maintenance or breakdown. The applicant is not likely to use this more than 500 hours per year</li> <li>• Addition of new waste- Sludges from on-site effluent treatment under the European waste code 02 02 04.</li> <li>• Update the details on discharge points to foul and surface water sewer to correct errors discovered during the previous permit variation.</li> </ul> <p>The main impacts to the environment would be through emissions to air from the addition of the backup combined heat and power (CHP) plant. The CHP plant will be used when the main boiler is non operation (due to either breakdown or maintenance) and would be limited in the permit to 500 hours per year.</p>
5	<b>Relevant legislation or statutory basis</b>	Environmental permitting regulation 2016 Industrial emission directive 2010 Medium combustion plant directive
6	<b>Location</b>	Site address: Tremorfa Anaerobic Digestion Facility, Tide Fields Road, Tremorfa, Cardiff, CF24 5SB NGR: ST 21116 75997

7	Plan or project documents, including any application documents	Internal see DMS folder External See public register
8	Environmental Statement	N/A
9	Pre-application correspondence	N/A

10	<b>NRW team responsible for preparing this HRA report, and lead officer</b>	William Wallace, Senior Officer Installation and RSR permitting
11	<b>Team or person responsible for approving the plan or project (competent authority role)</b>	Installation and RSR permitting, Permitting Service

## 2. Determining the need for a Habitats Regulations Assessment

<b>2.1 Is there any possibility that the plan or project could negatively affect any European sites?</b>	Yes Proposed boiler would result in emissions to air
<b>2.2 Is the whole of the plan or project directly and only connected with or necessary to the management of one or more European sites, for the purposes of conserving the habitats or species for which the European site(s) is/are designated?</b>	No
<b>2.3 Is there a possibility that the plan or project could affect any other feature of the European site(s) concerned, or of another European site, in a way that would undermine that feature's conservation objectives?</b>	no

## 3. Considering the likelihood of a significant effect (LSE)

### 3.1 Renewal of a project authorisation on the same or more restrictive terms as an extant authorisation

<b>Is this a renewal of an extant authorisation which complies with NRW approved criteria</b>	No
---	----

for ruling out significant effects of renewals (see Part 2 of <a href="#">OGN200</a> ) without conducting a project-specific LSE test?	
--	--

## 3.2 Likelihood of significant effects (LSE) test

### 3.2.1 Which European sites might be affected by the plan or project?

(a)	<b>Based on the plan or project specification, or information provided in the application, it is considered that these European sites have features which could be negatively affected by the plan or project</b>	Seven Estuary (SAC, SPA, Ramar) – is within screening distance of the combustion unit.
(b)	<b>The potential for the plan or project to negatively affect these European sites was also initially considered, but can be ruled out without further consideration</b>	<p>Cardiff Beach Wood – The only impact pathway to this SAC from the proposal is emissions of NO<sub>x</sub>, and SO<sub>2</sub> to air from the boiler. As only source is from the the boiler and this is 1.53 MWth, using the relevant screening distance for biogas (gas other than natural gas) the screening distance of a combustion unit of this size is 1000 meters. As such this SAC site outside of the screening distance for emissions from the boiler and therefore there is no impact pathway due to size and scale of the boiler.</p> <p>See: <a href="#">Natural Resources Wales / What to do before you apply for a standalone Medium Combustion Plant (MCP) permit between 1 and less than 20 MW thermal input</a></p>

### 3.2.2 Screening for likelihood of significant effect

<b>Table 3.2.2 Screening assessment</b>
---

Designated site feature	Relevant conservation objectives	Screening conclusion – SCREEN OUT', 'SCREEN IN' or 'IN COMB'	Explanation
<b>European site name: Seven Estuary (SAC)</b>			
<b>SAC interest feature 1: Estuaries</b> 1.12: Estuarine & intertidal habitats	<p>All conservation objectives are contained within the following document:  <a href="#">The Severn Estuary / Môr Hafren</a></p> <ul style="list-style-type: none"> <li>i. the total extent of the estuary is maintained;</li> <li>ii. the characteristic physical form (tidal prism/cross sectional area) and flow (tidal regime) of the estuary is maintained;</li> <li>iii. the characteristic range and relative proportions of sediment sizes and sediment budget within the site is maintained;</li> <li>iv. the extent, variety and spatial distribution of estuarine habitat</li> </ul>	<b>Toxic Contamination</b> <b>Screen out</b>	<p><b>Toxic contamination</b></p> <p>Air Emissions</p> <p>The applicant had for the worst case scenario that the estimated emission for both short term and long term (annual) for NO<sub>x</sub> and SO<sub>2</sub>.</p> <p><u>NO<sub>x</sub></u></p> <p>The highest short term process contribution was 1.79 µg/m<sup>3</sup> which is 2.38% of the (lower) short term critical level of 75 µg/m<sup>3</sup>. As the short term process contribution is less than 10% of the short term critical level the emissions screen out as insignificant.</p> <p>The highest long term process contribution is 0.321 µg/m<sup>3</sup> which is 1.07 % of the long term critical level of 30 µg/m<sup>3</sup>. The predicted environmental concentration at this location (background of 15.6 µg/m<sup>3</sup>) is 53.1% of the critical level and as such screens out. It should also be noted that the applicant had taken a conservative approach and the modelled long term impacts on the assumption that the unit is running 8760 hours per year but the unit is only to run less than 500 hours per year as a backup and as such the impacts predicted are far higher than what the unit would be running at.</p>

