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

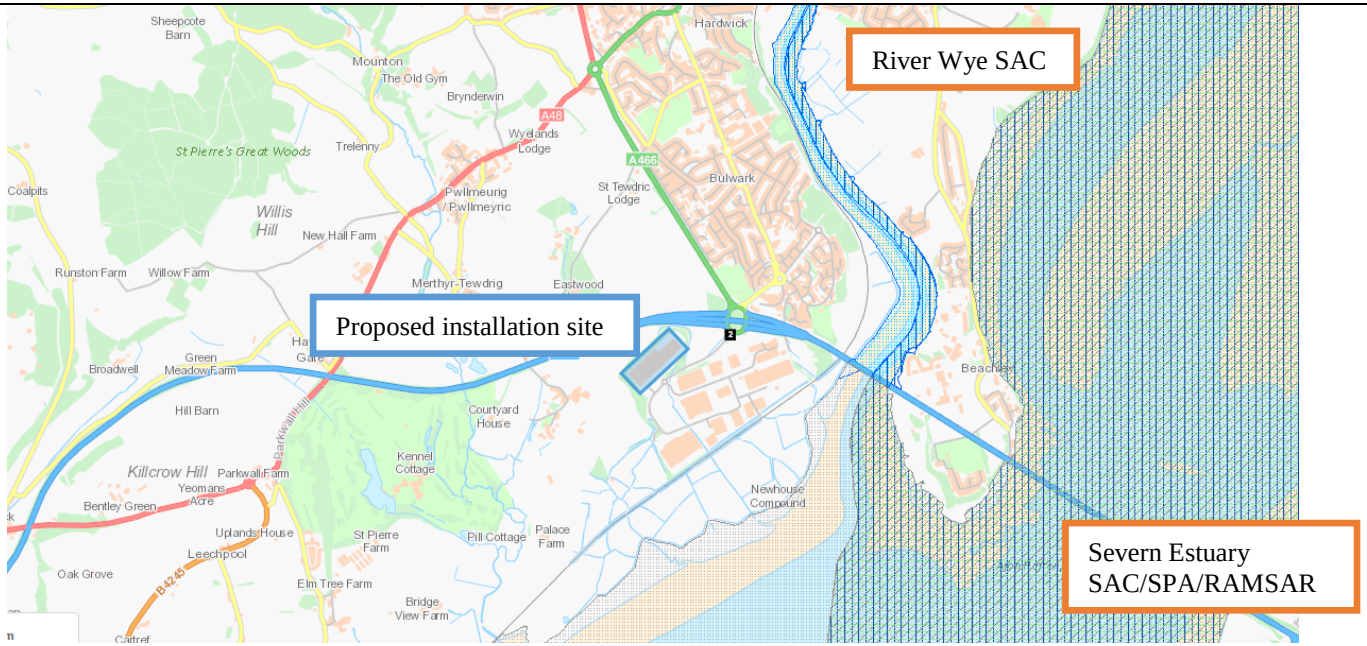
Next review date: April 2019

Record of a Habitats Regulations Assessment of a project

1. Project Details This form will also be sent to Natural England for consultation

1(a): Project details where an external party has applied to NRW for any form of authorisation	
Application reference number (if applicable)	PAN-007607
Date application received	***23/10/2019***
Applicant details	***ALUK (GB) Limited***
Activity proposed	ALUK (GB) Limited in Chepstow manufacture a variety of Aluminium systems including window and door products. During the first stage of the process the aluminium profiles are loaded onto a conveyor belt where they hang vertically. The sections are first pre-treated in a pre-treatment tunnel in which they are rinsed from top to bottom with a cascade system, they are rinsed with an alkaline treatment then an acid rinse. The profiles can then either undergo a flash anodising process prior to drying or dried straight away with no anodising. Anodising involves dipping the aluminium sheets in large baths of sulphuric acid in order to prevent their corrosion. The sheets are then dried in a drying oven and then undergo powder coating, then cured in a curing oven and offloaded from the conveyor and packaged ready for dispatch. There are 2-point source emissions to air via stacks with scrubber abatement systems fitted; one for the pre-treatment process and the other for anodising process. The pollutants emitted are sulphuric acid mist, hydrogen fluoride, nitrogen oxides, sulphur dioxide, volatile organic compounds and particulate matter. The applicant has submitted detailed air dispersion modelling for all these pollutants, regardless of whether they screened out in the H1 tool assessment. The modelling is overly conservative as has been completed at maximum 8760 hours per year whereas in reality the plant runs for approximately 3472 hours per year. There are three modelling scenarios, one at BAT-AELs (best available techniques associated emissions levels), one at proposed ELVs (emission limit values) which are lower than BAT-AELs but higher than actual emissions (to allow for process variation) and one at actual emissions following an emissions monitoring survey. As the process can achieve much lower emissions than the BAT-AEL levels it is expected that any ELVs set in the permit will be between the ‘actual’ and ‘proposed ELV’ values which will achieve considerate environmental protection whilst being representative of operations. This Form 1 HRA has been completed using the data obtained from all the modelling scenarios.

