

Wylfa Newydd Project Site Preparation and Clearance

Environmental Statement Addendum-Volume 1



Additional Information May 2018

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1 Introduction

1.1 Background

- 1.1.1 A planning application made by Horizon in respect of the Site Preparation and Clearance Proposals (SPC Proposals) on land adjacent to the Existing Power Station at Wylfa Head, west of Cemaes, Anglesey was submitted in November 2017 to the Isle of Anglesey County Council (IACC).
- 1.1.2 Following the submission of the application, which included an Environmental Statement (ref.38C310F/EIA/ECON) a consultation process was undertaken by the IACC to garner the views of statutory and non-statutory consultees.
- 1.1.3 As a result of that process, the IACC issued a Regulation 22 Request (dated 9th February 2018 and included at Appendix 1 of the Regulation 22 Request – Statement of Response) for additional information in accordance with the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2016, to enable the planning authority to request additional information that is required in order for it to determine a planning application that is accompanied by an Environmental Statement.

Work Undertaken

- 1.1.4 The information contained in this Addendum and its appendices has been produced to supplement the submitted Environmental Statement (November 2017) with relevant amendments identified where applicable in response to the Regulation 22 request and other comments made on the application.
- 1.1.5 The structure of this Addendum follows that of the Environmental Statement to provide a consistent approach to the presentation of information.
- 1.1.6 There are three substantive changes to the SPC Proposals that have been designed to further mitigate potential environmental impacts as well as addressing the concerns of consultees. These are:
- The proposed temporary cessation of all heavy plant and machinery work associated with the SPC Works to the west of the Afon Cafnan during the tern nesting season;
 - The removal from the proposals of the diversion of a stretch of the Nant Porth-y-Pistyll; and
 - The reduction of the period of works from 15 months to 13 months.
- 1.1.7 The topic chapters below report on the key issues raised by consultees as well as identifying changes to the proposed development and/or resultant changes to matters of particular significance. Appendix 05-04 of Volume 3 of this Addendum submitted addresses all of the issues raised by respondents to the planning application consultation.

2 Legislation, policy and guidance

2.1 Introduction

- 2.1.1 A review of all legislation, policy and guidance referenced within the SPC planning application has been undertaken and concluded that there has been no material change to the circumstances within which the Environmental Statement should be considered.
- 2.1.2 For the purposes of this Environmental Statement Addendum, three documents were identified for consideration as to their inclusion in the assessment. These are as follows:
- The Siting Criteria and Process for a New National Policy Statement for Nuclear Power with Single Reactor Capacity over 1 Gigawatt Beyond 2025 (Department for Business, Energy & Industrial Strategy: December 2017);
 - Wylfa Newydd: Supplementary Planning Guidance Consultation Draft (Isle of Anglesey County Council: January 2018); and
 - Draft Planning Policy Wales 10 (Welsh Government: February 2018).
- 2.1.3 Two of these are in the process of being updated and are subject to a statutory consultation process by their respective authors. As of 15th May 2018 the Wylfa Newydd: Supplementary Planning Guidance (May 2018) was adopted by the IACC, however, as this is a planning led document its relevance in terms of the EIA is negligible in terms of the SPC Proposals. It should be noted that the adopted document has been considered further within the covering letter that accompanies this Addendum.
- 2.1.4 All of these documents remain in a consultation draft format, at the time of preparation of this Addendum, and therefore it is concluded that they bear little weight in the assessment of the SPC Proposals. As such the documents have not been considered any further in this Addendum.

2.2 Key Issues from Statutory Consultation

- 2.2.1 Responses received to the consultation process highlighted concerns regarding the superseding of the IACC Welsh Language SPC by Policy PS 1 of the Anglesey and Gwynedd Joint Local Development Plan 2011 – 2026 (July 2017).
- 2.2.2 This is acknowledged and criterion 3-5 of Policy PS 1 has been addressed in the submitted planning statement. Whilst the criteria for the need for a WLIA has been updated under Policy PS 1 it is considered that this is a moot point as a WLIA was undertaken and submitted as part of the planning application.
- 2.2.3 All other general comments relating to legislation, policy and guidance have been addressed within the respective Chapters and the Responses Table which can be found in Appendix 05-04 of Volume 3 of this Addendum.

3 Proposed Development

3.1 Introduction

- 3.1.1 This chapter describes the changes to the proposed activities and programme for the SPC Proposals that have been made since the submission of the planning application in November 2017.
- 3.1.2 The key elements of the planning application that have been subject to change as a result of consideration of the proposed development and in response to consultations received to the planning application are:
- The removal of the diversion of the Nant Porth-y-Pistyll (Phase D) from the proposed development;
 - Precautionary restriction of the operation of plant and machinery on land to the west of the Afon Cafnan between March 7th and August 31st of each year that SPC works take place;
- 3.1.3 The following explains these changes in the context of the overall development and the implications for it. It also includes reference to a number of less substantial amendments that have arisen as a result of the consultation exercise.

3.2 Summary of the Development

- 3.2.4 The proposed amendments to the development have not necessitated any substantive amendment to the SPC planning application boundary. A minor amendment has been necessary due to land ownership issues on the northern boundary of the site which has drawn the red line boundary in at one location, but this has not led to the need to revise any of the content of the Environmental Statement. The land associated with the section of the Nant Porth-y-Pistyll that was previously proposed to be diverted has not been removed from the site, and remains within the red-line boundary.
- 3.2.5 The SPC Proposals, as shown on amended figure 3-2/A in volume 2 of this Addendum, now comprise the following:
- Establishment of Main Site Compound, comprising:
 - provision of fencing and site security facilities, an area for material handling and storage and a secure parking area for plant and machinery.
 - Offices, welfare and mess facilities in temporary buildings, as well as the provision of a fuel store and parking for office-based staff and the site workforce.
 - an overflow parking area (the car park which previously served the former Wylfa Sports and Social Club) would be used as necessary and a new footpath link formed between it and the Main Site Compound.

- Formalisation of road crossings, comprising:
 - a new vehicular crossing of the Existing Power Station access road for use by construction vehicles accessing the north of the SPC Application Site from the Main Site Compound.
 - two upgraded vehicular crossings of Cemlyn Road for use by construction vehicles.
 - Establishment of Remediation Processing Compound and associated fencing and access tracks, and treatment of contaminated material.
 - Remediation of contaminated soils and treatment of invasive non-native species (INNS).
 - Establishment of Satellite and Material Compounds and associated fencing.
 - Erection of perimeter fencing.
 - Clearance of buildings and other existing above-ground structures.
 - Vegetation clearance and species relocation.
- 3.2.6 Further information regarding the works listed above can be found in table 3-1.
- 3.2.7 Amended Drawing 00004 Rev 1 illustrates the condition of the SPC Application Site following the completion of the SPC works.
- 3.2.8 The implications of the changes to the planning application and in particular the removal of the diversion of the Nant Porth-y-Pistyll, is that these proposed works would take place over a reduced period of approximately 13 months (compared to 15 months previously) starting as soon as possible following grant of planning permission, subject to any seasonal constraints.
- 3.2.9 The SPC Proposals will be included in both the TCPA application and the DCO application. If, during that period, the DCO is granted, the SPC works may be completed in accordance with the requirements of the DCO.
- 3.2.10 The structure of the remainder of this chapter is summarised below:
- section 3.2 – summarises the changes to the existing conditions at the SPC Application Site and its environmental context;
 - section 3.3 – provides a detailed description of the changes to the SPC Proposals and the associated phases of SPC works;
 - section 3.4 – outlines the changes to the proposed SPC programme;
 - section 3.5 – summarises the changes to the resource requirements and management techniques associated with the SPC Proposals; and
 - section 3.6 – describes the scheme of restoration required in the event that the DCO is not granted or the Wylfa Newydd Project does not proceed.

3.3 Changes to SPC site conditions

- 3.3.1 There have been no material changes to the conditions or circumstances of the SPC site since the submission of the planning application that would impact on the design or nature of the SPC Works (ref: 38C310F/EIA/ECON) in November 2017.
- 3.3.2 Land adjacent to the site at Wylfa Head - Arfordir Mynydd y Wylfa – Trwyn Penrhyn, for the purposes of the updated Environmental Impact Assessment, has been considered as a local Wildlife Site. Figures 3-4, 9-3, 14-3 and 16-4 have been amended accordingly.

3.4 The SPC works

- 3.4.1 The proposed SPC works have been designed to enable an efficient construction period following the grant of the DCO, yet are respectful of the prevailing site conditions, and elements of restoration can be implemented in the event that the DCO is not granted or the Wylfa Newydd Project does not proceed. The proposed amendments seek to complement this approach by reducing the scope of works proposed and by providing additional mitigation against the potential for impacts upon environmental features.
- 3.4.2 Throughout the preparation of the SPC Proposals the input of stakeholders has helped to inform designs to reduce potentially significant environmental effects where practicable. This process has been further enhanced through the consultation exercise undertaken pursuant to the planning application.
- 3.4.3 This section provides a detailed description of the changes to the SPC works based on the original format of Chapter 3 of the Environmental Statement (volume 1).
- 3.4.4 The revised SPC works are split into phases as set out in table 3.1 with the duration of works amended as appropriate. The phases are not necessarily set out in chronological order, for example, treatment of INNS in phase G is required before vegetation clearance works in phase C. The programme for the SPC works is provided in section 3.5 of this chapter.
- 3.4.5 The duration of works referenced in Table 3.1 below should be assumed as being from the commencement of development on site rather than the date when planning permission is granted.