	<p>v. communities within the site is maintained; the extent, variety, spatial distribution and community composition of hard substrate habitats and their notable communities (v) is maintained</p> <p>vi. the abundance of the notable estuarine species assemblages is maintained or increased;</p> <p>vii. the physico-chemical characteristics of the water column support the ecological objectives described above;</p> <p>viii. Toxic contaminants in water column and sediment are below levels which would pose a risk to the ecological objectives described above</p> <p>ix. Airborne nutrient and containment loads are below levels which would pose a risk to the ecological</p>		<p>As the boiler is running as a backup &lt;500 hours, when the main one is out the emissions of NO<sub>x</sub> are unlikely to increase the sites overall emission compare to when the main boiler is online and will not be high enough to cause exceedance through (long term) in-combination with other plans or projects.</p> <p><u>SO<sub>2</sub></u></p> <p>The highest process contribution was 0.161 µg/m<sup>3</sup> which is 1.61% of the critical level of SO<sub>2</sub> (10 µg/m<sup>3</sup>). The predicted environmental concentration (using the APIS background of 3.2 µg/m<sup>3</sup>) is 33.6% of the critical level. As such the emissions of SO<sub>2</sub> screen out as insignificant. As with NO<sub>x</sub>, the applicant had modelled on the assumption of the site running 8760 hour per year (when it will only run as a backup less than 500 hours per year). As such the impacts are would be far lower than what the applicant had shown in their modelling and the model (under a far higher impact scenario) showed the emissions screened out.</p> <p><u>Water</u></p> <p>-Screen out. The variation is to amend the permit to reflect the current activities on site. There will be no operational changes that will change the composition of water discharged to sewer. All process water is discharged to sewer under a trade effluent consent with existing parameters for phosphates. The process water is treated at Cardiff Waste water treatment works which is covered by its own permit.</p>
--	--	--	--

	objectives described above	<p><b>Nutrient Enrichment</b> -Screened out</p> <p><b>Acidification</b> Screen out</p>	<p><b>Air-Nitrogen deposition</b> The feature can be affected from deposition from atmospheric NO<sub>x</sub> which could cause impact that could damage the feature (see conservation objective ix) The highest nitrogen deposition was 0.00757 kgN/Ha/Year which is less than 1% (0.076%) of the lower critical load of 10 kgN/Ha/Year and as such screen out as insignificant. Given the very low predicted process contribution under worst case scenario (modelled on 8760 hours rather than the maximum 500 hours permitted) and operating as a backup when the main boiler is offline there is no likely impact either alone or in combination.</p> <p>Water-No change. The variation is to amend the permit to reflect the current activities on site. There will be no operational changes that will change the composition of water discharged to sewer. All process water is discharged to sewer under a trade effluent consent with existing parameters for phosphates. The process water is treated at Cardiff Waste water treatment works which is covered by its own permit.</p> <p><b>Acidification</b> Air- Acidification could occur as a result of nitrogen and sulphur deposition from air. APIS does not have any acidity for the SAC, although the SSSI features do have an acid critical load assessment. The applicants initial conservative modelled (8760 hours per year) and produced an acid deposition of initially did not screen out (1.69% of the lower acid critical level and predicted</p>
--	----------------------------	--	---



		<p>environmental concentration was 130% of the lower acid critical level). However the backup boiler is to run less than 500 hours per year (as limited in the permit) and the applicant had shown that under this situation (using a reduction factor of 0.0571) the process contribution would less than 0.1% of the long term lower acid critical level. As such the modelling showed that when assessed against the 500 hour maximum, the acid deposition from the emissions of NOx and SO<sub>2</sub> screens out as insignificant and will not cause damage alone or in-combination (as it only runs when the existing permitted boiler is offline)</p> <p><b>Changes in Salinity Regime</b> -Screen out</p> <p><b>Changes in Thermal Regime</b> Screen out</p> <p><b>Habitat Loss</b> -Screen out</p> <p><b>Physical Damage</b> -Screen out</p> <p><b>Turbidity and Siltation</b> -Screen Out</p>	<p>environmental concentration was 130% of the lower acid critical level). However the backup boiler is to run less than 500 hours per year (as limited in the permit) and the applicant had shown that under this situation (using a reduction factor of 0.0571) the process contribution would less than 0.1% of the long term lower acid critical level. As such the modelling showed that when assessed against the 500 hour maximum, the acid deposition from the emissions of NOx and SO<sub>2</sub> screens out as insignificant and will not cause damage alone or in-combination (as it only runs when the existing permitted boiler is offline)</p> <p><b>Changes in Salinity Regime</b> – No Impact pathway. All process emissions are discharge to sewer under trade effluent consent..</p> <p><b>Changes in Thermal Regime</b>- no direct discharge. All process emissions are discharge to sewer under trade effluent consent..</p> <p><b>Habitat Loss</b> No impact pathway-proposal would not result in habitat loss</p> <p><b>Physical Damage</b> No impact pathway- the proposal would not cause any physical damage to the SAC</p> <p><b>Turbidity and Siltation</b></p>
--	--	--	---