	There is one discharge to foul sewer via their on-site effluent treatment plant (ETP). They have a discharge consent from Welsh Water in place for this discharge. All process rinse water and surface water drainage from process areas is directed through the ETP process in a separate drainage system to the uncontaminated surface water drainage system. Water quality monitoring is undertaken periodically by Dŵr Cymru and ALUK, water quality monitoring and ELVs on relevant parameters will be replicated in any permit issued by NRW. There are two balancing lagoons which collect clean uncontaminated surface water from their surface water drainage system water prior to discharge into the nearby Rhyne, (ditch) which travels to the Severn Estuary. The operator has detailed a number of measures in place to meet the requirements set out in Guidance for Pollution Prevention (GPP) including multiple class 1 oil separators and maintenance CCTV drainage surveys. Apart from uncontaminated surface water there are no other discharges to ground or surface water.
Relevant legislation	***Industrial Emissions Directive*** ***Environmental Permitting Regulations 2016:*** ***Schedule 1, Part 2, Chapter 2, Section 2.3: Surface treating of metals and plastics – Part A(1)(a) Unless falling within Part A(2) of this Section, surface treating metals and plastic materials using an electrolytic or chemical process where the aggregated volume of the treatment vats is more than 30 m^3.*** ***Schedule 1, Part 2, Chapter 5, Section 5.4: Disposal, recovery or a mix of disposal and recovery of non-hazardous waste – Part A(1)(a) Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving one or more of the following activities; (ii) physico-chemical treatment*** ***Schedule 1, Part 2, Chapter 6, Section 6.4: Coating activities, printing and textile treatments – Part B (i) …likely to involve the use in any 12-month period of 20 or more tonnes of printing ink, paint or other coating material which is applied in solid form*** ***The Solvent Emissions Directive does not apply to any of the activities.***
Location	***ALUK (GB) Limited, Newhouse Farm Industrial Estate, Chepstow, NP16 6UD*** ***NGR: ST52979 91272***

	 The proposed installation is located approximately: 1 km from Severn Estuary SAC/SPA/RAMSAR 1.3 km from River Wye SAC 2.9 km from Wye Valley Woodland SAC 5.3 km from Wye Valley and Forest of Dean Bat Sites SAC (to closest Welsh site)
Application documents	DMS (internal NRW use) public register (external use)
Environmental Statement	***N/A***
Pre-application correspondence	***N/A***
NRW team responsible for drafting this HRA report, and name of	***Rebecca Williams, Permitting Officer Installations & RSR***

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: ***Severn Estuary*** ***SAC UK0013030*** ***SPA UK9015022*** ***RAMSAR UK11081*** ***River Wye*** ***SAC UK0012642*** ***Wye Valley Woodland*** ***SAC UK0012727*** ***Wye Valley and Forest of Dean Bat Sites*** ***SAC UK0014794*** 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

There is no impact pathway from the proposal to the designated feature
There is an impact pathway in principle, but significant effects from the proposal when considered alone can be ruled out
There is an impact pathway and significant effects cannot be ruled out