Table 3-1 Summary of phases

Phase of SPC works	Description of works	Indicative duration of works	Relevant planning drawing number
Phase A - establishment of the Main Site Compound	<p>This phase would comprise of the following works:</p> <ul style="list-style-type: none"> • Provision of fencing and site security facilities, an area for material handling and storage, and a secure parking area for plant and machinery. • Temporary structures providing offices, welfare and mess facilities, a bunded fuel store and parking for office-based staff and the site workforce. • 32 car parking spaces would be provided on the Main Site Compound with a further 18 to be provided within an overflow parking area (the car park previously serving the Wylfa Sports and Social Club) to be used as necessary. 	6 weeks from months 1 to 2.	WN0903-JAC-OS-DRG-00008
Phase B - erection of perimeter fence	This phase would involve the installation of a 2m-high fence around the perimeter of the SPC Application Site, comprising temporary construction fencing.	26 weeks from months 1 to 7. No operations associated with the installation of fencing would take place within land to the	WN0903-JAC-OS-DRG-00009

Phase of SPC works	Description of works	Indicative duration of works	Relevant planning drawing number
		west of Afon Cafnan between 7 th March and 31 st August.	
Phase C – species translocation and site clearance	35 buildings and other structures would be demolished across the SPC Application Site as part of the SPC Proposals, as listed in table 3.2. Vegetation clearance activities would include removing some of the trees, (leaving tree stumps and roots) shrubs and hedges which make up road and field boundaries throughout the SPC Application Site. Works would incorporate a range of ecological and related measures and take account of the breeding bird season and other relevant seasonal restrictions. Ecological surveys would be undertaken prior to the vegetation clearance works commencing to ensure the ecological situation has not materially changed. Surface clearance also includes removal of fencing, walls, gates, field boundaries, existing structures (including buildings), scrub, trees, and other above ground features.	46 weeks from months 1 to 13. No plant and machinery associated with site clearance operations would take place within land to the west of Afon Cafnan between 7 th March and 31 st August.	WN0903-JAC-OS-DRG-00029 Rev 2 Amendment to illustrate land to the west of Afon Cafnan within which no plant and machinery associated with site clearance operations would take place between 7 th March and 31 st August.
Former Phase D - Watercourse realignment	The watercourse realignment is no longer required to be implemented due to operational reasons. This element of the	The previous timescale of the watercourse realignment	The previous drawing reference WN0903-JAC-OS-DRG-00027 that illustrated

Phase of SPC works	Description of works	Indicative duration of works	Relevant planning drawing number
	scheme therefore no longer forms part of the SPC Works.	(59 weeks) no longer forms part of the application.	<p>the proposed watercourse realignment has been withdrawn from the application.</p> <p>Other application drawings that included reference to the watercourse diversion have been amended accordingly.</p>
Phase E - establishment of Satellite and Material Compounds	This phase would involve the creation of three Satellite Compounds and seven Material Compounds. The creation of these compounds allows the safe storage of equipment and material, close to where it is required, reducing the distance vehicles need to travel across the SPC Application Site.	<p>21 weeks from months 2 to 7.</p> <p>No plant and machinery associated with the implementation or operation of Satellite Compound No. 1 would take place between 7th March and 31st August.</p>	<p>WN0903-JAC-OS-DRG-00014 Rev 1.</p> <p>Amendment to illustrate land to the west of Afon Cafnan within which the implementation or operation of Satellite Compound No. 1 would take place between 7th March and 31st August.</p>

Phase of SPC works	Description of works	Indicative duration of works	Relevant planning drawing number
Phase F - Establishment of road crossings	<p>This phase would comprise of the following works:</p> <ul style="list-style-type: none"> The creation of a new vehicular crossing of the Existing Power Station access road for the ingress and egress of construction vehicles to the north of the SPC Application Site from the Main Site Compound. Two existing vehicular crossings of Cemlyn Road would be formalised for use by construction vehicles, allowing access from the north to the south of the SPC Application Site. Since these are existing accesses, this will involve the erection of new fencing and gates at the accesses. 	3 weeks in month 3.	WN0903-JAC-OS-DRG-00009
Phase G – remediation	This phase comprises the establishment of a Remediation Processing Compound and the associated remediation of contaminated soil excavated on site.	20 weeks from months 3 to 7.	<p>WN0903-JAC-OS-DRG-00013.</p> <p>New Drawings have been provided to illustrate the details of the plant associated with the remediation proposals which can be found in Appendix 03-01</p>

Phase of SPC works	Description of works	Indicative duration of works	Relevant planning drawing number
			of volume 3 of this Addendum.

Phase A: Main Site Compound

3.4.6 There are no material changes to the layout or arrangement of the Main Site Compound since the submission of the planning application. Additional information has been requested regarding the drainage and water treatment arrangements and the lighting strategy for the compound. This information is included below:

- Drainage

3.4.7 Due to the existing topography which falls towards the east, a drain will be installed consisting of a trench filled with loose stones or a perforated pipe covered with earth. This will prevent run off onto the Existing Power Station access road. The drain will discharge into the swales located adjacent to the Main Site Compound. The refuelling area will benefit from a concrete apron laid to falls with a gully connected to an oil separator. The water from the oil separator will then be discharged to a swale. This arrangement is shown on figure 3-6 in volume 2.

3.4.8 The surface water drainage system for the compound has yet to have detailed design but will be based on the submitted planning application drawing (WN0903-JAC-OS-DRG-00008) and the following:

- The surface run off from adjacent land will be cut off from entering the compound by using a grass lined swale which will act as a cut off ditch. The Hard standing will be compacted stone and this falls to the north and the water will be collected into a swale;
- The compound to the east will have a cut off drain between the compound and the Magnox road. This drain will out fall to a sump and then it will be pumped up to a grass lined swale north of the compound where it will dissipate to ground;
- In the plant storage compound refuelling will be carried out on a concrete apron with a centre gully. This gully will be connected to an oil interceptor and the clean water from the interceptor will discharge into the western swale;
- There will be a wheel wash bay which will discharge into a gully and then into the northern swale. Due to very limited vehicles going on to site this system will be little used;

- The Foul drainage will be connected to cess tanks which will be emptied by a licenced operator on a regular basis.
 - It is proposed that the final layout of the compound and the associated drainage works will be secured through an appropriate planning condition.
 - Lighting
- 3.4.9 It is proposed that a detailed lighting strategy for the whole of the SPC Works will be secured by an appropriate planning condition.

Phase B: Perimeter fence

- 3.4.10 Figure 3-2 in volume 2 of the Environmental Statement shows the general arrangement of the proposed fencing. There have been no changes to the alignment of the fencing since the submission of the application. Additional information has been provided to illustrate the foundations proposed for the fencing resulting in the submission of amended planning drawings WN0903-JAC-OS-DRG-00030 Rev 1 and WN0903-JAC-OS-DRG-00032 Rev 1.

Phase C: Species translocation and site clearance

Demolition of existing buildings and walls

- 3.4.11 The proposal to demolish 35 buildings and other structures across the SPC Application Site remains unchanged. A schedule of the properties is set out in table 3.2 of the Environmental Statement.

Tree and hedgerow removal

- 3.4.12 The methodology and extent of the tree, shrub and hedge clearance of the SPC Application Site, as set out in Section 3.4 of the Environmental Statement remains unchanged.

Clearance of other vegetation

- 3.4.13 Following the clearance of the SPC Application Site during Phase G, the cleared land would be actively managed to prevent recolonisation through methods such as low grass cutting. An Interim Management Plan will be prepared prior to the commencement of works and will be secured through a planning condition in the event that planning permission is granted.

Species management

- 3.4.14 There has been no change to the two receptor sites secured by Horizon to accommodate species translocated or displaced from the Wylfa Newydd Development Area are the reptile receptor site and receptor site for species listed in accordance with Section 7 of the *Environment (Wales) Act 2016* [RD3-1] (hereafter referred to as "Section 7 Species").

- 3.4.15 The Section 7 Species receptor site comprises approximately 15ha of land and is located to the north-west of the Wylfa Newydd Development Area. It is separated into three distinct parcels of land by a public highway and Pencarreg.
- 3.4.16 The reptile receptor site comprises approximately 5ha of land located at Mynydd-lthel Farm, to the south-west of the Wylfa Newydd Development Area.
- 3.4.17 These receptor sites are located outside the SPC Application Site and have been secured and managed to provide optimum habitats for the species affected. The land will be managed in line with the requirements of the Ecological Management Strategy in the proposed CoCP which will maximise the quality of the habitat present with respect to the requirements of the target species, as described in chapter 14 (terrestrial and freshwater ecology) in the submitted Environmental Statement. The land has been secured by Horizon through a lease agreement for a period of 15 years, which is proposed to cover the construction and landscape establishment periods.
- 3.4.18 In addition, it is proposed that a management plan will be implemented in respect of Wylfa Head to the north-east of the site. The provisions for this will be enshrined within the proposed s106 Agreement, and are likely to include the following:
- The need to maximise foraging opportunities for breeding chough *Pyrrhocorax pyrrhocorax*;
 - support for the existing populations of adder and common lizard;
 - the retention and enhancement of botanical and fungal diversity; and
 - the need to avoid the spread of injurious weeds and invasive non-native species.

Phase D: Watercourse realignment

- 3.4.19 This no longer forms a part of the application and all reference to it should be discounted from the submitted documents.

Phase E: Satellite and Material Compounds

- 3.4.20 There is no change proposed to the material or satellite compounds. Satellite compound 1 will not be established or operated between 7th March and 31st August of each year that operations take place.

Phase F: Road crossings

- 3.4.21 There are no changes proposed to the road crossings as a result of the consultation exercise.

Phase G: Remediation

- 3.4.22 Proposed site plan – Phase G (drawing no. WN0903-JAC-OS-DRG-00012) shows the areas of the SPC Application Site known to be affected by contamination.
- 3.4.23 It is proposed to treat the majority of asbestos and INNS contaminated soil on-site and to remove all of the trichloroethene and contaminated material off-site to an appropriately licensed facility.
- 3.4.24 INNS has been treated on site for a number of years using best practice methods to prevent its spread and aid in its eradication. However, to prevent the spread of INNS across the site, the treatment of INNS would be undertaken ahead of vegetation clearance carried out in the vicinity of INNS during Phase C of the SPC Works.
- 3.4.25 The proposed construction of the Remediation Compound and the methodology for treating contaminated materials has not substantively changed since the submission of the planning application.
- 3.4.26 However, further information has been provided by the preferred contractor in respect of the methodology to be implemented and the plant to be used. This information is provided below.
- 3.4.27 The following summarises the operational and management techniques proposed for the treatment of the contaminated soils. All operations will be undertaken by specialist contractors in accordance with all relevant permits and consents associated with activities of this nature.

