Cyfoeth Naturiol Cymru
Natural Resources Wales

Form

Record of a Habitats Regulations Assessment of a project

OGN 200 Form 1

Document owner: Protected Sites Team, EPP

Version History:

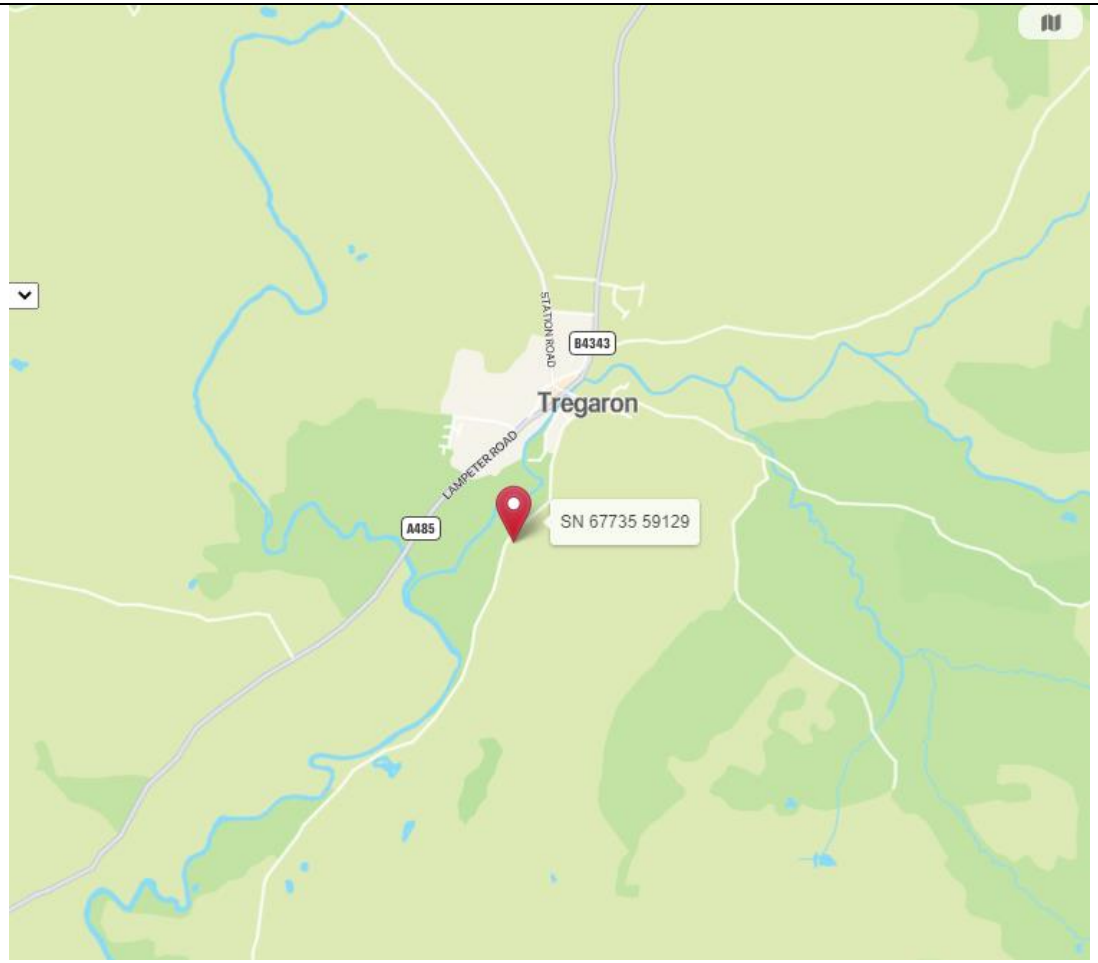
Document Version	Date Published	Summary of Changes
1.0	March 2016	Document created
1.1	30 November 2017	References to the 2010 Habitats Regulations updated to reflect new consolidated version of the regulations which entered into force on 30th November 2017; References to KSP and National Services Directorates updated to EPP
1.2	28 June 2018	With marked up changes in light of ruling in CJEU case c-323/17 'People over Wind'.
1.3	27 June 2019	With marked up changes in light of ruling in CJEU case c-323/17 'People over Wind'. See Guidance here