	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.* **Severn Estuary SAC UK0013030**	
SAC interest feature 1: Estuaries *1.12: Estuarine & Intertidal habitats*	All conservation objectives are contained within the following document: The Severn Estuary European Marine Site comprising: The Severn Estuary SAC, The Severn Estuary SPA, The Severn Estuary Ramsar site Natural England & the Countryside Council for Wales' advice given under Regulation 33(2)(a) of the Conservation (Natural Habitats, &c.) Regulations 1994, as amended. June 2009 *'Severn Estuary SAC, SPA and Ramsar site: Regulation 33 Advice from CCW and Natural England, June*	The applicant has submitted air dispersion modelling for all pollutants: NOx, SO_2, HF, VOCs, H_2SO_4 mist and particulate matter. Ecological assessment has included NOx, SO_2 and HF as there are no Environmental Standards for the other pollutants, therefore assessment is not required. Emission of H_2SO_4 mist has been included in acid deposition modelling. The modelling is overly conservative as has been completed for 365 days per year, 24 hours per day operation (8760 hours), in reality the plant operates for approximately 3500 hours, therefore over half of what has been modelled. There has been three scenarios modelled and all three have been included in this assessment: (i) Emissions at BAT-AELs (ii) Emissions at proposed ELVs (lower	

	2009'	than the BAT-AELs) (iii) Emissions at actual Toxic Contamination **NOx:** (i) Emissions at BAT-AELs: A long-term critical level of 30 µg/m^3 NOx (annual) and short-term critical level of 75 µg/m^3 NOx (hourly) has been assumed for the SAC Severn Estuary. The maximum process contribution (PC) is >1% and PEC is <70% of the long-term critical level therefore long-term impact from NOx emissions can be considered insignificant. The maximum PC is >10% (13.28%) of the short-term critical level, therefore the short-term impact from NOx emissions cannot be considered insignificant. The PEC is 43.44 % of the short-term critical level and <100 % therefore there is unlikely to be an exceedance of the critical level and the impact from short-term NOx emissions can be considered not significant. (ii) Emissions at proposed ELVs The maximum long-term process contribution (PC) is <1% of the long-term critical level therefore long-term impact from NOx emissions can be considered insignificant. The maximum short-term PC is <10% of the short-term critical level, therefore the short-term impact from NOx emissions can be considered insignificant. (iii) Emissions at actual: The maximum long-term process contribution (PC) is <1% of the long-term critical level therefore long-term impact from NOx emissions can be considered insignificant. The maximum short-term PC is <10% of the short-term critical level, therefore the short-term impact from NOx emissions can be considered insignificant.	

		SO_2: (i) Emissions at BAT-AELs: A long-term critical level of 10 µg/m^3 SO_2 (annual) has been assumed for the SAC Severn Estuary. The maximum process contribution (PC) is >1% and PEC is <70% of the long-term critical level therefore long-term impact from SO_2 emissions can be considered insignificant. (ii) Emissions at proposed ELVs The maximum long-term process contribution (PC) is <1% of the long-term critical level therefore long-term impact from SO_2 emissions can be considered insignificant. (iii) Emissions at actual: The maximum long-term process contribution (PC) is <1% of the long-term critical level therefore long-term impact from SO_2 emissions can be considered insignificant. **HF:** (i) Emissions at BAT-AELs: A long-term critical level of 0.5 µg/m^3 HF (weekly) and short-term critical level of 5 µg/m^3 HF (daily) has been assumed for the SAC Severn Estuary. The maximum process contribution (PC) is >1% and PEC is <70% of the long-term critical level therefore long-term impact from HF emissions can be considered insignificant. The maximum PC is <10% of the short-term critical level, therefore the short-term impact from HF emissions can be considered insignificant.	

		(ii) Emissions at proposed ELVs The maximum long-term process contribution (PC) is >1% and PEC is <70% of the long-term critical level therefore long-term impact from HF emissions can be considered insignificant. The maximum short-term PC is <10% of the short-term critical level, therefore the short-term impact from HF emissions can be considered insignificant. (iii) Emissions at actual: The maximum long-term process contribution (PC) is <1% of the long-term critical level therefore long-term impact from HF emissions can be considered insignificant. The maximum short-term PC is <10% of the short-term critical level, therefore the short-term impact from HF emissions can be considered insignificant. Nutrient Enrichment Smothering (i) Emissions at BAT-AELs: The minimum nutrient nitrogen critical load value of 15 kgN/ha/yr (fen, marsh & swamp) has been assumed for SAC Severn Estuary. The maximum nitrogen deposition process contribution is 0.119 kgN/ha/yr and is <1% of the lower critical load value. The SAC Severn Estuary is not sensitive to acidification therefore has not been assessed. (ii) Emissions at proposed ELVs The maximum nitrogen deposition process contribution is <1% of the lower critical load value. The SAC Severn Estuary is not sensitive to acidification therefore has not been assessed.	