		-Screen Out	-No impact pathway. No direct discharge to surface water other than uncontaminated rain water run off. All process water is discharge to sewer and treated at Cardiff STW (which has existing emission limits/controls)
SAC interest feature 2: Subtidal Sandbanks 1.13: Submerged marine habitats	<p>i. the total extent of the subtidal sandbanks within the site is maintained;</p> <p>ii. the extent and distribution of the individual subtidal sandbank communities within the site is maintained;</p> <p>iii. the community composition<sup>5</sup> of the subtidal sandbank feature within the site is maintained;</p> <p>iv. the variety and distribution<sup>3</sup> of sediment types across the subtidal sandbank feature is maintained;</p> <p>v. the gross morphology (depth, distribution and profile) of the subtidal sandbank feature within the site is maintained.</p>	<p><b>Toxic Contamination</b> Screen out</p> <p><b>Nutrient Enrichment</b> -Screened out</p> <p><b>Changes in Salinity Regime</b> -Screen out</p> <p><b>Changes in Thermal Regime</b> Screen out</p> <p><b>Habitat Loss</b> -Screen out</p> <p><b>Physical Damage</b> -Screen out</p> <p><b>Turbidity</b> -Screen Out</p> <p><b>Siltation</b> -Screen Out</p>	See SAC feature 1
SAC interest feature 3: Intertidal	i. The total extent of the mudflats and sandflats feature	<b>Toxic contamination</b>	See SAC feature 1

mudflats and Sandflats 1.12: Estuarine & intertidal habitats	<ul style="list-style-type: none"> <li>ii. is maintained; ii. the variety and extent of individual mudflats and sandflats communities within the site is maintained;</li> <li>iii. the distribution of individual mudflats and sandflats communities within the site is maintained</li> <li>iv. iv. the community composition of the mudflats and sandflats feature within the site is maintained</li> <li>v. the topography of the intertidal flats and the morphology</li> </ul>	<p>Screen out</p> <p><b>Nutrient Enrichment</b></p> <p>-Screened out</p> <p><b>Changes in Salinity Regime</b></p> <p>-Screen out</p> <p><b>Changes in Thermal Regime</b></p> <p>Screen out</p> <p><b>Habitat Loss</b></p> <p>-Screen out</p> <p><b>Physical Damage</b></p> <p>-Screen out</p> <p><b>Turbidity</b></p> <p>-Screen Out</p> <p><b>Siltation</b></p> <p>-Screen Out</p>	
SAC interest feature 4: Atlantic salt meadow 1.12: Estuarine & intertidal habitats	<ul style="list-style-type: none"> <li>i. the total extent of Atlantic salt meadow and associated transitional vegetation communities within the site is maintained<sup>3</sup> ;</li> <li>ii. the extent and distribution<sup>4</sup> of the individual Atlantic salt meadow and associated transitional vegetation</li> </ul>	<p><b>Toxic Contamination</b></p> <p>Screen out</p> <p><b>Nutrient Enrichment</b></p> <p>-Screened out</p> <p><b>Changes in Salinity Regime</b></p> <p>-Screen out</p> <p><b>Changes in Thermal Regime</b></p>	See SAC feature 1

	<p>iii. communities within the site is maintained; the zonation of Atlantic salt meadow vegetation communities and their associated transitions<sup>2</sup> to other estuary habitats is maintained;</p> <p>iv. the relative abundance of the typical species<sup>5</sup> of the Atlantic salt meadow and associated transitional vegetation communities<sup>2</sup> is maintained;</p> <p>v. the abundance of the notable species<sup>6</sup> of the Atlantic salt meadow and associated transitional vegetation communities<sup>2</sup> is maintained.</p> <p>vi. the structural variation of the salt marsh sward (resulting from grazing) is maintained within limits sufficient to satisfy the requirements of conditions iv and v</p>	<p>Screen out</p> <p><b>Habitat Loss</b></p> <p>-Screen out</p> <p><b>Physical Damage</b></p> <p>-Screen out</p> <p><b>Turbidity</b></p> <p>-Screen Out</p> <p><b>Siltation</b></p> <p>-Screen Out</p>	
--	---	--	--