Next review date: April 2019

Record of a Habitats Regulations Assessment of a project

1. Project Details

1(a): Project details where an external party has applied to NRW for any form of authorisation	
Application reference number (if applicable)	PAN-017822
Date application received	***19 April 2022 – applicant revised proposal 17 August 2022.***
Applicant details	***GFI73 LTD***
Activity proposed	GFI73 LTD "the Operator" and "the Applicant" has applied for a bespoke Specified Generator permit. Under the permit they propose to operator: • 6x 2.5 MW thermal input compression ignition engines fuelled on low-sulphur diesel with Selective Catalytic Reduction (SCR) abatement fitted to each engine to reduce NOx emissions. The combustion plant will discharge combustion products to air via individual stacks on each engine. Pollutants of concern for habitats assessment from these type of combustion plant are oxides of nitrogen (NOx) and sulphur dioxide. Due to the use of SCR abatement emissions of ammonia may also occur due to 'ammonia slip'. The Applicant has assessed the impacts on habitats sites within 5 km (the relevant screening distance for this type of plant) using detailed air dispersion modelling from all 6 engines and a maximum annual operating period of 1500 hours per year (the Operator will be conditioned to this in the permit if issued). They have assessed long-term and short term airborne NOx impacts; long-term airborne sulphur dioxide and ammonia impacts and long-term nutrient nitrogen deposition and acid deposition impacts. For short-term airborne NOx impacts the Applicant has completed two modelling scenarios: one is the realistic operational scenario (5 hours operation per day) and the other is non-realistic operational scenario (24 hours operation per day). The second scenario is considered overly conservative and not realistic given the past operational history of the plant, so this assessment herein has included data from the realistic operational scenario. There are no other emissions to land or water from the regulated facility. As per the legislation these types of permit (standalone MCP/SG) only contain conditions for emissions to air and no other conditions apply (emissions to water, land, noise or odour, BAT).
Relevant legislation	**Environmental Permitting (England and Wales) Regulations 2016:** Schedule 25A – Medium Combustion Plant Directive Schedule 25B – Specified Generator Regulations
Location	Address: Tregaron Generation, Dewi Road, Tregaron, SY25 6JP Grid reference: SN 67735 59129

	
Application documents	PAN-017822 (sharepoint.com)
Environmental Statement	***N/A***
Pre-application correspondence	***N/A***
NRW team responsible for drafting this HRA	***Rebecca Williams*** ***Lead Specialist Permitting Officer, Installations & RSR permitting team***

report, and name of lead officer	

2. Determining the need for a Habitats Regulations Assessment

2.1 Is the whole of the project directly connected with or necessary to the management of one or more Natura 2000 sites, for the purposes of conserving the habitats or species for which the Natura 2000 site(s) is/are designated?	**NO**
2.2 Is there a possibility that the project could affect a different Natura 2000 site to the one(s) the project is intended to conserve?	**N/A**
2.3 Is it necessary to carry out an HRA?	**YES**

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

3.1 Renewal of a permission on the same or more restrictive terms as the extant permission

Is this project a renewal of a current permission which complies with NRW approved criteria for ruling out significant effects of renewals (see section 6.2A of OGN 200) without conducting a project-specific LSE test?	***NO***

3.2 Likelihood of significant effects (LSE) test

3.2.1 Which Natura 2000 sites might be affected by the proposal?	Based on the project specification or information provided in the application, it is considered that the following Natura 2000 sites have features which could be affected by the project: **SAC Afon Teifi / River Teifi UK0012670** **SAC & Ramsar Cors Caron UK0014790** The potential for the project to affect the following Natura 2000 sites was also initially considered, but can be ruled out without further consideration: ***N/A***

3.2.2 Screening assessment

	Assessment of likelihood of significant effect		
	I **Relevant conservation objectives**	**II** **Potential impact pathway**	**~~III~~** **~~Avoidance measure~~** *~~Briefly describe any measures~~ **~~included within the project at this point~~** ~~that will ensure that the potential effects are avoided, are not significant or are not likely to occur. If none, put 'N/A'~~ In light of the ruling of the CJEU in case C-323/17 'People over Wind', avoidance measures should not be considered at this stage of HRA, so this column is left blank.*