		(iii) Emissions at actual: The maximum nitrogen deposition process contribution is <1% of the lower critical load value. The SAC Severn Estuary is not sensitive to acidification therefore has not been assessed. There is no environmental standard for particulate matter to assess smothering of this feature, however for the human health assessment long term and short-term impacts from particulate matter have screened out as insignificant at all sensitive human receptor locations for all modelling scenarios. Changes in Salinity Regime Changes in Thermal Regime No impact pathway as only uncontaminated surface water is discharged to nearby Rhyne. Habitat Loss Physical Damage No impact pathway as SAC is approximately 1 km away from installation site Turbidity Siltation No impact pathway as there is no direct discharge activities.	
SAC interest feature 2: Subtidal Sandbanks *1.13: Submerged marine habitats*		Toxic Contamination Nutrient Enrichment See above Changes in Salinity Regime Changes in Thermal Regime	

		Physical Damage Turbidity Siltation See above	
SAC interest feature 3: Intertidal mudflats and sandflats *1.12: Estuarine & Intertidal habitats*		Toxic Contamination Nutrient Enrichment Smothering See above	
SAC interest feature 4: Atlantic salt meadow *1.12: Estuarine & Intertidal habitats*		Changes in Salinity Regime Changes in Thermal Regime Habitat Loss Physical Damage Turbidity Siltation See above	
SAC interest feature 5: Reefs *1.12: Estuarine & Intertidal habitats* *1.13 Submerged marine habitats*			
SAC interest feature 6: River lamprey *2.5 Anadramous fish*		Toxic Contamination Nutrient Enrichment See above Acidification There are no acid deposition critical load values on APIS to allow for assessment, please advise on site specific basis Changes in Salinity Regime Changes in thermal regime Habitat Loss Physical Damage Turbidity Siltation See above Entrapment No impact pathway as there is no water abstraction activities	
SAC interest feature 7: Sea lamprey *2.5 Anadramous fish*			
SAC interest feature 8: Twaite shad *2.5 Anadramous fish*			

Severn Estuary SPA UK9015022			
SPA interest feature 1: Bewick's Swan *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*	All conservation objectives are contained within the following document: The Severn Estuary European Marine Site comprising: The Severn Estuary SAC, The Severn Estuary SPA, The Severn Estuary Ramsar site Natural England & the Countryside Council for Wales' advice given under Regulation 33(2)(a) of the Conservation (Natural Habitats, &c.) Regulations 1994, as amended. June 2009 *'Severn Estuary SAC, SPA and Ramsar site: Regulation 33 Advice from CCW and Natural England, June 2009'*	Toxic Contamination Nutrient Enrichment Acidification Smothering See above Changes in salinity regime Changes in thermal regime Turbidity Siltation Habitat Loss Physical Damage Entrapment See above Disturbance (Noise) No impact pathway as SAC is approximately 1 km away from the installation site in addition noise is not considered a significant issue for this installation.	
SPA interest feature 2: European white-fronted goose *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*			
SPA interest feature 3: Dunlin *3.4 Birds of lowland wet grasslands* *3.7 Birds of farmland* *3.8 Birds of coastal habitats* *3.9 Birds of estuarine habitats*			
SPA interest feature 4: Redshank *3.4 Birds of lowland wet grasslands* *3.7 Birds of farmland* *3.8 Birds of coastal habitats* *3.9 Birds of estuarine habitats*			
SPA interest feature 5: Shelduck *3.6 Birds of lowland freshwaters and their*			