	<p>above and the requirements of the Ramsar and SPA features<sup>7</sup></p> <p>vii. the characteristic stepped morphology of the salt marshes and associated creeks, pills, drainage ditches and pans, and the estuarine processes that enable their development, is maintained.</p> <p>viii. Any areas of <i>Spartina ang</i></p>		
<p>SAC interest feature 5: Reefs 1.12: Estuarine &amp; intertidal habitats 1.13 Submerged marine habitats</p>	<p>i. the total extent and distribution of Sabellaria reef is maintained;</p> <p>ii. the community composition<sup>4</sup> of the Sabellaria reef is maintained;</p> <p>iii. the full range of different age structures of Sabellaria reef are present;</p> <p>iv. the physical<sup>5</sup> and ecological processes<sup>6</sup> necessary to support Sabellaria reef are maintained.</p>	<p><b>Toxic Contamination</b> Screen out</p> <p><b>Nutrient Enrichment</b> -Screened out</p> <p><b>Changes in Salinity Regime</b> -Screen out</p> <p><b>Changes in Thermal Regime</b> Screen out</p> <p><b>Habitat Loss</b> -Screen out</p> <p><b>Physical Damage</b></p>	<p>See SAC feature 1</p>



	<p>below levels which would pose a risk to the ecological objectives described above</p>	<p><b>Changes in Salinity Regime</b> -Screen out</p> <p><b>Changes in Thermal Regime</b> Screen out</p> <p><b>Habitat Loss</b> -Screen out</p> <p><b>Physical Damage</b> -Screen out</p> <p><b>Turbidity</b> -Screen Out</p> <p><b>Siltation</b> Screen out</p>	<p>Feature (aquatic species) not directly impacted by deposition from air. Emissions screen out (seen SAC feature 1 for details)</p> <p>Water- all process effluent discharge to sewer under trade effluent consent. Variation is to amend the description of discharge to sewer identified in the previous permit review.</p> <p><b>Changes in Salinity Regime</b> -No impact –Surface water discharge to sewer (under trade effluent consent) and treated at Cardiff Waste water treatment works.</p> <p><b>Changes in Thermal Regime</b> No impact- All process effluent discharge to sewer and treated at Cardiff Waste water treatment works.</p> <p><b>Habitat Loss</b> -Screen out</p> <p><b>Physical Damage- No impact pathway</b> <b>Turbidity</b> -Screen Out</p> <p><b>Turbidity and Siltation</b> -No impact pathway. No direct discharge to surface water other than uncontaminated rain water run off. All process water is discharge to sewer and treated at Cardiff STW (which has existing emission limits/controls)</p>
--	--	---	---

SAC interest feature 7: Sea lamprey 2.5 Anadramous fish	<ul style="list-style-type: none"> <li>i. the migratory passage of both adult and juvenile sea lamprey through the Severn Estuary between the Bristol Channel and any of their spawning rivers is not obstructed or impeded by physical barriers, changes in flows, or poor water quality;</li> <li>ii. the size of the sea lamprey population in the Severn Estuary and the rivers which drain into it, is at least maintained as is at a level that is sustainable in the long term;</li> <li>iii. the abundance of prey species<sup>2</sup> forming the sea lamprey's food resource within the estuary, is maintained.</li> <li>iv. Toxic contaminants in the water column<sup>3</sup> and sediment are below levels which would pose a risk to the ecological</li> </ul>	As above	As above



	objectives described above.		
SAC interest feature 8: Twaite shad 2.5 Anadramous fish	<ul style="list-style-type: none"> <li>i. the migratory passage of both adult and juvenile twaite shad through the Severn Estuary between the Bristol Channel and their spawning rivers is not obstructed or impeded by physical barriers, changes in flows or poor water quality;</li> <li>ii. the size of the twaite shad population within the Severn Estuary and the rivers draining into it is at least maintained and is at a level that is sustainable in the long term.</li> <li>iii. the abundance of prey species<sup>2</sup> forming the twaite shad's food resource within the estuary, in particular at the salt wedge<sup>3</sup> , is maintained.</li> <li>iv. Toxic contaminants in the water column<sup>4</sup> and sediment are below levels which</li> </ul>	As above	As above