Soils contaminated with asbestos fibres.

General Approach

- 3.4.28 The general approach to be adopted is to excavate the soils under the direct supervision of a specialist asbestos contractor. The material would be tested and transported from its location on site to the Remediation Compound where the material would be handpicked over a conveyor belt for asbestos fragments. The purpose of hand picking is to reduce the asbestos within the soils to be less than 0.1% asbestos (hazardous waste threshold) on a weight for weight (w/w) basis. The material would be retested to confirm that the material is below the threshold. Once clear, the material would be removed to a material store after which it would be placed and capped with inert material.
- 3.4.29 The preferred contractor would appoint an asbestos specialist contractor with in-house capability and expertise to draw up proposals, to carry out asbestos analysis of bulk materials and soils, via their United Kingdom Accreditation Service (UKAS) accredited laboratory, and to monitor and supervise activities on site.

- 3.4.30 The treatment process would be undertaken by another accredited contractor in accordance with the appropriate Environment Permit (EP) for the on-site treatment of contaminated soils.

Pre-Mobilisation Studies

- 3.4.31 In advance of the decontamination process, desktop studies would be undertaken using the extensive soil information to confirm the delineation boundaries for each of the specific contaminated areas. It is currently estimated that there is approximately 6,250m³ of asbestos containing soils within the SPC Application Site. With sampling information the asbestos contractors would work collaboratively with Horizon and relevant stakeholders to draw up and agree definite treatment strategies and boundaries.

Methodology

- 3.4.32 Having identified the specific areas of contaminated asbestos soils, areas of contaminated materials would be marked out on site and a fenced Asbestos Control Zone (ACZ) would be set up under the supervision of the specialist contractor.
- 3.4.33 Perimeter / internal boundary fencing would be erected around each ACZ which would be appropriately signed (in Welsh and English) and entry restricted to authorised personnel. Within each ACZ an area for loading out the contaminated material and one for receiving and processing the contaminated material would be established.
- 3.4.34 The movement of plant in and out of the area would also be restricted depending on the contaminants. The 360^o excavator would excavate and load a dumper which would tip the contaminated material at a designated load out area within the ACZ. A “clean” dumper truck which operates outside the confines of the ACZ would be loaded with contaminated material and then the load sheeted. This clean dumper would then transport the material across the site to Remediation Processing Compound where it would tip into the reception area whilst standing on clean ground. The material once in the Remediation compound would then be processed using processes specific for that particular contaminated material.

Excavation

- 3.4.35 The proposed method of work is to use a tracked hydraulic excavator to excavate / scrape to a depth as identified from the surveys, of the material and would be continually progressed laterally until visible asbestos is removed. Where any visible ACMs are encountered these would be excavated from the face. Any larger ACMs would be removed and placed in a designated quarantine area for offsite disposal.
- 3.4.36 A system for spraying the ground within the ACZ to dampen it down would be employed as required. This would generally be used when excavating the soils which could contain asbestos to suppress fibres from becoming airborne.

- 3.4.37 Any open faces of the excavation would be inspected at the end of each day or end of a phase of work during the day to ensure that no asbestos is left exposed in the face where it could release fibres. The face would be sealed up by the excavator and if asbestos is present in the face then it would either be removed prior to the end of the work, or the area would be covered with polythene sheeting to prevent release of fibres. During all activities the above methodology and risk assessments must be reviewed regularly to assess the nature of the risk(s) based on work activities/monitoring activities.

Restoration

- 3.4.38 Once the area has been signed off as clear of asbestos the excavation would be backfilled with inert material recycled from the building and cement bound walling works.

Processing

- 3.4.39 The material would be transported out of the ACZ to the asbestos treatment area within the Remediation Processing Compound (as illustrated on Drawing WN0903-JAC-OS-DRG-00013). The asbestos treatment area is a 100mx50m fenced area which has a geomembrane and 250mm of compacted 6F2 material. The area will be fenced for secure plant storage overnight. The treatment area has a perimeter drain and this surface water is collected filtered and then would be either reused on the sprinkler systems or discharged over the existing grass land.
- 3.4.40 The contaminated material would be loaded into a screen (details of which are included at Appendix 03-01 of volume 2 of this Addendum) using a 360° excavator to remove any oversize fragments. The oversized material is checked for asbestos and if clean it is put into an area for recycling. The pieces of asbestos are contained and packaged for disposal to a licensed disposal facility.
- 3.4.41 The remainder of the screened material is passed over a conveyer belt within the asbestos picking facility (details of which are included at Appendix 03-01 of volume 2 of this Addendum) where trained pickers would pick out the pieces of asbestos material. The processed material is stored within the asbestos treatment area where it is tested to ensure that there is no asbestos material above the 0.1% w/w asbestos threshold. If for any reason a sample comes back over the threshold that particular batch of material is reprocessed.

Storage of processed material

- 3.4.42 The processed asbestos material having been signed off as being under the 0.1% threshold would be moved to a storage area. The material would be placed on top of a geomembrane and compacted in layers to a height of 2m, and with side slopes of 1:3. A non-woven orange geotextile used for separating contaminated/uncontaminated soils would be placed over the processed material and the covered with an inert capping material up to 600mm thick.

Dust Prevention

- 3.4.43 The primary risk for the spreading of asbestos materials is through fugitive dust emissions. To mitigate against this occurring the following mitigation measures would be implemented, to be confirmed in the proposed CoCP:
- In all soils/areas that have the potential to contain exposed ACM the ground would if required be wetted using a fine spray jet wash over the potentially impacted area before works commence;
 - When wetting down areas all plant and personnel must be removed from the area to prevent further spread of contaminated materials as the wetting process may cause low level air turbulence and once wet the contaminated materials may adhere to plant and personnel.
 - All plant is to operate at a 10mph speed limit as not to generate dust within the ACZ;
 - During excavation of the soils only the required plant would be present in the ACZ.
 - Following each load of material where ACM is present in excavated soils the materials must be sufficiently wetted to prevent dust arising when moved from either the plant to the ground or from plant to plant, i.e. loading a dump truck.
 - At the end of each day all exposed materials with the potential to contain asbestos would be either wetted sufficiently to prevent it drying and dusting during the night, or covered with a liner type material to prevent dusting when the materials is not being worked.

On site Monitoring

- 3.4.44 The method of working would be designed so as to minimise the potential for dust and fibres to be released into the atmosphere as this may increase risk of exposure to unacceptable levels and beyond the ACZ. To continually assess this risk and ensure onsite control measures and appropriately mitigate fugitive emissions from the works would be monitored by an onsite analyst provided by the specialist contractor.
- 3.4.45 The specialist contractor would carry out air monitoring for the detection for asbestos fibres. It is proposed that monitoring locations would be established near to the work area and on the boundary of the site to provide reassurance monitoring to local stakeholders.
- 3.4.46 All appropriate measures will be undertaken in order to prevent the exposure to asbestos of all employees of Horizon and all contractors. Details of the proposed welfare facilities are included at Appendix 03-01 of volume 2 of this Addendum.

Soils Contaminated with Invasive non-native species (INNS)

Introduction

3.4.47 The site is known to include several INNS:

- Cotoneaster spp
- Montbretia
- Rhododendron spp
- Parrot's Feather
- New Zealand Pygmy weed
- Giant Rhubarb
- Water Fern
- Water weed
- Yellow Archangel

3.4.48 It has been estimated that some 3,250m³ of INNS contaminated soils will need to be processed in order to eradicate INNS across the site.

Pre-Mobilisation

3.4.49 The first step would be an updating survey of the site for the presence of INNS listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). During this survey the locations of previously identified INNS will be checked and the locations of plants previously treated with herbicide (Japanese knotweed) will be checked for evidence of re-growth.

3.4.50 This survey will be undertaken when plants are in active growth (April to October inclusive).

3.4.51 All water courses and ponds will be surveyed for the presence of aquatic invasive plant species. During the survey, where invasive aquatic plant species are recorded the potential risk of contamination of adjacent water features will also be noted. This will include the presence of connecting ditches etc.

3.4.52 Where invasive plant species are recorded, the location and extent of the plant will be noted and a GPS reference taken. The extent of affected soil will be measured or estimated, and recorded to facilitate the planning of excavation and treatment of the soil.

3.4.53 The results of the survey work will be used to update and refine the proposed management plan. Japanese Knotweed would be managed in accordance with the EA/NRW Japanese Knotweed Code of Practice.

Excavation

- 3.4.54 Specific excavation methodologies will be developed for specific INNS in accordance with best practice. In general terms, material will be excavated using an appropriately sized excavator under the supervision of a specialist Ecological Clerk of Works (ECoW).
- 3.4.55 Excavated material will be placed by the excavator into a dumper located on existing hardstanding where present, or a sheet of terram or similar material, whilst it is being filled, so that any material that falls from the excavator bucket can easily be seen and picked up.
- 3.4.56 Once the dumper is two thirds full, the wheels of the dumper will be checked by the ECoW for any INNS material and the dumper will be allowed to leave the site to deposit the excavated material at the designated remediation processing compound.
- 3.4.57 Tracking of the excavator will be limited, avoiding the infested area, to prevent spread of INNS. Before leaving the works area the excavator tracks will be cleared of soil and inspected for evidence of INNS. All staff footwear will also be scraped free of mud.
- 3.4.58 Any INNS material found will removed from working area to the remediation processing compound. Once satisfied that all invasive plant material has been removed the ECoW will sign the permit stating works have been completed.

Treatment area

- 3.4.59 All material arising from the eradication of an INNS, including stems, leaves, roots as well as soil containing roots or potentially contaminated with seed, will be stored within a soil bund designated within the Remediation Processing Compound.
- 3.4.60 Plant material and contaminated soil excavated will be brought to the remediation processing compound in a 9 tonne dumper and tipped in the designated area. Before leaving the deposition area the vehicle will be checked to ensure that all plant material is removed and placed in the Remediation Processing Compound.
- 3.4.61 Tipped material will be formed into a mound using suitably sized 360o excavator. This excavator will stay within the remediation processing compound until works are complete, to prevent the spread of invasive plants. On completion of the invasive species excavation works, the tracks and bucket of the excavator will be jet washed within the remediation processing compound.
- 3.4.62 The soil bund will be sealed at the end of each working day to prevent contamination of adjacent land through wind-blow or rain-washing of plant material off the soil bund. Fencing will be placed around the soil bund to prevent unauthorised access, and the bund clearly marked as containing INNS.