SAC Afon Teifi / River Teifi UK0012670			
1.3 Riverine habitats & running waters Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation	Core Management Plan Including Conservation Objectives for Afon Teifi / River Teifi SAC (Special Area of Conservation) Version 1.8 Date April 2008 Approved by: Tracey Lovering	**Toxic contamination** Due to emissions to air of oxides of nitrogen, sulphur dioxide and ammonia there is an impact pathway and cannot rule out significant effects therefore Appropriate Assessment completed below.	
2.6 Non-migratory fish and invertebrates of rivers Brook lamprey *Lampetra planeri*		**Nutrient enrichment** Due to emissions to air of oxides of nitrogen and ammonia there is an impact pathway and cannot rule out significant effects therefore Appropriate Assessment completed below.	
2.5 Anadromous fish River lamprey *Lampetra fluviatilis*		**Acidification** Due to emissions to air of oxides of nitrogen, sulphur dioxide and ammonia there is an impact pathway and cannot rule out significant effects therefore Appropriate Assessment completed below.	
2.5 Anadromous fish Atlantic salmon *Salmo salar*			
2.6 Non-migratory fish and invertebrates of rivers Bullhead *Cottus gobio*			
2.9 Mammals of riverine habitats European otter *Lutra*		**Smothering** See above for acidification and nutrient enrichment impacts.	
2.1 Vascular plants of aquatic habitats Floating water-plantain *Luronium natans*		**Changes in salinity regime** No impact pathway as there is no discharge into River Teifi.	
1.4 Standing waters (sensitive to acidification) Oligotrophic to No mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoeto-Nanojuncetea*		**Changes in thermal regime** No impact pathway as there is no discharge into River Teifi. **Habitat loss** No impact pathway as there is no destructive work occurring at the SAC as part of this proposal.	
2.5 Anadromous fish Sea lamprey *Petromyzon marinus*		**Physical damage**	

		No impact pathway as there is no physical work occurring at the SAC as part of this proposal. **Turbidity and siltation** No impact pathway as there is no discharge into River Teifi. **Entrapment** No impact pathway as there is no water abstraction activity. **Disturbance (noise)** No impact pathway as noise is not expected to be significant at the SAC for this activity.	
SAC Cors Caron UK0014790			
1.2 Bogs and wet habitats Active raised bog (EU habitat codes 7110)	Core Management Plan including Conservation Objectives for Cors Caron SAC, Ramsar and SSSI Version 5 Date 16 April 2008 Approved by: Tracey Lovering	**Toxic contamination** Due to emissions to air of oxides of nitrogen, sulphur dioxide and ammonia there is an impact pathway and cannot rule out significant effects therefore Appropriate Assessment completed below. **Nutrient enrichment** Due to emissions to air of oxides of nitrogen and ammonia there is an impact pathway and cannot rule out significant effects therefore Appropriate Assessment completed below. **Acidification** Due to emissions to air of oxides of nitrogen, sulphur dioxide and ammonia there is an impact pathway and cannot rule out significant effects therefore Appropriate Assessment completed below. **Smothering** See above for acidification and nutrient enrichment impacts.	
1.2 Bogs and wet habitats Degraded raised bog still capable of natural regeneration (EU habitat code 7120)			
1.2 Bogs and wet habitats Transition mires and quaking bogs (EU habitat code 7140)			
1.2 Bogs and wet habitats Depressions on peat substrates of the *Rhyncosporion* (EU habitat code 7140)			
2.9 Mammals of riverine habitats Otter (EU species code 1355)			

		Changes in salinity regime No impact pathway as there is no discharge into River Teifi. **Changes in thermal regime** No impact pathway as there is no discharge into River Teifi. **Habitat loss** No impact pathway as there is no destructive work occurring at the SAC as part of this proposal. **Physical damage** No impact pathway as there is no physical work occurring at the SAC as part of this proposal. **Turbidity and siltation** No impact pathway as there is no discharge into River Teifi. **Entrapment** No impact pathway as there is no water abstraction activity. **Disturbance (noise)** No impact pathway as noise is not expected to be significant at the SAC for this activity.	
Ramsar Cors Caron			
Populations of *Coenonympha tullia, Coenophila subrosea*, otter, water vole	Core Management Plan including Conservation Objectives for Cors Caron SAC, Ramsar and SSSI Version 5 Date 16 April 2008 Approved by: Tracey Lovering	See above. Assessment of SAC features considered representative of Ramsar features.	
1.2 Bogs and wet habitats Supports a rich vegetation assemblage and possesses a surface pattern			