	would pose a risk to the ecological objectives described above.		
<b>European site name: Severn Estuary SPA UK9015022</b>			
<b>SPA interest feature 1: Bewick's Swan</b> 3.4 Birds of lowland wet grasslands 3.6 Birds of lowland freshwaters and their margins 3.7 Birds of farmland 3.8 Birds of coastal habitats	I. the 5 year peak mean population size for the Bewick's swan population is no less than 289 individuals (ie the 5 year peak mean between 1988/9 - 1992/3); II. the extent of saltmarsh at the Dumbles (Appendix 8: Map 1) is maintained; III. the extent of intertidal mudflats and sandflats at Frampton Sands, Waveridge Sands and the Noose (Appendix 8: Map 1) is maintained; IV. the extent of vegetation with an effective field size of >6 ha and with unrestricted bird sightlines > 500m at feeding, roosting and refuge sites (Appendix III) are maintained; V. greater than 25% cover of suitable soft leaved herbs and grasses <sup>3</sup> in winter season throughout the	<b>Toxic Contamination</b> Screen out	<b>Toxic contamination</b> Air Emissions The applicant had for the worst case scenario that the estimated emission for both short term and long term (annual) for NOx and SO <sub>2</sub> .  NOx The highest short term process contribution was 1.79 µg/m <sup>3</sup> which is 2.38% of the (lower) short term critical level of 75 µg/m <sup>3</sup> . As the short term process contribution is less than 10% of the short term critical level the emissions screen out as insignificant.  The highest long term process contribution is 0.321 µg/m <sup>3</sup> which is 1.07 % of the long term critical level of 30 µg/m <sup>3</sup> . The predicted environmental concentration at this location (background of 15.6 µg/m <sup>3</sup> ) is 53.1% of the critical level and as such screens out. It should also be noted that the applicant had taken a conservative approach and the modelled long term impacts on the assumption that the unit is running 8760 hours per year but the unit is only to run less than 500 hours per year as a backup and as such the impacts predicted are far higher than what the unit would be running at. Therefore the impacts would screen out when alone and given the boiler only operates 500 hours per year (when the main boiler is down) it is unlikely to have any long term in-combination impacts with any other plan or project.

	transitional saltmarsh at the Dumbles (Appendix 8: Map 1) is maintained; (vi) aggregations of Bewick's swan at feeding, roosting and refuge sites are not subject to significant disturbance.	<p><b>Nutrient Enrichment</b> Screen out</p> <p><b>SO<sub>2</sub></b></p> <p>The highest process contribution was 0.161 µg/m<sup>3</sup> which is 1.61% of the critical level of SO<sub>2</sub> (10 µg/m<sup>3</sup>). The predicted environmental concentration (using the APIS background of 3.2 µg/m<sup>3</sup>) is 33.6% of the long term (annual) critical level. As such the emissions of SO<sub>2</sub> screen out as insignificant.</p> <p>As with NO<sub>x</sub>, the applicant had modelled on the assumption of the site running 8760 hour per year (when it will only run as a backup less than 500 hours per year). As such the impacts are would be far lower than what the applicant had shown in their modelling and the model (under a far higher impact scenario) showed the emissions screened out.</p> <p><b>Nutrient Enrichment</b> Air-Nitrogen deposition</p> <p>The feature can be affected from deposition from atmospheric NO<sub>x</sub> which could cause impact that could damage the feature (see conservation objective ix)</p> <p>The highest nitrogen deposition was 0.00757 kgN/Ha/Year which is less than 1% (0.076%) of the lower critical load of 10 kgN/Ha/Year and as such screen out as insignificant. Given the very low predicted process contribution under worst case scenario (operating for 8760 hours rather than the 500 hours permitted) and operating as a backup when the main</p> <p>Water-No change. The variation is to amend the permit to reflect the current activities on site. All process water is discharged to sewer under a trade effluent consent with</p>
--	---	---

		<p>existing parameters for phosphates. The process water is treated at Cardiff Waste water treatment works which is covered by its own permit. The variation would not lead to any change to the water discharge</p> <p><b>Acidification</b> <b>-Screen out</b></p> <p><b>Acidification</b> Acidification could occur as a result of nitrogen and sulphur deposition from air. APIS does not have any acidity for the SAC, although the SSSI features do have an acid critical load assessment. The applicants initial conservative modelled (8760 hours per year) and produced an acid deposition of initially did not screen out (1.69% of the lower acid critical level and predicted environmental concentration was 130% of the lower acid critical level). However the backup boiler is to run less than 500 hours per year (as limited in the permit) and the applicant had shown that under this situation (using a reduction factor of 0.0571) the process contribution would less than 0.1% of the long term lower acid critical level. As such the modelling showed that when assessed against the 500 hour maximum, the acid deposition from the emissions of NOx and SO<sub>2</sub> screens out as insignificant.</p> <p><b>Changes in Thermal Regime</b> <b>-Screen out</b> <b>Changes in thermal regime</b> <b>-Screen out</b></p> <p><b>Changes in Salinity Regime</b> and <b>Changes in Thermal Regime</b>- No direct discharge. All process emissions are discharge to sewer under trade effluent consent and treated at Cardiff STW.</p>
--	--	---