- 3.4.63 All staff working within the remediation processing compound will ensure their boots are scraped free of mud when leaving the compound, to prevent the spread of invasive plant species.
- 3.4.64 The soil bund will be inspected monthly during the SPC Works for evidence of any invasive plant species re-growth, and evidence of soil slippage or other erosion which could lead to contamination of the adjacent land. Where any INNS species re-growth is recorded, this will be treated with a suitable herbicide treatment.
- 3.4.65 The soil in the treatment bund will eventually be used as part of the earthworks phase of the
- 3.4.66 Scheme, where it will be placed at suitable depth to prevent any invasive plant species re-growing.

Soils contaminated with trichloroethene and Hydrocarbons

- 3.4.67 The area contaminated with trichloroethene and hydrocarbons is more limited than those affected by asbestos and INNS. The expected quantity of contaminated soils is approximately 150m³.
- 3.4.68 The identified areas of contamination will be confirmed and identified by specialist contractors and appropriate temporary fencing will be placed in the correct location. Polythene sheeting will be laid and an appropriately sized excavator will remove the contaminated soils and place on the polythene sheeting.
- 3.4.69 Once the contaminated soils are removed, on site tests will be undertaken to the adjacent sides and floor of the excavation to confirm complete removal of contaminants. Further excavation may be required until the testing process proves to be negative.
- 3.4.70 The contaminated soils will then be removed from the SPC Site and taken to an appropriately licensed disposal site. The excavation void will be restored using excavated topsoils from the SPC Site.

Remediation Processing Compound

- 3.4.71 In order to treat and process the range of contaminated soils and INNS present in various locations across the SPC Application Site, an area of approximately 1.2ha has been identified as a dedicated Remediation Processing Compound as shown on figure 3-2. The Remediation Processing Compound would comprise of an asbestos treatment area of approximately 0.6ha., asbestos processed material storage area of approximately 0.2ha., and an INNS treatment and storage area of approximately 0.4ha. All these areas will be surfaced with a geomembrane and 250mm of compacted material. The Remediation Processing Compound would be enclosed by a 3m high CPNI fence to ensure the secure storage of plant overnight with a 2.4m high timber hoarding sited on the outside of the CPNI fence. The Remediation Processing Compound would include a perimeter drain, and surface water would be collected, filtered and subsequently

either re-used on the misting/sprinkler systems for dust suppression or tankered off-site for disposal. Access to and from the Remediation Processing Compound would be linked to the existing haul road network through the provision of new haul roads constructed from crushed stone.

Treatment of contaminated material

- 3.4.72 The proposed approach would involve the excavation and treatment of identified soils by a specialist asbestos contractor. The proposed method of works would be to use a tracked hydraulic excavator to remove / scrape material to a depth as identified from the surveys, and will be continually progressed laterally until visible asbestos is removed. Where any visible Asbestos Containing Materials are encountered these will be excavated.
- 3.4.73 The material would be tested and transported to the Remediation Processing Compound. The material will be loaded into a screen to remove oversize fragments including pieces of cable, lumps of concrete etc. The oversized material is checked for asbestos and if clean separated for recycling. The pieces of asbestos are contained and packaged for disposal to a licensed disposal facility. The remainder of the screened material would be subject to handpicking of larger asbestos fragments over a conveyor belt system. The excavation sites would be backfilled with hardcore currently present on the SPC Application Site, generated from demolition works, and then covered with topsoil obtained from the topsoil strip associated with the creation of the Remediation Processing Compound and seeded with grass.
- 3.4.74 The purpose of hand picking is to reduce the asbestos within the soils to less than 0.1% asbestos (hazardous waste threshold) on a weight for weight basis. The processed material will be tested, and when it is confirmed to contain less than 0.1% asbestos on a weight for weight basis, it would be removed to the asbestos processed material storage area where material would be placed on top of a geomembrane and compacted in layers to form remediated soil storage mounds. These mounds would measure up to 3m high, with a height to side slope ratio of 1:3 gradient.
- 3.4.75 A non-woven geotextile separation layer would be placed over the processed material and covered with an inert capping material up to 600mm thick. This material would remain in a temporary stockpile until the main earthworks phase of the Wylfa Newydd DCO Project commences following the approval of the DCO, after which it would be incorporated into the landscaping associated with the Wylfa Newydd DCO Project and capped with inert material.
- 3.4.76 The remediation works would be subject to continuous air monitoring and testing by a certified P403 (Asbestos Fibre Counting) and P404 (Air Sampling and Clearance Testing For Asbestos) analyst who will be on site to carry out the fibre monitoring to confirm threshold limits are kept to acceptable levels.
- 3.4.77 In the event that the DCO is not granted or the Wylfa Newydd Project does not proceed, the hardcore used to fill the excavations associated with the removal of contaminated soil would be exported from the SPC Application Site. The treated

soil at the Remediation Processing Compound would then be used to backfill these excavations and then seeded with grass.

3.5 SPC programme

- 3.5.1 The revised scope of works proposed in respect of the SPC planning application is such that the previously estimated schedule of 15 months to complete the required works has been reduced to 13 months. An outline of the programme for the implementation of the SPC Proposals is provided in figure 3-1. It is anticipated that works would commence during 2018.
- 3.5.2 As the commencement date is reliant upon granting of planning permission and is therefore not yet known, only an indicative programme can be provided at this stage. As such, activities have been noted against the expected month during the SPC works, though these may be subject to seasonal constraints.
- 3.5.3 Taking into account seasonal working requirements, clearance works would take place across the SPC Application Site in a manner that accommodates constraints such as bird nesting season, mitigation requirements and operational practicalities. The site clearance works would also be undertaken in a generally south westerly direction, initially commencing in the most north easterly area of the SPC Application Site before proceeding in a south westerly direction. This is to ensure that the wildlife is not driven towards the coast and the A5025.
- 3.5.4 In the event that the DCO is not granted or the Wylfa Newydd Project does not proceed, the proposed scheme of restoration works would take approximately 12 months to be implemented, followed by an agreed aftercare period of 10 years to ensure suitable landscape maintenance.

Figure 3-1 Indicative SPC programme

ACTIVITY SUMMARY	Works by month post commencement																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Main Site Compound	■	■															
Perimeter Fence		■	■	■	■	■	■	■									
Site Clearance incl. Translocation		■	■	■	■	■	■	■	■	■	■	■	■				
Material & Satellite Compounds			■	■	■	■	■										
Road Crossings			■														
Contaminated Land Remediation			■	■	■	■	■										

3.6 SPC resource requirements and management

Management

- 3.6.1 The only substantive change to the management of the development, since the submission of the application, is the commitment by Horizon to exclude activities associated with plant and machinery from land West of the Afon Cafnan during the Tern nesting season. It is anticipated that this will be secured through an appropriate planning condition.

3.7 Removal and restoration

Introduction

- 3.7.1 In the event that the DCO is not granted or the Wylfa Newydd Project does not proceed, a scheme of restoration would be implemented to return the SPC Application Site to an acceptable condition to be agreed with the IACC by way of a planning condition.
- 3.7.2 The potential proposed restoration concept in the event that the DCO does not proceed is illustrated in Drawing WN0903-JAC-OS-DRG-00034: Landscape Restoration Principles (also figure 3-3 Volume 2).
- 3.7.3 The restoration works are intended to take approximately 12 months, followed by an agreed aftercare period of 10 years to ensure suitable landscape maintenance.

Landscape restoration

- 3.7.4 The landscaping scheme delivered under a restoration scenario, as shown on figure 3-3 would include the restoration of many of the field boundaries, landscape planting, the rebuilding of stone walls and cloddiau using existing stone saved for re-use and other works designed to return the site to a state resembling its former condition (although demolished buildings would not be reinstated). The landscaping restoration scheme would be designed to enhance both the landscape character and biodiversity of the area and allow a productive agricultural use to resume for the majority of the SPC Application Site.
- 3.7.5 It is anticipated that most of the pre-existing hedgerows would be reinstated by management of re-growth from retained root stock, as it is only proposed to cut hedgerows down to ground level as part of the SPC works and not to grub out roots.
- 3.7.6 A similar principle same applies to felled areas of scrub and woodland. New planting would also be required to create the additional hedgerows and woodland belts proposed for enhanced habitat connectivity in the current Landscape Restoration Principles plan. For new hedgerow and tree planting the following approach is proposed:

- 3.7.7 The Landscape Restoration Principles plan is intended to serve as a guideline for the restoration if it is required. Any planning condition(s) associated with the requirement for restoration to be agreed and implemented is likely to include mechanisms for the triggering of the restoration provisions, and requirements for detailed planting schemes, management and after-care details to be submitted for approval. The submitted CoCP does not include provisions for restoration: these are likely to be subject to a separate and stand-alone CoCP in the event that the required works will be implemented.
- 3.7.8 The SPC Application Site would be subject to ongoing inspection and the continual maintenance of planted areas for the duration of the aftercare period to ensure mitigation remains effective. The ecology and landscape management strategy for the aftercare of the SPC Application Site, set out in the Restoration CoCP, would be implemented subject to agreement with the IACC. The aftercare period for the restoration would be 10 years.

4 Alternatives and design evolution

4.1 Introduction

- 4.1.1 This chapter outlines the further design evolution of the SPC Proposals following the consultation and engagement processes undertaken as part of the planning application.
- 4.1.2 Following an internal review of the SPC Proposals, as well as a review and assessment of the consultation responses and ongoing engagement with key stakeholders, several changes have been made to the SPC Proposals as part of the ongoing design evolution.

4.2 Summary of Design Changes

- 4.2.1 The changes to the SPC proposals can be summarised as follows:
- The removal of the diversion of the Nant Porth-y-Pistyll (Phase D) from the proposed development;
 - The restriction of the operation of plant and machinery on land to the west of the Afon Cafnan between March 7th and August 31st of each year that SPC works take place; and
 - A reduction in the overall timetable for implementation and completion of the SPC works from 15 to 13 months.