characteristic of this mire habitat type			

3.2.3 Screening decision of the project 'alone'	
~~(a) If ALL rows in column II of Table 3.2.2 are GREEN~~	~~The project is not likely to have a significant effect on any Natura 2000 site, because there is no impact pathway from the project to any Natura 2000 features, and no further consideration under the Habitats Directive/Regulations is required in order to determine the application.~~
~~(b) If there are NO rows coloured RED in column II of Table 3.2.2, and there are ANY rows which are BLUE~~	~~The project is not likely to have a significant effect on any Natura 2000 sites when considered alone, but the possibility of significant effects in combination with other plans and projects needs to be considered.~~
(c) If ANY rows in Column II of Table 3.2.2 are RED	The project is likely have a significant effect on one or more Natura 2000 sites and therefore an appropriate assessment is required.

4. Appropriate assessment of the project when considered alone

4.1 Assessment of project as currently defined

Natura 2000 site feature (from Table 3.2.2 – RED rows only)	Impact pathway(s) (from Table 3.2.2)	Description of impacts	Assessment in view of conservation objectives	Can adverse effect on site integrity be ruled out?
SAC Afon Teifi UK UK0012670				
1.3 Riverine habitats & running waters Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation **2.6 Non-migratory fish and invertebrates of rivers** Brook lamprey *Lampetra planeri* **2.5 Anadromous fish** River lamprey *Lampetra fluviatilis* **2.5 Anadromous fish** Atlantic salmon *Salmo salar* **2.6 Non-migratory fish and**	**Toxic contamination** **Nutrient enrichment** **Acidification** **Smothering**	**Toxic contamination** There are emissions to air of NOx, SO_2 and ammonia. Each pollutant will be assessed in turn below. Oxides of nitrogen (NOx) A long-term critical level of 30 µg/m^3 NOx (annual) has been applied. The maximum long-term process contribution (PC) is 3.29 µg/m^3 and >1 % (10.96 %) of the long-term critical level. The maximum long-term predicted environmental concentration (PEC) is 7.7 µg/m^3 and <70 % (25.6 %) of the long-term critical level. In line with current guidance long-term airborne NOx emissions are considered insignificant. A short-term critical level of 200 µg/m^3 NOx (daily mean) has been applied in line with current guidance here where ozone and sulphur dioxide is low: Air emissions risk assessment for your environmental permit - GOV.UK (www.gov.uk). The maximum short-term PC is 36.3 µg/m^3 and >10 % (18.15 %) of the short-term critical level. The maximum predicted short-term PEC is	**Toxic contamination** Impacts from air emissions considered not significant. **Nutrient enrichment** SAC considered not sensitive to nitrogen deposition from NOx and NH_3 emissions as no critical loads have been applied. **Acidification** Considered not sensitive due to lack of any acid deposition critical load values. **Smothering** See above for nitrogen deposition and acidification impacts, considered not sensitive.	YES

invertebrates of rivers Bullhead *Cottus gobio* **2.9 Mammals of riverine habitats** European otter *Lutra* **2.1 Vascular plants of aquatic habitats** Floating water-plantain *Luronium natans* **1.4 Standing waters (sensitive to acidification)** Oligotrophic to No mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoeto-Nanojuncetea* **2.5 Anadromous fish** Sea lamprey *Petromyzon marinus*		45.2 µg/m^3 and 22.6 % of the short-term critical level. The emissions are not likely to cause an exceedance of the critical level and can be considered not significant. **Sulphur dioxide** A long-term critical level of 20 µg/m^3 SO_2 (annual) has been applied. The maximum long-term process contribution (PC) is 0.0052 µg/m^3 and <1 % (0.026 %) of the long term critical level. In line with current guidance long-term airborne SO_2 emissions are considered insignificant. **Ammonia** As per APIS there are not lichens or bryophytes present at the SAC therefore a long-term critical level of 3 µg/m^3 NH_3 (annual) has been applied. The maximum long-term process contribution (PC) is 0.016 µg/m^3 and <1 % (0.53 %) of the long term critical level. In line with current guidance long-term airborne NH_3 emissions are considered insignificant. **Nutrient enrichment** We have concluded following a thorough assessment of APIS and advice from JNCC that no critical loads should be applied to the River Teifi SAC. See separate briefing note for further information and decision making evidence. **Acidification** Site specific advice has been sought regarding the acid deposition critical loads to be used as there are none		