margins *3.8 Birds of coastal habitats* *3.9 Birds of estuarine habitats*			
SPA interest feature 6: Gadwall *3.6 Birds of lowland freshwaters and their margins*			
SPA interest feature 7: Internationally important assemblage >20,000 waterfowl *3.6 Birds of lowland freshwaters and their margins* *3.8 Birds of coastal habitats* *3.9 Birds of estuarine habitats*			
Severn Estuary RAMSAR UK11081			
Ramsar interest feature 1: Estuaries *1.12 Estuarine & intertidal habitats*	All conservation objectives are contained within the following document: The Severn Estuary European Marine Site comprising: The Severn Estuary SAC, The Severn Estuary SPA, The Severn Estuary Ramsar site Natural England & the Countryside Council for Wales' advice given under Regulation 33(2)(a) of the Conservation (Natural Habitats, &c.) Regulations 1994, as amended. June 2009 *'Severn Estuary SAC, SPA and Ramsar site: Regulation 33 Advice from CCW and Natural England, June 2009'*	See SAC interest feature 1	
Ramsar interest feature 2: Assemblage of migratory fish species *2.5 Anadramous fish*		See SAC interest features 6,7 & 8	
Ramsar interest feature 3: Bewick's Swan		See SPA interest feature 1	
Ramsar interest feature 4: European white-fronted goose		See SPA interest feature 2	
Ramsar interest feature 5: Dunlin		See SPA interest feature 3	
Ramsar interest feature 6: Redshank		See SPA interest feature 4	
Ramsar interest feature 7: Shelduck		See SPA interest feature 5	
Ramsar interest feature 8:		See SPA interest feature 6	

Gadwall			
Ramsar interest feature 9: Internationally important populations of waterfowl		See SPA interest feature 7	
River Wye SAC UK0012642			

SAC designated feature 1: Sea lamprey *2.5 Anadromous fish*	*All conservation objectives are contained within the following document:* *Core Management Plan Including Conservation Objectives for River Wye / Afon Gwy SAC Version 2 September 2017 Gillian Barter*	Toxic Contamination **NOx:** (i) Emissions at BAT-AELs: A long-term critical level of 30 µg/m^3 NOx (annual) and short-term critical level of 75 µg/m^3 NOx (hourly) has been assumed for the SAC River Wye. The maximum process contribution (PC) is >1% and PEC is <70% of the long-term critical level therefore long-term impact from NOx emissions can be considered insignificant. The maximum PC is >10% (11.15%) of the short-term critical level, therefore the short-term impact from NOx emissions cannot be considered insignificant. The PEC is 46.15 % of the short-term critical level and <100 % therefore there is unlikely to be an exceedance of the critical level and the impact from short-term NOx emissions can be considered not significant. (ii) Emissions at proposed ELVs: The maximum long-term process contribution (PC) is <1% of the long-term critical level therefore long-term impact from NOx emissions can be considered insignificant. The maximum short-term PC is <10% of the short-term critical level, therefore the short-term impact from NOx emissions can be considered insignificant. (iii) Emissions at actual: The maximum long-term process contribution (PC) is <1% of the long-term critical level therefore long-term impact from NOx emissions can be considered insignificant. The maximum short-term PC is <10% of the short-term critical level, therefore the short-term impact from NOx emissions can be considered insignificant.	
SAC designated feature 2: Brook lamprey *2.5 Anadromous fish*			
SAC designated feature 3: River lamprey *2.5 Anadromous fish*			
SAC designated feature 4: Twaite shad *2.5 Anadromous fish*			
SAC designated feature 5: Atlantic Salmon *2.5 Anadromous fish*			

		SO_2: (i) Emissions at BAT-AELs: A long-term critical level of 10 µg/m^3 SO_2 (annual) has been assumed for the SAC River Wye. The maximum process contribution (PC) is >1% and PEC is <70% of the long-term critical level therefore long-term impact from SO_2 emissions can be considered insignificant. (ii) Emissions at proposed ELVs: The maximum process contribution (PC) is <1% of the long-term critical level therefore long-term impact from SO_2 emissions can be considered insignificant. (iii) Emissions at actual: The maximum process contribution (PC) is <1% of the long-term critical level therefore long-term impact from SO_2 emissions can be considered insignificant. **HF:** (i) Emissions at BAT-AELs: A long-term critical level of 0.5 µg/m^3 HF (weekly) and short-term critical level of 5 µg/m^3 HF (daily) has been assumed for the SAC River Wye. The maximum process contribution (PC) is >1% and PEC is <70% of the long-term critical level therefore long-term impact from HF emissions can be considered insignificant. The maximum PC is <10% of the short-term critical level, therefore the short-term impact from HF emissions can be considered insignificant. (ii) Emissions at proposed ELVs: The maximum long-term process contribution (PC) is >1% and PEC is <70 % of the long-term critical level therefore long-term impact from HF emissions can be considered insignificant. The maximum short-term PC is <10% of the short-term critical level, therefore the short-term impact	