4.3 Reasons for Design Changes

Removal of the diversion of the Nant Porth-y-Pistyll

- 4.3.1 The water course realignment is no longer required to be implemented following a review of the requirement of the land for the DCO Project. This element of the scheme therefore no longer forms part of the SPC Works.

Western Area Stand-off

- 4.3.2 It is proposed that there will be a restriction of the operation of plant and machinery on land to the west of the Afon Cafnan between March 7th and August 31st of each year that SPC works take place. This has been proposed to ensure that there is no imperceptible effects on the noise environment of the tern colony at Cemlyn Lagoon, and is considered in respect of the Report to Inform Habitats Regulations Assessment.

Reduction of Programme

- 4.3.3 As a result of the removal of the diversion of the Nant Porth-y-Pistyll from the scope of works, the proposed duration of the SPC Works has been reduced from 15 months to 13 months.

5 Consultation

5.1 Introduction

5.1.1 This chapter summarises the consultation and engagement processes undertaken following submission of the planning application for the SPC Proposals to date. These include:

- Statutory consultation on the submitted SPC Proposals by the IACC;
- Informal engagement with relevant stakeholders;

5.1.2 Each of these consultation processes is discussed in turn below.

5.1.3 Key issues identified from consultation that are relevant to a particular topic are summarised the relevant topic chapter (chapters 7 to 17). Issues relevant to the SPC Proposals as a whole are outlined in section 5.3 of this chapter.

5.2 Statutory Consultation on the SPC Proposals

5.2.1 In accordance with the Town and Country Planning (Development Management Procedure) (Wales) Order 2012 (DMPO) the IACC undertook a formal consultation exercise for the planning application accompanied by the Environmental Statement. This required the planning authority to publicise the application by undertaking the following activities:

- The display of an appropriate Notice in at least one place on or near the land to which the application relates, for not less than 21 days; and
- The publication of the Notice in a newspaper circulating in the locality in which the land to which the application relates is situated.

5.2.2 The IACC undertook these requirements from 22nd November 2017 until 2nd January 2018.

5.2.3 The IACC also undertook formal consultation with prescribed consultees as identified in Schedule 4 of the DMPO.

5.2.4 Relevant responses received during this process have been taken into account by Horizon in preparing this addendum to the original Environmental Statement for the SPC Proposals.

6 Overview of assessment process

6.1 Introduction

- 6.1.1 This chapter outlines any changes to the general approach followed for the environmental impact assessment (EIA) of the SPC Proposals.
- 6.1.2 The form and general approach followed for the EIA of the SPC Proposals, in accordance with the EIA Regulations and relevant guidance, remains unchanged following review of the consultation responses. As previously highlighted, where the approach within a specific technical topic differs from the approach outlined in this chapter, the discipline-specific methodology is explained within the respective topic chapter.

6.2 Key Issues from Statutory Consultation

- 6.2.1 Responses highlighted concerns regarding the approach followed for the EIA stating that for the purpose of compliance with the EIA Directive and Habitats Directive, the 'project' should be interpreted as the entirety of the consents for the Wylfa Newydd Project.
- 6.2.2 This issue relates particularly to the cumulative effects associated with the inter-project effects and is addressed in the Cumulative Effects chapter.
- 6.2.3 Where other issues have been raised regarding the methodology of assessment that relate to a particular topic these are summarised and addressed in the relevant topic chapter.

7 Socio-economics

7.1 Introduction

- 7.1.1 This chapter summarises and addresses the issues raised by the Regulation 22 request, as well as other comments made on the application, in relation to Socio-economics.
- 7.1.2 The chapter outlines any changes to the proposed development and/or the associated assessment as a result of the consultation responses and offers points of clarity where deemed necessary.

7.2 Key Issues from Statutory Consultation

- 7.2.1 Responses highlighted concerns regarding the SPC Works triggering the start of the wider Wylfa Newydd Project and the need to pilot schemes associated with the DCO, the impact of the SPC Works on tourism, the detail of and justification for the methodology and the adequacy of the proposed mitigation/planning obligations.
- 7.2.2 All other specific comments made in relation to socio-economics have been addressed within the Responses Table which can be found in Appendix 05-04 of Volume 3 of this Addendum.

Start of Wylfa Newydd Project and Precedent Pilot Schemes

Horizon Response

- 7.2.3 Horizon acknowledges the precedent brought by the Hinkley Point C development and aims to pilot programmes and appropriate mitigation where required before the main construction programme of the Wylfa Newydd Project commences. These measures are outlined within the covering letter that provides a schedule of the draft SPC Heads of Terms, including both planning and non-planning obligations.

Effects on Tourism

Horizon Response

- 7.2.4 Effects on tourism as a result of the SPC Proposals (in isolation) are found to be negligible and therefore not significant overall, resulting in no requirement for mitigation. It has however been recognised that as the SPC Proposals constitute the start of the wider Wylfa Newydd Project and as such a commitment has been made by Horizon to put in place a Tourism Contribution which will serve to support the sector and prepare for the arrival of the wider Wylfa Newydd Project.

Justification for Methodology

Horizon Response

- 7.2.5 Residual socio-economic effects, as justified and reported in Chapter 7, are considered to be negligible or otherwise beneficial (minor) in nature. The assessment of effects section justifies the reasoning behind each of the residual effect findings, for example, there is expected to be a beneficial effect on employment given the number of net jobs (72) that would be safeguarded as a result of the SPC Proposals. Moreover, the effect of short-term road closures and traffic management measures on local businesses, within the Local Area of Influence (LAI) and North Wales, is expected to be negligible given that such short-term effects are expected to be minimal. As residual effects are negligible (or have a beneficial effect) these were not included within the cumulative impact assessment as such residual socio-economic effects do not contribute to any potential (significant) adverse cumulative effects of the SPC Proposals overall. This conclusion is reported within the stated findings of the SPC cumulative impact assessment.
- 7.2.6 A caveat is provided within paragraph 7.4.22 of the SPC Environmental Statement, bullet point 3, "Census data (2011) have been used for the baseline; however, where more recent information is available, this has been used. In addition, while up-to-date baseline information is presented where possible, due to data restrictions, data for the DCCZ are not always readily available". North Wales data was used as a proxy for the DCCZ when suitable or sufficient data was not available for use.

Adequacy of Mitigation/Planning Obligations

Horizon response

- 7.2.7 Horizon proposes as part of the SPC Works to make provision for the following services to address issues raised in relation to planning and non-planning obligations and the implementation of early pilot schemes. These may be subject to change but are currently as follows:
- Services from the local authorities – Horizon acknowledges the demand for services from the local authorities in respect to the needs and requirements of SPC and the wider DCO Project, however, it is considered that any contribution relating to delivery would be included within an appropriate Planning Performance Agreement, if considered necessary. Notwithstanding the above Horizon will seek to work collaboratively and productively with officers of the local authorities to fulfil project obligations and requirements as both projects progress.

- Tourism – A Tourism Development Contribution is proposed under the terms of a S106 Agreement to be put in place during the SPC works.
- Skills and training – The Employment and Skills Service is proposed under the terms of a S106 Agreement between Horizon and IACC and is proposed to be in place during the SPC works.
- Community Resilience Contribution – A Community Resilience Contribution is proposed under the terms of a S106 Agreement and is proposed to be in place during the SPC works.
- Community Liaison Group – A Community Liaison Group is proposed as part of the SPC CoCP which it is anticipated will be secured through an appropriate planning condition.
- Empty Houses Contribution – An Empty Homes Contribution is proposed in order to facilitate the purchase and renovate empty homes as useable accommodation.
- Re-provision of community facilities – A Local Facilities Contribution, to provide meeting space for local communities is proposed under the terms of a S106 Agreement to be in place during the SPC works.

7.3 Implications for Environmental Statement Effects

- 7.3.1 The issues raised by the IACC have been clarified by the reiteration and further explanation of the findings of the existing socio-economic assessment detailed within the submitted SPC Environmental Statement. These points of clarification have warranted the redrafting or amendment of only one statement within the existing Environmental Statement. Please consult the Consultation Response table (Appendix 05-04 of volume 3 of this Addendum) for details.

7.4 Implications for Environmental Statement Residual Effects

- 7.4.1 As outlined in paragraph 7.3.1, none of the issues raised by the IACC in Section 7.2 have warranted the redrafting or amendment of any of the text within the submitted SPC Environmental Statement. By extension, none of the issues raised have implication on the findings of the socio-economic assessment and, as a result, the residual effects reported in the assessment remain the same.

7.5 Conclusion

- 7.5.1 To conclude, points of clarification have been made in Section 7.2 to issues raised in relation to the socio-economic assessment within the SPC Environmental Statement. None of these issues have implications for the overall findings of said assessment, and therefore the assessment of effects and resulting residual effects reported within the socio-economic assessment of the submitted SPC Environmental Statement remain the same, with no alterations.

8 Public access and recreation

8.1 Introduction

- 8.1.1 This chapter summarises and addresses the issues raised by the Regulation 22 request, as well as other comments made on the application, in relation to Public access and recreation.
- 8.1.2 The chapter outlines any changes to the proposed development and/or the associated assessment as a result of the consultation responses and offers points of clarity where deemed necessary.

8.2 Key Issues from Statutory Consultation

- 8.2.1 Responses highlighted concerns regarding the temporary closure of Cemlyn Road and the impact on existing Public Right of Way (PRoW) that connect with Cemlyn Road. In view of the above a request was made that Cemlyn Road is not closed to pedestrian use.

Horizon response

- 8.2.2 As was stated within the original application it is confirmed that all PRoWs will remain open for the duration of the SPC Works.
- 8.2.3 All other specific comments made in relation to public access and recreation have been addressed within the Responses Table which can be found in Appendix 05-04 of Volume 3 of this Addendum.

8.3 Implications for Environmental Statement Effects

- 8.3.1 There are no implications for the effects identified in the Environmental Statement as a result of the comments received.

8.4 Implications for Environmental Statement Residual Effects

- 8.4.1 There are no implications for the residual effects identified in the Environmental Statement as a result of the comments received.