		<p><b>Habitat Loss</b> Screen out</p> <p><b>Physical Damage –</b> Screen out</p> <p><b>Turbidity and Siltation</b> Screen out</p> <p><b>Entrapment</b> Screen out</p> <p><b>Disturbance (Noise):</b> Screen out</p>	<p><b>Habitat Loss</b> No impact pathway-proposal would not result in habitat loss</p> <p><b>Physical Damage</b> No impact pathway- the proposal would not cause any physical damage to the associated habitat.</p> <p><b>Turbidity and Siltation</b> -No impact pathway.</p> <p>There are no changes to sewer discharge other than correcting some of the details (which All process water is discharge to sewer and treated at Cardiff STW (which has existing emission limits/controls)</p> <p><b>Entrapment-</b> No impact pathway, as the proposed changes to the permit would not cause entrapment.</p> <p><b>Disturbance-</b> The changes to the site are unlikely to add any addition sources of noise or change the existing noise from the site. As such the proposal is not likely to have any impact to the designated feature through this pathway.</p>
--	--	---	--

<p><b>SPA interest feature 2: European white-fronted goose</b>  3.6 Birds of lowland freshwaters and their margins  3.7 Birds of farmland  3.8 Birds of coastal habitats  3.9 Birds of estuarine habitats</p>	<ul style="list-style-type: none"> <li>i. the 5 year peak mean population size for the wintering European white fronted goose population is no less than 3,002 individuals (ie the 5 year peak mean between 1988/9-1992/3);</li> <li>ii. the extent of saltmarsh at the Dumbles is maintained</li> <li>iii. the extent of intertidal mudflats and sandflats at Frampton Sands, Waveridge Sands and the Noose is maintained;</li> <li>iv. greater than 25% cover of suitable soft-leaved herbs and grasses<sup>3</sup> is maintained during the winter on saltmarsh areas (Appendix 8: Map 1)</li> <li>v. unrestricted bird sightlines of &gt;200m at feeding and roosting sites are maintained</li> <li>vi. aggregations of European white-fronted goose at feeding or roosting sites are not subject to significant disturbance</li> </ul>	<p><b>Toxic Contamination</b> Screen out</p> <p><b>Nutrient Enrichment</b> Screen out</p> <p><b>Acidification</b> <b>-Screen out</b></p> <p><b>Habitat Loss</b> Screen out</p> <p><b>Physical Damage –</b> Screen out</p> <p><b>Turbidity and Siltation</b> Screen out</p> <p><b>Entrapment</b> Screen out</p> <p><b>Disturbance (Noise):</b> Screen out</p>	<p>See SPA feature 1</p>
<p><b>SPA interest feature 3: Dunlin</b></p>	<ul style="list-style-type: none"> <li>i. the 5 year peak mean population size for the wintering dunlin</li> </ul>	<p><b>Toxic Contamination</b> Screen out</p>	<p>See SPA feature 1</p>

<p>3.4 Birds of lowland wet grasslands</p> <p>3.7 Birds of farmland</p> <p>3.8 Birds of coastal habitats</p> <p>3.9 Birds of estuarine habitats</p>	<p>population is no less than 41,683 individuals (ie the 5 year peak mean between 1988/9 - 1992/3);</p> <p>ii. the extent of saltmarsh and associated strandlines is maintained;</p> <p>iii. the extent of intertidal mudflats and sandflats is maintained;</p> <p>iv. the extent of hard substrate habitats is maintained;</p> <p>v. the extent of vegetation with a sward height of</p> <p>vi. the abundance and macro-distribution of suitable invertebrates in intertidal mudflats and sandflats is maintained;</p> <p>vii. the abundance and macro-distribution of suitable invertebrates<sup>3</sup> in hard substrate habitats is maintained;</p> <p>viii. the extent of vegetation with a sward height of 200m at feeding and roosting sites are maintained;</p> <p>ix. aggregations of dunlin at feeding or roosting sites</p>	<p><b>Nutrient Enrichment</b> Screen out</p> <p><b>Acidification</b> <b>-Screen out</b></p> <p><b>Habitat Loss</b> Screen out</p> <p><b>Physical Damage –</b> Screen out</p> <p><b>Turbidity and Siltation</b> Screen out</p> <p><b>Entrapment</b> Screen out</p> <p><b>Disturbance (Noise):</b> Screen out</p>	
---	---	---	--

	are not subject to significant disturbance.		
<b>SPA interest feature 4: Redshank</b> 3.4 Birds of lowland wet grasslands 3.7 Birds of farmland 3.8 Birds of coastal habitats 3.9 Birds of estuarine habitats	i. the 5 year peak mean population size for the wintering redshank population is no less than 2,013 individuals (ie the 5 year peak mean between 1988/9 - 1992/3); ii. the extent of saltmarsh and associated strandlines is maintained; iii. the extent of intertidal mudflats and sandflats is maintained; iv. the extent of hard substrate habitats is maintained; v. The extent of vegetation with a sward height of <10cm throughout the saltmarsh is maintained; vi. the abundance and macro-distribution of suitable invertebrates <sup>3</sup> in intertidal mudflats and sandflats is maintained; vii. the abundance and macro-distribution of suitable invertebrates <sup>3</sup> in hard substrate habitats is maintained; viii. unrestricted bird sightlines of >200m at	<b>Toxic Contamination</b> Screen out  <b>Nutrient Enrichment</b> Screen out  <b>Acidification</b> -Screen out  <b>Habitat Loss</b> Screen out  <b>Physical Damage –</b> Screen out  <b>Turbidity and Siltation</b> Screen out  <b>Entrapment</b> Screen out  <b>Disturbance (Noise):</b> Screen out	See SPA feature 1