		from HF emissions can be considered insignificant. (iii) Emissions at actual: The maximum long-term process contribution (PC) is <1% of the long-term critical level therefore long-term impact from HF emissions can be considered insignificant. The maximum short-term PC is <10% of the short-term critical level, therefore the short-term impact from HF emissions can be considered insignificant. Nutrient Enrichment Acidification There are no critical load values for either nutrient nitrogen deposition or acid deposition for any of these features on APIS, therefore they have not been assessed. Please advise on a site-specific basis. Changes in Salinity Regime Changes in thermal regime No impact pathway as only uncontaminated surface water is discharged to nearby Rhyne. Habitat Loss Physical Damage No impact pathway as SAC is over 1 km away from the installation site Turbidity Siltation No impact pathway as there is no direct discharge activities. Entrapment No impact pathway as there is no water abstraction activities	

SAC designated feature 6: Bullhead *2.6 Non-migratory fish & invertebrates of rivers*		Toxic Contamination Nutrient Enrichment Acidification See above Smothering There are no critical load values for either nutrient nitrogen deposition or acid deposition for any of these features on APIS, therefore they have not been assessed. Please advise on a site-specific basis. There is no environmental standard for particulate matter to assess this feature, however for the human health assessment long term and short-term impacts from particulate matter have screened out as insignificant at all sensitive human receptor locations for all modelling scenarios. Changes in Salinity Regime Changes in thermal regime Habitat Loss Physical Damage Turbidity Siltation Entrapment See above	
SAC designated feature 7: European otter *2.9 Mammals of riverine habitats*		Toxic Contamination Nutrient Enrichment Acidification See above Changes in Salinity Regime Changes in thermal regime See above Habitat Loss Physical Damage	

		See above Entrapment See above Disturbance (Noise) No impact pathway as SAC is approximately 1 km away from the installation site in addition noise is not considered a significant issue for this installation.	
SAC designated feature 8: Water course of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation *1.3 Riverine habitats & running waters***		***Please confirm if this class is correct*** Toxic Contamination Nutrient Enrichment Acidification Changes in Salinity Regime Changes in thermal regime Habitat Loss Physical Damage Turbidity Siltation ***See above for all***	
SAC designated feature 9: White-clawed crayfish *2.6 Non-migratory fish & invertebrates of rivers*		Toxic Contamination Nutrient Enrichment Acidification Changes in Salinity Regime Changes in thermal regime Habitat Loss Physical Damage Smothering Turbidity Siltation Entrapment ***See above for all***	
SAC designated feature 10: Allis shad		Toxic Contamination Nutrient Enrichment	

2.5 Anadromous fish		Acidification Changes in Salinity Regime Changes in thermal regime Habitat Loss Physical Damage Turbidity Siltation Entrapment ***See above for all***	
SAC designated feature 11: Quaking bogs and transition mires *1.2 Bogs & wet habitats*		This designated feature is not relevant as it is not present in this area of the SAC. Please see correspondence for further information and confirmation from conservation specialists.	
Wye Valley Woodland SAC UK0012727			
SAC Feature 1: Tilio-Acerion forests of slopes, screes and ravines *1.6 Dry Woodlands & scrub*	*Core Management Plan (Including Conservation Objectives) for Wye Valley Woodlands/Coetiroedd Dyffryn Gwy SAC 14 April 2008 David Mitchell*	Toxic Contamination **Emissions at BAT-AELs, proposed ELVs and actual:** **NOx:** A long-term critical level of 30 µg/m^3 NOx (annual) and short-term critical level of 75 µg/m^3 NOx (hourly) has been assumed for the SAC Wye Valley Woodland. The maximum process contribution (PC) is <1% of the long-term critical level therefore long-term impact from NOx emissions can be considered insignificant. The maximum PC is <10% of the short-term critical level, therefore the short-term impact from NOx emissions can be considered insignificant. **SO_2:** A long-term critical level of 10 µg/m^3 SO_2 (annual) has been assumed for the SAC Wye Valley Woodland. The maximum process contribution (PC) is <1% of the long-term critical level therefore long-term impact from SO_2 emissions can be considered insignificant.	
SAC feature 2: Asperulo-Fagetum beech forests *1.6 Dry Woodlands & scrub*			
SAC feature 3: Taxus baccata woods of the British Isles *1.6 Dry Woodlands & scrub*			