8.5 Conclusion

- 8.5.1 No additional information or changes to the residual effects identified in the Environmental Statement are required due to the comments received.

9 Air quality

9.1 Introduction

- 9.1.1 This chapter summarises and addresses the issues raised by the Regulation 22 request, as well as other comments made on the application, in relation to air quality.
- 9.1.2 The chapter outlines any changes to the proposed development and/or the associated assessment as a result of the consultation responses and offers points of clarity where deemed necessary.

9.2 Key Issues from Statutory Consultation

- 9.2.1 Responses highlighted concerns regarding the cumulative effects of the SPC proposal, the DCO Project and other projects in the area. In addition, concern was raised about the potential impacts on specified local residential properties.
- 9.2.2 All other specific comments made in relation to air quality have been addressed within the Responses Table which can be found in Appendix 05-04 of Volume 3 of this Addendum.

Cumulative Air Quality Impacts

- 9.2.3 It should be noted that the air quality effects of the DCO Project is a distinct matter, to be appropriately considered during the DCO process. Given there are no intra-project air quality effects, it is not a relevant consideration for the purposes of determining the SPC Application.
- 9.2.4 However, a technical note has been produced to address matters relating specifically to cumulative emissions at Protected Sites and can be found at Appendix 09-05 of Volume 3 of this Addendum. The technical note concludes that based on the information on the RFPs and data provided in tables 3-1 to 3-5 for the SPC works and DCO proposals, it is concluded that the SPC works would not lead to damage to the Cae Gwyn SSSI, Cemlyn Bay SAC/SSSI or Tre'r Gof SSSI. As set out in chapter 9 of the SPC Environmental Statement, the predicted increases due to the SPC works are well within the assessment criteria that would indicate the potential for any damage or harm to occur to the ecological sites. The total concentrations of NO_x and SO₂ are either well below the relevant critical levels and any increases in nitrogen or acid deposition are well within 1% of the critical load and represent increases in existing deposition of less than 1%.
- 9.2.5 The other external developments would not contribute sufficiently to alter this conclusion (even if they all occurred at the same time as the SPC works, which is highly unlikely). With regard to the DCO proposals, these lead to considerably higher concentrations and deposition rates at the ecological sites than the SPC works and are the focus of additional ecological assessment to identify the need for controls to reduce NO_x concentrations and acid/nitrogen deposition as part of the DCO proposals.

Residential Impacts

- 9.2.6 In its letter to the IACC on 18 December 2017, the National Trust raised concerns about the amenity implications for residential properties at Felin Gafnan and Tyddyn Sidney near to the SPC Application Site boundary with regard to dust emissions.

Horizon Response

- 9.2.7 The assessment of dust emissions was undertaken using the methodology and approach agreed with the IACC during pre-application consultation and set out in a methodology report (previously supplied to the IACC) and developed through consultation with the IACC (and contained within appendix 09-05 of the ES Addendum document)
- 9.2.8 The assessment includes consideration of Felin Gafnan and Tyddyn Sidney residential properties and their distances to the SPC Application Boundary (at approximately 210m and 100m, respectively) in the determination of the risk of dust impacts and required mitigation measures. The risk levels and the subsequent determination of the level of mitigation to be applied for all SPC works activities were primarily derived from residential properties which are closer to the SPC Application Site than Felin Gafnan and Tyddyn Sidney (see appendix 9-02 of the Environmental Statement). No significant noise effects are predicted at Felin Gafnan or Tyddyn Sidney as a result of the SPC Proposals. In addition, noise and vibration monitoring and control measures are set out in the noise and vibration management strategy of the CoCP, and are in-line with good practice.

Assessment of Air Quality at Arfordir Mynydd y Wylfa – Trwyn Penrhyn Wildlife Site

- 9.2.9 The IACC identified in its letter of 09 February 2018 that the Environmental Statement did not undertake an assessment of effects to Arfordir Mynydd y Wylfa – Trwyn Penrhyn Wildlife Site (Wylfa Head). This chapter focuses on effects related to air quality, however, other potential effects on this site are considered within the respective topic chapters, where appropriate.

Horizon Response

- 9.2.10 This section of the report provides the assessment of dust emissions and pollutant emissions from the SPC works at the Arfordir Mynydd y Wylfa – Trwyn Penrhyn Wildlife Site.

Emissions of dust

- 9.2.11 This section presents an assessment of dust emissions which supplements the assessment undertaken and reported in appendix 09-02 and chapter 9 of the Environmental Statement.

- 9.2.12 The Arfordir Mynydd y Wylfa – Trwyn Penrhyn Wildlife Site is adjacent to the SPC Application Site boundary and is, therefore, within the 50m study area for the assessment of dust emissions generated by the SPC works. It comprises a mixture of coastal grassland with some areas of heather (*Calluna vulgaris*). The Wildlife Site has been classed as a Low sensitivity receptor in accordance with the Institute of Air Quality Management (IAQM) guidance used for the assessment of dust emissions.
- 9.2.13 The site clearance activities, including vegetation clearance and demolition of walls and fences, would be undertaken in close proximity to the southern boundary of the Wildlife Site.
- 9.2.14 The sensitivity of the area with regard to Arfordir Mynydd y Wylfa – Trwyn Penrhyn Wildlife Site is classed as Low for the demolition, earthworks and construction activities and not applicable for trackout due to the large distance to the local road network.
- 9.2.15 The dust risks for the Arfordir Mynydd y Wylfa – Trwyn Penrhyn Wildlife Site are classed as a Low risk for the demolition and earthworks and negligible risk for construction and trackout activities. However, as set out in table 5-5 of appendix 09-02 of the Environmental Statement, the overall risk to ecological sites was based on the highest risk identified for any of the ecological receptors (i.e. the more sensitive sites of Tre'r Gof SSSI and Cae Gwyn SSSI). This resulted in Medium risk for demolition and earthworks activities and Low for construction activities, with negligible for trackout. These higher risk levels were taken forward to inform the level of good practice mitigation required to be adopted during the SPC works to protect ecological receptors and reduce the potential for dust emissions to potentially lead to significant dust effects. The mitigation measures are set out in the SPC CoCP.
- 9.2.16 The potential dust effects at all ecological receptors, including the Arfordir Mynydd y Wylfa – Trwyn Penrhyn Wildlife Site, are not significant with these good practice mitigation measures in place.

Emissions of pollutants

- 9.2.17 This section presents an assessment of emissions of pollutants from construction plant and machinery which supplements the assessment undertaken and reported in chapter 9 of the Environmental Statement.
- 9.2.18 The predicted maximum NO_x and SO₂ concentrations at the Arfordir Mynydd y Wylfa – Trwyn Penrhyn Wildlife Site are shown in table 9-6.

Table 9-1 Predicted maximum NO_x and SO₂ concentrations at Arfordir Mynydd y Wylfa – Trwyn Penrhyn Wildlife Site

Pollutant	Averaging period	Critical level (CLE) (µg/m ³)	PC (µg/m ³)	PEC (µg/m ³)	PC/CLE (%)	PEC/CLE (%)	Further consideration required?
NO _x	Annual mean	30	0.29	9.16	1%	31%	No
	Maximum 24-hour mean	200	2.62	20.35	1%	10%	No
SO ₂	Annual mean	20	0.001	3.34	<0.01%	17%	No

9.2.19 The predicted annual mean NO_x and SO₂ concentrations at Arfordir Mynydd y Wylfa – Trwyn Penrhyn Wildlife Site are well below the relevant critical levels. The predicted maximum 24-hour mean NO_x concentrations were also considerably lower than the relevant critical level. The predicted concentrations are also below the criteria for identifying where further consideration would be required by an ecologist (see the criteria adopted for Wildlife Sites in paragraph 9.4.66 of chapter 9 of the Environmental Statement).

9.2.20 On this basis, the predicted NO_x and SO₂ concentrations due to emissions from the plant and machinery is categorised as a not significant effect at Arfordir Mynydd y Wylfa – Trwyn Penrhyn Wildlife Site.

9.2.21 The predicted nitrogen and acid deposition rates at Arfordir Mynydd y Wylfa – Trwyn Penrhyn Wildlife Site are set out in table 9-7 and table 9-8, respectively.

Table 9-2 Predicted maximum nutrient nitrogen deposition at Arfordir Mynydd y Wylfa – Trwyn Penrhyn Wildlife Site

Vegetation type	Nutrient nitrogen deposition (kgN/ha/year) ¹						Further consideration required?
	Critical load (CLO)	Existing deposition	PC	PEC	PC/CLO (%)	PEC/CLO (%)	
Short	10	13.0	0.030	13.05	0.3%	130%	No

Note 1: kgN/ha/year - Kilograms of nitrogen per hectare per year

Table 9-3 Predicted maximum acid deposition at Arfordir Mynydd y Wylfa – Trwyn Penrhyn Wildlife Site

Vegetation type	Acid deposition (keq/ha/year) ¹						Further consideration required?
	CLO (CLMaxN)	Existing acid deposition (N + S)	PC	PEC	PC / CLO (%)	PEC / CLO (%)	
Short	1.02	1.1	0.002	1.10	0.2%	108%	No

9.2.22 The results show that at Arfordir Mynydd y Wylfa – Trwyn Penrhyn Wildlife Site the PC for nitrogen and acid deposition rates are less than 100% of the relevant

critical loads. Therefore, the deposition rates are below the relevant criteria (see paragraph 9.4.66 of chapter 9 of the Environmental Statement) for identifying a potentially significant effect at these sites which requires further consideration by an ecologist.

- 9.2.23 On this basis, the nitrogen and acid deposition due to emissions from the plant and machinery is categorised as a not significant effect at Arfordir Mynydd y Wylfa – Trwyn Penrhyn Wildlife Site.

9.3 Implications for Environmental Statement Effects

- 9.3.1 The two main issues raised in the consultation responses that could have implications for the assessment of effects presented in chapter 9 (air quality) and chapter 19 (cumulative effects) are:

- air quality information on predicted emissions for other relevant developments (including DCO proposals) on ecological receptors; and
- inclusion of Arfordir Mynydd y Wylfa – Trwyn Penrhyn Wildlife Site (Wylfa Head) as an ecological receptor.