	ix. feeding and roosting sites are maintained; aggregations of redshank at feeding or roosting sites are not subject to significant disturbance.		
<b>SPA interest feature 5: Shelduck</b> 3.6 Birds of lowland freshwaters and their margins 3.8 Birds of coastal habitats 3.9 Birds of estuarine habitats	i. the 5 year peak mean population size for the wintering shelduck population is no less than 2,892 individuals (ie the 5 year peak mean between 1988/9 - 1992/3); ii. the extent of saltmarsh is maintained; iii. the extent of intertidal mudflats and sandflats is maintained; iv. the extent of hard substrate habitats is maintained; v. the abundance and macro-distribution of suitable invertebrates in intertidal mudflats and sandflats is maintained; vi. unrestricted bird sightlines of >200m at feeding and roosting sites are maintained; vii. aggregations of shelduck at feeding or roosting sites are not subject to significant disturbance.	<b>Toxic Contamination</b> Screen out  <b>Nutrient Enrichment</b> Screen out  <b>Acidification</b> Screen out  <b>Habitat Loss</b> Screen out  <b>Physical Damage –</b> Screen out  <b>Turbidity and Siltation</b> Screen out  <b>Entrapment</b> Screen out  <b>Disturbance (Noise):</b> Screen out	See SPA feature 1

<b>SPA interest feature 6: Gadwall</b> 3.6 Birds of lowland freshwaters and their margins	i. the 5 year peak mean population size for the wintering gadwall population is no less than 330 (ie the 5 year peak mean between 1988/9 - 1992/3); ii. the extent of intertidal mudflats and sandflats is maintained; iii. unrestricted bird sightlines of >200m at feeding and roosting sites are maintained; iv. aggregations of gadwall at feeding or roosting sites are not subject to significant disturbance	<b>Toxic Contamination</b> Screen out  <b>Nutrient Enrichment</b> Screen out  <b>Acidification</b> -Screen out  <b>Habitat Loss</b> Screen out  <b>Physical Damage –</b> Screen out  <b>Turbidity and Siltation</b> Screen out  <b>Entrapment</b> Screen out  <b>Disturbance (Noise):</b> Screen out	See SPA feature 1
<b>SPA interest feature 7: Internationally important assemblage &gt;20,000 waterfowl</b>	i. the 5 year peak mean population size for the waterfowl assemblage is no less than 68,026 individuals (ie the 5 year peak mean	<b>Toxic Contamination</b> Screen out	See SPA feature 1

<p>3.6 Birds of lowland freshwaters and their margins</p> <p>3.8 Birds of coastal habitats</p> <p>3.9 Birds of estuarine habitats</p>	<p>ii. between 1988/9 - 1992/3); the extent of saltmarsh and their associated strandlines is maintained;</p> <p>iii. the extent of intertidal mudflats and sandflats is maintained;</p> <p>iv. the extent of hard substrate habitats is maintained;</p> <p>v. extent of vegetation of &lt;10 cm throughout the saltmarsh is maintained;</p> <p>vi. the abundance and macroscale distribution of suitable invertebrates in intertidal mudflats and sandflats is maintained</p> <p>vii. the abundance and macroscale distribution of suitable invertebrates in hard substrate habitats is maintained;</p> <p>viii. greater than 25% cover of suitable soft leaved herbs and grasses during the</p>	<p><b>Nutrient Enrichment</b> Screen out</p> <p><b>Acidification -Screen out</b></p> <p><b>Habitat Loss</b> Screen out</p> <p><b>Physical Damage –</b> Screen out</p> <p><b>Turbidity and Siltation</b> Screen out</p> <p><b>Entrapment</b> Screen out</p> <p><b>Disturbance (Noise):</b> Screen out</p>	
---	--	--	--

	ix. winter on saltmarsh areas is maintained extent of vegetation of >500m at feeding and roosting sites are maintained; x. (x) waterfowl aggregations at feeding or roosting sites are not subject to significant disturbance		
<b>European site name: Ramsar (UK11081)</b>			
<b>Ramsar interest feature 1: Estuaries</b> 1.12 Estuarine & intertidal habitats	See SAC interest feature 1	See SAC interest feature 1 <b>Estuaries above</b>	See SAC interest feature 1 <b>Estuaries above</b>
<b>Ramsar interest feature 2: Assemblage of migratory fish species</b> 2.5 Anadromous fish	See SAC interest features 6, 7 & 8	See SAC interest features 6, 7 & 8	See SAC interest features 6, 7 & 8
<b>Ramsar interest feature 3: Bewick's Swan</b>	See SPA interest feature 1	See SPA interest feature 1	See SPA interest feature 1
<b>Ramsar interest feature 4: European white-fronted goose</b>	See SPA interest feature 2	See SPA interest feature 2	See SPA interest feature 2
<b>Ramsar interest feature 5: Dunlin</b>	See SPA interest feature 3	See SPA interest feature 3	See SPA interest feature 3
<b>Ramsar interest feature 6: Redshank</b>	See SPA interest feature 4	See SPA interest feature 4	See SPA interest feature 4