		HF: A long-term critical level of 0.5 µg/m^3 HF (weekly) and short-term critical level of 5 µg/m^3 HF (daily) has been assumed for the SAC Wye Valley Woodland. The maximum process contribution (PC) is <1% of the long-term critical level therefore long-term impact from HF emissions can be considered insignificant. The maximum PC is <10% of the short-term critical level, therefore the short-term impact from HF emissions can be considered insignificant. Nutrient Enrichment Acidification Smothering **Emissions at BAT-AELs, proposed ELVs and actual:** The minimum nutrient nitrogen critical load value of 5 kgN/ha/yr (Taxus Baccata Woods of the British Isles) has been assumed for SAC Wye Valley Woodlands. The maximum nitrogen deposition process contribution is <1% of the lower critical load value. Therefore, the nutrient nitrogen deposition impacts can be considered insignificant. The acid deposition critical load values of 0.142 kEq/ha/yr (Min N), 1.226 kEq/ha/yr (Max N) and 1.084 kEq/ha/yr (Max S) have been assumed for SAC Wye Valley Woodlands. The maximum total acid deposition process contribution is <1% of the critical load function. Therefore, acid deposition impacts can be considered insignificant. There is no environmental standard for particulate matter to assess this feature, however for the human health assessment long term and short-term impacts from particulate matter have screened out as insignificant at all sensitive human receptor	

		locations for all modelling scenarios. Habitat Loss Physical Damage No impact pathway as SAC is approximately 2.9 km from installation site	
SAC feature 4: Lesser horseshoe bat Rhinolophus hipposideros *2.8 Mammals of wooded habitats*		Toxic Contamination Nutrient Enrichment Acidification Smothering See above Habitat Loss Physical Damage See above Disturbance (Noise) No impact pathway as SAC is approximately 2.9 km away from the installation site in addition noise is not considered a significant issue for this installation.	
Feature 5: Non-SAC semi natural broadleaved woodland (this is a SSSI feature)		***This will not be assessed as it is not a SAC feature***	
Wye Valley and Forest of Dean Bat Sites SAC UK0014794			
SAC Feature 1: Greater Horseshoe bat Rhinoloplus ferrumequinum *2.8 Mammals of wooded habitats*	*Core Management Plant including conservation objectives for Safleoedd ystlumod dyffryn gwy a fforest y ddena/Wye Valley and Forest of Dean Bat SAC 22 January 2008 David Mitchell*	Toxic Contamination **Emissions at BAT-AELs, proposed ELVs and actual:** **NOx:** A long-term critical level of 30 µg/m^3 NOx (annual) and short-term critical level of 75 µg/m^3 NOx (hourly) has been assumed for the SAC Wye Valley and Forest of Dean Bat Sites. The maximum process contribution (PC) is <1% of the long-term	
SAC Feature 2: Lesser Horseshoe bat Rhinoloplus hipposideros			