- 9.3.2 As discussed above, there is not expected to be a direct temporal overlap between the SPC works and the DCO proposals, therefore there would not be any significant cumulative or in-combination effects.

- 9.3.3 In relation to inter-project cumulative effects, three projects have potential spatial and temporal overlaps with the SPC works (AN08, AN20 and AN25). Given the small size and/or distance of these projects in relation to the SPC works, and the concentrations and deposition rates predicted for the SPC works, the likelihood of exceeding any thresholds requiring further ecological assessment was considered to be extremely low. Therefore, there would not be any significant inter-project cumulative effects.

- 9.3.4 The results and analysis presented in this chapter demonstrate that the potential dust effects and air quality effects at Arfordir Mynydd y Wylfa – Trwyn Penrhyn Wildlife Site are not significant.

- 9.3.5 Other issues raised in the consultation responses and the Horizon responses set out in this chapter do not affect or alter the assessment of effects that were presented in chapter 9 of the Environmental Statement.

- 9.3.6 No additional mitigation over and above that specified in the Environmental Statement is required.

9.4 Implications for Environmental Statement Residual Effects

- 9.4.1 The comments received during consultation and addressed in this addendum do not have any implications for the residual effects reported in the Environmental Statement, as no significant effects have been identified.

9.5 Conclusion

9.5.1 This chapter of the addendum has addressed the comments raised during consultation in relation to air quality, including:

- air quality information on predicted emissions for other relevant developments (including DCO proposals) with regard to the potential for significant effects at specific ecological receptors;
- concerns raised with regard to dust and air quality impacts and monitoring at two specific residential properties close to the SPC Application Site;
- inclusion of Arfordir Mynydd y Wylfa – Trwyn Penrhyn Wildlife Site (Wylfa Head) as a receptor within the air quality assessment;
- specific requests relating to air quality monitoring and alert thresholds;
- consideration of combined air quality and noise effects;
- observations on study area and assessment criteria; and
- a proposed condition in relation to the approval of the CoCP with the local authority.

9.5.2 Based on the additional information presented in this addendum, there are no changes to the residual effects presented in the Environmental Statement and all air quality effects associated with the SPC works are not significant. No additional mitigation is required.

10 Noise and vibration

10.1 Introduction

- 10.1.1 This chapter summarises and addresses the issues raised by the Regulation 22 request, as well as other comments made on the application, in relation to noise and vibration.
- 10.1.2 The chapter outlines any changes to the proposed development and/or the associated assessment as a result of the consultation responses and offers points of clarity where deemed necessary.

10.2 Key Issues from Statutory Consultation

- 10.2.1 Responses highlighted concerns regarding noise impacts at Felin Gafnan and Tyddyn Sidney residential properties. Whilst not a noise specific issue concerns were also raised regarding the impact of the proposed works on the Tern colony at the Anglesey Terns SPA. This has been addressed in more detail in the HRA Addendum submitted alongside this Addendum.

Horizon response

- 10.2.2 An assessment of noise and vibration was undertaken using the methodology and approach agreed with the IACC during pre-application consultation and set out in the Noise and Vibration Modelling and Assessment Methodology [DCRM No: HNP-S5-PAC-REP-00014] developed through consultation with the IACC. The assessment includes consideration of Felin Gafnan and Tyddyn Sidney residential properties and their respective distances to the SPC Application Boundary in the determination of the noise and vibration impacts, and required additional mitigation measures.
- 10.2.3 No significant noise effects are predicted at Felin Gafnan or Tyddyn Sidney as a result of the SPC Proposals. In addition, noise and vibration monitoring and control measures will be set out in the noise and vibration management strategy of an amended CoCP, subject to a pre-commencement condition, and are in-line with good practice.
- 10.2.4 It should be noted that as a result of the restriction of the operation of plant and machinery on land to the west of the Afon Cafnan, between March 7th and August 31st, works to the west of Afon Cafnan will be intensified to compensate for the cessation. This intensification of works has been re-modelled (see Appendix 10-07 of volume 3 of this Addendum) and shown that in accordance with the best practice measures outlined within the CoCP, residual noise effects at nearby residential properties such as Felin Cafnan and Tyddyn Sydney are no worse than currently identified in Chapter 10 of the original Environmental Statement. It is anticipated that this will be secured through an appropriate planning condition.

- 10.2.5 All other specific comments made in relation to noise and vibration have been addressed within the Responses Table which can be found in Appendix 05-04 of Volume 3 of this Addendum.

10.3 Implications for Environmental Statement Effects

- 10.3.1 An assessment of noise and vibration was undertaken using the methodology and approach agreed with the IACC during pre-application consultation. This assessment considers Felin Gafnan and Tyddyn Sidney residential properties.
- 10.3.2 As is highlighted at 10.2.5, following the further noise modelling, the restriction of the operation of plant and machinery west of the Afon Cafnan would have no significant change in the conclusions of this chapter.
- 10.3.3 Therefore, there are no implications for the effects identified in the Environmental Statement as a result of the comments received.
- 10.3.4 Following the decision to remove the watercourse diversion from the SPC Proposals, this has also had the effect of removing the moderate adverse effect (and therefore significant effect) at a residential receptor in the vicinity of the works. The removal of the watercourse diversion was not incorporated into the re-modelling undertaken for the intensification of works noted above, as the timing of the decision was taken post modelling. However, the noise propagation plans shown on figures 10-1 to 10-12 of the Environmental Statement show that the significant noise effects arise from works at the watercourse diversion, and thus its removal from the SPC Proposals also leads to the removal of the moderate adverse noise effect.

10.4 Implications for Environmental Statement Residual Effects

- 10.4.1 The revised noise modelling does not identify any significant residual noise effects at Felin Gafnan or Tyddyn Sidney residential properties.
- 10.4.2 There are no implications for the residual effects identified in the Environmental Statement as a result of the comments received.

10.5 Conclusion

- 10.5.1 No additional information or changes to the residual effects identified in the Environmental Statement are required due to the comments received.

11 Soils and geology

11.1 Introduction

- 11.1.1 This chapter summarises and addresses the issues raised by the Regulation 22 request, as well as other comments made on the application, in relation to soils and geology.
- 11.1.2 The chapter outlines any changes to the proposed development and/or the associated assessment as a result of the consultation responses and offers points of clarity where deemed necessary.

11.2 Key Issues from Statutory Consultation

- 11.2.1 No key issues were raised in relation to soils and geology as part of the planning application consultation. Other comments have been addressed within the Responses Table which can be found in Appendix 05-04 of Volume 3 of this Addendum.

11.3 Implications for Environmental Statement Effects

- 11.3.1 There are no implications for the effects identified in the Environmental Statement as a result of the comments received.

11.4 Implications for Environmental Statement Residual Effects

- 11.4.1 There are no implications for the residual effects identified in the Environmental Statement as a result of the comments received.

11.5 Conclusion

- 11.5.1 No additional information or changes to the residual effects identified in the Environmental Statement are required due to the comments received.

12 Conventional waste and materials management

12.1 Introduction

- 12.1.1 This chapter summarises and addresses the issues raised by the Regulation 22 request, as well as other comments made on the application, in relation to conventional waste and materials management.
- 12.1.2 The chapter outlines any changes to the proposed development and/or the associated assessment as a result of the consultation responses and offers points of clarity where deemed necessary.

12.2 Key Issues from Statutory Consultation

- 12.2.1 Responses highlighted concerns regarding the absence of a worst-case scenario in relation to the overall development and the risk that waste produced as a consequence of the SPC development could affect capacity locally.

Horizon response

- 12.2.2 With regard to the absence of a worst-case scenario it should be noted that the assessment methodology adopted has been based on the known mineral and waste tonnages established from a variety of sources. As such there is no need to assume a worst-case in instances where there is sufficient empirical detail to allow a robust assessment to be undertaken.
- 12.2.3 All other specific comments made in relation to conventional waste and materials management have been addressed within the Responses Table which can be found in Appendix 05-04 of Volume 3 of this Addendum.

12.3 Implications for Environmental Statement Effects

- 12.3.1 There are no implications for the effects identified in the Environmental Statement as a result of the comments received.

12.4 Implications for Environmental Statement Residual Effects

- 12.4.1 There are no implications for the residual effects identified in the Environmental Statement as a result of the comments received.

12.5 Conclusion

- 12.5.1 No additional information or changes to the residual effects identified in the Environmental Statement are required due to the comments received.

13 Surface water and groundwater

13.1 Introduction

- 13.1.1 This chapter summarises and addresses the issues raised by the Regulation 22 request, as well as other comments made on the application, in relation to surface water and groundwater.
- 13.1.2 The chapter outlines any changes to the proposed development and/or the associated assessment as a result of the consultation responses and offers points of clarity where deemed necessary.

13.2 Key Issues from Statutory Consultation

- 13.2.1 Responses highlighted concerns regarding the level of detail contained within the submitted Flood Consequences Assessment, the detail contained in the assessment of effects on Tre'r Gof SSSI and Cae Gwyn SSSI and the level of detail contained within the Assessment of Effects as well as the criteria used for the assessment.

Flood consequences assessment

Key Issues

- 13.2.2 Responses highlight that greater detail is required of the assessment which has been undertaken and should demonstrate that any possible amendments to the site topography/flow paths will not result in floodwater being directed to different catchments.

Horizon response

- 13.2.3 The assessment of fluvial and pluvial flood risk presented in the Flood Consequence Assessment (FCA) is based on publicly available information from NRW in the form of fluvial and surface water flood maps and detailed hydraulic modelling undertaken by Horizon of the baseline and proposed changes as a result of the development.
- 13.2.4 High-resolution topographical details such as the presence of boundary walls and cloddiau are not explicitly modelled. This is true of both the NRW flood mapping, the flood mapping produced by Horizon and most if not all hydraulic models built for flood mapping purposes, typically because at the scale of the modelling undertaken there is insufficient data on every feature to provide certainty on the robustness of the feature or its permeability to flow and influence therefore on flood risk. It is likely for example that, by their very nature, cloddiau will be permeable to overland flow with very little areas of ponding located behind as a result. The effect of this is that the modelled results, to a degree, already allow for the removal of these features.