Ramsar interest feature 7: Shelduck	See SPA interest feature 5	See SPA interest feature 5	See SPA interest feature 5
Ramsar interest feature 8: Gadwall	See SPA interest feature 6	See SPA interest feature 6	See SPA interest feature 6
Ramsar interest feature 9: Internationally important populations of waterfowl	See SPA interest feature 7	See SPA interest feature 7	See SPA interest feature 7

TABLE 3.2.3 Screening decision of the plan or project 'alone'	
(a) If the screening conclusion for <u>all</u> features for all sites in Table 3.2.2 is 'SCREEN OUT'	The plan or project is not likely to have a significant effect on any European site, and no further consideration under the Habitats Regulations is required in order to determine the approval/application.
<del>(b) If the conclusion for <u>any</u> features in Table 3.2.2 is 'SCREEN IN'</del>	<del>The plan or project is likely to have a significant effect on one or more European sites and therefore an appropriate assessment is required.</del>
(c) If there are <u>no</u> features in Table 3.2.2 that are 'SCREEN IN' and <u>any</u> features that are 'IN COMB'	<del>The plan or project is not likely to have a significant effect on any European sites when considered alone, but the possibility of significant effects in combination with other plans and projects needs to be considered.</del>

## 6. Conclusion

HRA is not required because there is no conceivable impact on any European sites. (As documented in section 2.1)	
HRA is not required because the whole of the plan or project is directly connected with or necessary to the management of one or more European sites, for the purposes of conserving the habitats or species for which the site(s) is/are designated, <u>and</u> the plan or project is not likely to have a significant effect on any other European sites. (As documented in section 2.2 and 2.3)	
This project is a renewal of a current permission which complies with NRW agreed criteria for ruling out likely significant effects of a renewal without conducting a project-specific LSE test. Therefore, it is considered not likely to have a significant effect on any European sites, either alone or in-combination with other plans or projects. (As documented in section 3.1 of this form)	
The plan or project has been screened for likelihood of significant effects and is considered not likely to have a significant effect on any European sites. (As documented in section 3.2 of this form, and section 5 if applicable)	X
In light of the conclusions of an appropriate assessment it has been established that the plan or project will not adversely affect the integrity of any European sites, taking into account any conditions or restrictions as applicable, either alone or in-combination with other plans or projects. (As documented in section 4 of this form, and section 5 if applicable)	
In light of the conclusions of the appropriate assessment, it has <u>not</u> been ascertained that the plan or project will not adversely affect the integrity of any European sites, as documented in section 4 of this form, and section 5 if applicable. Approval for the plan or project <u>cannot</u> be given unless either: <ul style="list-style-type: none"> <li>the plan or project specification, and/or the terms under which it might be approved, are modified so as to remove the risk of adverse effects, and a revised HRA is prepared, or</li> <li>the plan or project (not being an SSSI consent*) satisfies the requirements for a derogation and a Derogation Notice is prepared and submitted for consideration by the appropriate authority, normally Welsh Ministers</li> </ul> (*SSSI consents cannot be given as derogations)	
Signed: W Wallace	

<b>Name: William Wallace</b>		<b>Position: Senior Officer Installation and RSR Permitting</b>	
<b>Date: 11/03/2025</b>			
<b>Was this HRA conclusion an escalated decision? NO</b>			<b>No</b>

**7. Consultation with the ANCB and how sections 2, 3, 4 and 5 of this HRA report (as applicable) take into account that advice.**

<b>Relevant section of the HRA report</b>	<b>Correspondence and/or meetings with the ANCB</b>	<b>Description of how the comments from the ANCB have been taken into account</b>
<b>2</b>		
<b>3</b>		
<b>4</b>		
<b>5</b>		



## 8. Countersignature

I have reviewed the HRA documented in this form and confirm that I agree\*/do not agree\* with the conclusion recorded in section 6. (\*delete as applicable)

Additional comments (if any):

Signed:

Name:

Position:

Date:

## 9. Appendix - Supporting information

- Air quality impact assessment: **PAN-025645 revised air quality modeling** title “AIR DISPERSION MODELLING REPORT OF RELEASES FROM A BOILER AT WELSH WATER ORGANIC ENERGY, TREMORFA, CARDIFF”
- Non technical summary - **AB3093CA\_Tremofa\_AD\_Facility\_Non\_Technical\_summary\_Normal\_Variation\_Feb 24**