2.8 Mammals of wooded habitats		critical level therefore long-term impact from NOx emissions can be considered insignificant. The maximum PC is <10% of the short-term critical level, therefore the short-term impact from NOx emissions can be considered insignificant. **SO_2:** A long-term critical level of 10 µg/m^3 SO_2 (annual) has been assumed for the SAC Wye Valley and Forest of Dean Bat Sites. The maximum process contribution (PC) is <1% of the long-term critical level therefore long-term impact from SO_2 emissions can be considered insignificant. **HF:** A long-term critical level of 0.5 µg/m^3 HF (weekly) and short-term critical level of 5 µg/m^3 HF (daily) has been assumed for the SAC Wye Valley and Forest of Dean Bat Sites. The maximum process contribution (PC) is <1% of the long-term critical level therefore long-term impact from HF emissions can be considered insignificant. The maximum PC is <10% of the short-term critical level, therefore the short-term impact from HF emissions can be considered insignificant. Nutrient Enrichment Acidification Smothering **Emissions at BAT-AELs, proposed ELVs and actual:** The minimum nutrient nitrogen critical load value of 10 kgN/ha/yr has been assumed for SAC Wye Valley and Forest of Dean Bat Sites. The maximum nitrogen deposition process contribution is <1% of the lower critical load value. Therefore, the nutrient nitrogen deposition impacts can be considered insignificant. The acid	

		deposition critical load values of 0.142 kEq/ha/yr (Min N), 1.123 kEq/ha/yr (Max N) and 0.838 kEq/ha/yr (Max S) have been assumed for SAC Wye Valley and Forest of Dean Bat Sites. The maximum total acid deposition process contribution is <1% of the critical load function. Therefore, acid deposition impacts can be considered insignificant. There is no environmental standard for particulate matter to assess this feature, however for the human health assessment long term and short-term impacts from particulate matter have screened out as insignificant at all sensitive human receptor locations for all modelling scenarios. Habitat Loss Physical Damage No impact pathway as SAC is approximately 5 km away from installation site Disturbance (Noise) No impact pathway as SAC is approximately 5 km away from the installation site in addition noise is not considered a significant issue for this installation.	

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	The project is not likely to have a significant effect on any Natura 2000 sites when considered alone, but the

RED in column II of Table 3.2.2, and there are ANY rows which are BLUE	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.~~

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	Severn Estuary SAC/SPA/RAMSAR	No projects in England have been assessed. There are 31 active permit application points within 10 km of the closest point of the Severn Estuary to the installation. None of the 31 active permit application points are industry or waste regulation therefore can be considered irrelevant.	None	NO
Toxic Contamination Nutrient Enrichment Acidification Smothering	River Wye SAC	No projects in England have been assessed. There are 31 active permit application points within 10 km of the closest point of the River Wye to the installation. None of the 31 active permit application points are relevant to this in-combination as either they	None	NO

		are active IPPC sites or are not industry or waste regulation permit applications therefore can be considered irrelevant.		
Toxic Contamination Nutrient Enrichment Acidification Smothering	Wye Valley Woodland SAC	No projects in England have been assessed. There are 35 active permit application points within 10 km of the closest point of the Wye Valley Woodland to the installation. None of the 35 active permit application points are relevant to this in-combination as either they are active IPPC sites or are not industry or waste regulation permit applications therefore can be considered irrelevant.	None	NO
Toxic Contamination Nutrient Enrichment Acidification Smothering	Wye Valley and Forest of Dean Bat Sites SAC	No projects in England have been assessed. There are 37 permit application points within 10 km of the closest Wye Valley and Forest of Dean Bat Site (Mynydd-bach) and 38 permit application points within 10 km of the other Wye Valley and Forest of Dean Bat Sites (Itton). None of the active permit application points are relevant to this in-combination as either they are active IPPC sites or are not industry or waste regulation permit applications therefore can be considered irrelevant.	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, and 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)	**X**
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)	
In light of the conclusions of the appropriate assessment, it has not 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: Rebecca Williams **Name: Rebecca Williams** **Position: Permitting Officer 2, Installations & RSR** **Date: 31/03/20**	

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
3.2.2	12/03/2020 E-mail correspondence between me, Khalid Aazem and Sam Bosenquet	The confirmation that Transition Mires and Quaking Bogs is not present within the Lower Wye part of the River Wye SAC therefore does not need to be assessed as part of this HRA.

8. Conservation Technical Specialist's comments

I have reviewed the HRA documented in this form and confirm that I agree with its findings.
(*strike out as applicable)

Additional comments (if any):

We agree with the conclusion.

Signed: E J Lawrie-Meddins

Name: Liz Lawrie-Meddins

Position: Conservation Officer

Date:25/4/2020