		present on APIS. None have been provided therefore the applicant is unable to complete this assessment. **Smothering** See above for acidification and nitrogen deposition assessment. Considered not relevant.		
SAC UK0014790 & Ramsar Cors Caron				
1.2 Bogs and wet habitats Active raised bog (EU habitat codes 7110) **1.2 Bogs and wet habitats** Degraded raised bog still capable of natural regeneration (EU habitat code 7120) **1.2 Bogs and wet habitats** Transition mires and quaking bogs (EU habitat code 7140) **1.2 Bogs and wet habitats** Depressions on peat substrates of the *Rhyncosporion* (EU habitat code 7140) **2.9 Mammals of riverine habitats** Otter (EU species code 1355)	**Toxic contamination** **Nutrient enrichment** **Acidification** **Smothering**	**Toxic contamination** There are emissions to air of NOx, SO_2 and ammonia. Each pollutant will be assessed in turn below. **Oxides of nitrogen (NOx)** A long-term critical level of 30 µg/m^3 NOx (annual) has been applied. The maximum long-term process contribution (PC) is 0.14 µg/m^3 and 0.46 % (<1 %) of the long-term critical level. In line with current guidance long-term airborne NOx emissions are considered insignificant. A short-term critical level of 200 µg/m^3 NOx (daily mean) has been applied in line with current guidance here where ozone and sulphur dioxide is low: Air emissions risk assessment for your environmental permit - GOV.UK (www.gov.uk). The maximum short-term PC is 1.3 µg/m^3 and <10 % (0.65 %) of the short-term critical level. In line with current guidance short-term airborne NOx emissions are considered insignificant. **Sulphur dioxide** A long-term critical level of 10 µg/m^3 SO_2 (annual) has been applied. The	**Toxic contamination** Impacts from air emissions considered insignificant. **Nutrient enrichment** Considered insignificant as PC <1 % of the critical load. **Acidification** Considered not significant as no exceedance of critical load function. **Smothering** See above for nitrogen deposition and acidification impacts, considered not significant.	YES

Populations of *Coenonympha tullia, Coenophila subrosea*, otter, water vole **1.2 Bogs and wet habitats** Supports a rich vegetation assemblage and possesses a surface pattern characteristic of this mire habitat type		maximum long-term process contribution (PC) is 0.0002 µg/m^3 and <1 % (0.002 %) of the long-term critical level. In line with current guidance long-term airborne SO_2 emissions are considered insignificant. **Ammonia** As per APIS there are lichens and bryophytes present at the SAC therefore a long-term critical level of 1 µg/m^3 NH_3 (annual) has been applied. The maximum long-term process contribution (PC) is 0.001 µg/m^3 and <1 % (0.1 %) of the long-term critical level. In line with current guidance long-term airborne NH_3 emissions are considered insignificant. **Nutrient enrichment** A minimum nutrient nitrogen critical load value of 3 kgN/ha/yr has been applied as per APIS. The maximum nitrogen deposition process contribution is 0.02 kgN/ha/yr and is <1 % (0.6 %) of the minimum critical load value. In line with current guidance nitrogen deposition impacts are considered insignificant. **Acidification** The following acid deposition critical load values have been applied as per APIS: 0.321 keq/ha/yr MinN; 0.768 keq/ha/yr MaxN; 0.447 keq/ha/yr MaxS. The maximum PC (from N and S) is 0.00123 keq/ha/yr and <1 % of the critical load function therefore the impacts from acid deposition can be considered not significant. **Smothering**		

		See above for assessment of nitrogen deposition and acid deposition, considered not significant.		

4.3 Concluding the appropriate assessment of the project alone

(a) If the right hand column of Table 4.1 and Table 4.2 (if applicable) is 'YES' for all features	It has been ascertained that the proposal, when considered alone, will not adversely affect the integrity of any Natura 2000 sites.
~~**(b) If there are any 'NO's in the right hand column of Table 4.1 that have not been resolved to 'YES' through mitigation measures identified in Table 4.2**~~	~~It has not been ascertained that the proposal, when considered alone, will not adversely affect the integrity of one or more Natura 2000 sites.~~
(c) Are there any residual effects of the project (net of any mitigation measures identified) which, though insignificant on their own, could be significant if considered in combination with the effects of other plans or projects?	**YES**

5 In combination assessment

5.1 Identifying possible in combination effects

BLUE impact pathway from Table 3.2 **and/or** **Residual effect (from appropriate assessment in section 4)**	**Natura 2000 site feature(s) concerned**	**Other plans/projects with effects that might interact with the effects of the project to render its effects significant (if any)**	**Nature of the in-combination effect (if any)**	**Is there likely to be any significant in-combination effect, in view of the site's conservation objectives?**
Toxic Contamination Nutrient enrichment Acidification Smothering	Afon Teifi / River Teifi SAC	5 km screening completed from closest point of SAC to proposal including current applications and those issued since background date (01.01.2019). No relevant	None	NO

		permitting proposals have been found.		
Toxic Contamination Nutrient enrichment Acidification Smothering	Cors Caron SAC & Ramsar	5 km screening completed from closest point of SAC to proposal including current applications and those issued since background date (01.01.2019). No relevant permitting proposals have been found.	None	NO
(a) If the right hand column is 'NO' for all rows		The project, when considered in combination with other plans and projects, is either not likely to have a significant effect on, or will not adversely affect the integrity of any Natura 2000 site.		
~~**(b) If any rows in the right hand column are 'YES' or 'DON'T KNOW'**~~		~~The project is likely to have a significant effect in combination with other plans or projects.~~		

6. Conclusion

HRA is not required because the whole of the project is directly connected with or necessary to the management of one or more Natura 2000/Ramsar sites, for the purposes of conserving the habitats or species for which the site(s) is/are designated, <u>and</u> the project is not likely to have a significant effect on any other Natura 2000/Ramsar sites. (As documented in section 2.1 and 2.2 of this form	
HRA is not required because there is no conceivable impact pathway to any Natura 2000/Ramsar site (As documented in section 2.3 of this form)	
This project is a renewal of a current permission which complies with NRW agreed criteria for ruling out 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 Natura 2000/Ramsar sites, either alone or in-combination with other plans and projects. (As documented in section 3.1 of this form)	
The project has been screened for likelihood of significant effects and, taking account of the advice received from protected sites advisors, is considered not likely to have a significant effect on any Natura 2000/Ramsar site (As documented in section 3.2 of this form, or section 5 if applicable)	
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 Natura 2000/Ramsar site, taking into account any conditions or restrictions as applicable, either alone or in-combination with other plans and projects. (As documented in section 4 of this form, and section 5 if applicable)	**X**
In light of the conclusions of the appropriate assessment, it has <u>not</u> been ascertained that the project will not adversely affect the integrity of any Natura 2000/Ramsar site, as documented in section 4 of this form, and section 5 is applicable. Approval for the project <u>cannot</u> be given unless either:	

• **the 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 report is prepared, or** • **the project satisfies the requirements of Article 6(4) of the Habitats Directive, an Article 6(4) Statement of Case is prepared (OGN 200 Form 3) and submitted for consideration by the appropriate authority, normally Welsh Ministers**	
Signed: RA Williams **Name: Rebecca Williams** **Position: Lead Specialist Permitting Officer** **Date: 28 September 2022**	

7. Consultation with protected sites advisor(s) and how sections 2, 3, 4 and 5 of this HRA report (as applicable) take into account that advice.

Relevant section of the HRA report	Date(s) of correspondence* and any meeting(s) with protected sites advisor(s)	Description of how the comments from protected sites advisors have been taken into account
4	Multiple meetings and correspondence	Review of APIS and advice from JNCC considers no critical load should be applied for this particular section of the River Teifi subject to the assessment.

8. Conservation Technical Specialist's comments

I have reviewed the HRA documented in this form and confirm that I agree/do not agree* with its findings.

See OGN Form 2