13.2.5

- 13.2.6 A more detailed explanation of the modelling undertaken by Horizon, as well as the amount data used to inform the Flood Consequences Assessment, can be found in the Responses Table which can be found in Appendix 05-04 of Volume 3 of this Addendum.
- 13.2.7 It has been noted that NRW has requested information on the effect of the watercourse realignment in isolation from the rest of the proposed landform changes introduced by the Site Preparation and Clearance proposals. The rationale for this request is that the watercourse realignment is an early activity that is expected to occur before the granting of consent to the rest of the main site development. However, subsequent amendments to the proposed development have resulted in the removal of the watercourse realignment, hence, there is now no longer a requirement to provide the information requested by NRW. It will be noted that this now means that the FCA and its supporting evidence include an activity that is no longer included. The information presented in the FCA is considered to represent a worst-case scenario with the inclusion of this activity, which it will be noted from the FCA resulted in a mixture of small localised increases and decreases in flood depth within the boundaries of the SPC Application Site. Removal of this activity is expected to result in no local changes in flood levels, which under the FCA assessment methodology would result in a negligible impact on flood risk.

Tre'r Gof SSSI

Key Issues

- 13.2.8 Responses highlighted concerns that the issue of changes to the catchment to Tre'r Gof is not sufficiently addressed by the assessment. Furthermore, it is considered that the mitigation measures as presented, do not provide sufficient detail on the timing and magnitude of changes to surface water flow and groundwater recharge. There is also insufficient detail provided to link the assessment undertaken to the result presented. More discussion/evidence is required in particular with regard to impacts on the hydrological functioning of SSSIs.

Horizon response

- 13.2.9 The assessment of potential changes to the Tre'r Gof Catchment has been assessed at a level of detail commensurate with the proposed development.
- 13.2.10 Although clearance of stone walls and hedges can locally alter the direction of surface water movement this is only the case at a local scale. With regard to the Tre'r Gof Catchment, which covers an area of about 1km², such changes will not alter the extent of the catchment. Similarly, construction of site compounds can alter local surface water movement due to changes in recharge and drainage, but these changes are small in scale and very localised such that they do not influence catchment extent. As there are only three relatively small materials processing compounds within the Tre'r Gof Catchment, and none of them are in

locations where they could alter the catchment area, this is not a significant effect. All of these compounds are greater than 100m from the Tre'r Gof SSSI, and none are located adjacent to watercourses, as such the potential for any direct effects on the SSSI is very small.

13.2.11 With regard to potential changes to water quality within the catchment, these are detailed within the Environmental Statement. As indicated previously the nature of the works within Tre'r Gof Catchment are very limited, with the potential for changes to water quality within the catchment also very limited.

13.2.12 The Tre'r Gof SSSI has been monitored and investigated and the data assessed to determine its hydrological functioning and a conceptual hydrogeological model has been prepared. The report provides details regarding the hydrological functioning of the SSSI and so is now included as appendix 13-06. The conclusions of the hydrological evaluation of the Tre'r Gof SSSI support the evaluation of no significant effects from SPC works.

Cae Gwyn SSSI

Key Issues

13.2.13 There is insufficient detail provided to link the assessment undertaken to the result presented. More discussion/evidence required in particular with regard to impacts on hydrological functioning of SSSIs.

Horizon response

13.2.14 The Cae Gwyn SSSI is located outside of the Wylfa Newydd Development Area at the headwaters of the Nant Caerdegog Isaf. There are therefore no streams that flow into Cae Gwyn. Furthermore, there are no compounds proposed adjacent to the SSSI and the only activities would be removal of trees and hedges within the Wylfa Newydd Development Area. These represent a very small percentage of the land area as can be seen from the habitat survey information within the Environmental Statement submitted with the planning application. The majority of the vegetation is grassland that would not be changed. There is therefore no potential for any significant effects on the hydrology of Cae Gwyn SSSI, and there would be no change to the rate or timing of recharge to Cae Gwyn SSSI.

13.2.15 The hydrological functioning of Cae Gwyn SSSI has been assessed following monitoring and investigation at and around the feature. The report provides details regarding the hydrological functioning of the SSSI and so is now included as appendix 13-07 of volume 3 of this Addendum. The conclusions of the assessment support the evaluation of no significant effects from the SPC works.

Assessment of effects

Key Issues

- 13.2.16 Responses highlighted concerns regarding the criteria for determining the value of identified receptors, the criteria for magnitude of change for hydrology, geomorphology and groundwater, the Summary of the Assessment of Effects and the level of detail contained within the Assessment of Effects.

Horizon response

- 13.2.17 Having reviewed the comments raised it is considered that the approach taken in assessing the effects on surface water and groundwater is robust and therefore remains unchanged. A detailed response to the specific comments raised can be found in Appendix 05-04 of Volume 3 of this Addendum.

Monitoring

Key Issues

- 13.2.18 Further consideration of mitigation/monitoring for Tre'r Gof in catchment in particular and for Cae Gwyn. Further details on environmental monitoring should be provided to ensure sufficient monitoring will be undertaken.
- 13.2.19 Planning conditions required to ensure the delivery of mitigation for the SSSI, to require monitoring of the SSSI during the process of construction/preparation to ensure that any changes to its condition can be identified early, and an agreed protocol initiated to prevent any further deterioration and indeed to reinstate the SSSI to the quality recorded before development commenced and reinstatement measures for the site to be agreed in the event that the NNB does not proceed.

Horizon response

- 13.2.20 Due to ongoing monitoring across the Wylfa Newydd Development Area there is a substantially greater data set available than at the time of the SPC application submission. These data have been further assessed and the updated baseline reports are included in appendix 13-01-A (surface water baseline report) and appendix 13-03-A (groundwater baseline report). Monitoring of the water environment will continue across the Wylfa Newydd Development Area to an agreed timeframe secured through a pre-commencement planning condition.
- 13.2.21 All other specific comments made in relation to surface water and groundwater have been addressed within the Responses Table which can be found in Appendix 05-04 of Volume 3 of this Addendum.

13.3 Implications for Environmental Statement Effects

- 13.3.1 The only implications of the comments above to the Environmental Statement assessment of effects are associated with the removal of the watercourse

realignment from the SPC scope of work. This will alter the flood risk assessment and the fluvial geomorphology assessment in the Environmental Assessment, but as this is a reduction in scope and means potential effects are removed this does not materially affect the outcome of the assessment.

13.4 Implications for Environmental Statement Residual Effects

- 13.4.1 The comments above do not affect the identified residual effects. There remain no significant residual effects on groundwater or surface water from the Site Preparation and Clearance proposals.

13.5 Conclusion

- 13.5.1 Although a number of issues have been raised regarding the effects of the SPC Proposals on the surface water and groundwater regime, these do not change the assessment. The scope of works is reduced due to removal of the watercourse realignment from the scheme.

14 Terrestrial and freshwater ecology

14.1 Introduction

- 14.1.1 This chapter summarises and addresses the issues raised by the Regulation 22 request, as well as other comments made on the application, in relation to Terrestrial and freshwater ecology.
- 14.1.2 The chapter outlines any changes to the proposed development and/or the associated assessment as a result of the consultation responses and offers points of clarity where deemed necessary.

14.2 Key Issues from Statutory Consultation

- 14.2.1 Responses highlighted concerns relating to terrestrial and freshwater ecology which included the following topics:
- additional information on the removal of INNS;
 - additional details on Schedule 1 bird species mitigation measures;
 - additional detail on the proposed red squirrel mitigation measures;
 - additional detail on possible impacts to black-headed gull; chough; and terns;
 - additional detail on possible impacts to the Arfordir Mynydd y Wylfa – Trwyn Penrhyn Wildlife Site;
 - additional justification regarding the size of mitigation areas;
 - additional details on the possible impacts to Holy Island SPA;
 - additional detail on possible impacts of predator displacement;
 - additional detail on impacts to fungi-rich grassland;
 - additional detail on impacts to great crested newt (GCN).

Information on the removal of INNS

Key Issues

- 14.2.2 Responses requested additional information regarding the removal of INNS from within the SPC Application Site.

Horizon response

- 14.2.3 To address the request for a report to address INNS, Horizon suggest that a planning condition is imposed whereby a Biosecurity Risk Assessment and Method Statement is prepared, reviewed and approved for use by the IACC. It is the intention that this document would be produced by the Principal Contractor

prior to commencement of SPC works in order that the targeted areas are as up-to-date as is reasonably practicable.

Schedule 1 Bird Species Mitigation Measures

- 14.2.4 Responses requested additional details on Schedule 1 bird species mitigation measures, including the review and approval of Risk Assessment Method Statement by the LPA in consultation with NRW.

Horizon response

- 14.2.5 During SPC works, any vegetation clearance during the breeding bird period (March to August inclusive) would be supervised by an Ecological Clerk of Works (ECoW). If a nest of a Schedule 1 species of bird is recorded and it is considered there is potential for works in its vicinity to cause disturbance, such works would cease until the nest was no longer in use. The ECoW would determine a buffer zone around an active nest within which works could not take place. The ECoW would also monitor the use of the nest to determine when it was no longer active. This is in accordance with paragraph 11.2.22 of the SPC CoCP, submitted with the TCPA for the SPC works. By following this described approach, it is not proposed to inform NRW or submit a specific RAMS to address such a situation.
- 14.2.6 The baseline data suggest that the most likely Schedule 1 species to be present is barn owl. In the event that a barn owl nest or roost is disturbed then, in addition to ceasing works, barn owl boxes would be erected in suitable numbers and in locations determined by the ECoW. These would be on land owned by Horizon to secure their long-term retention and maintenance, and in locations which would be unaffected by any future works associated with the Wylfa Newydd Project.

Red Squirrel Mitigation

- 14.2.7 Responses requested additional detail on the proposed red squirrel mitigation and compensation measures, including RAMs, which is suggested are approved by LPA in consultation with NRW.

Horizon response

- 14.2.8 Measures to protect red squirrels and their dreys are detailed in Paragraph 11.2.16 of the SPC CoCP and reference is made to the provision of nesting boxes and supplementary feeding. It is considered that the measures contained in the SPC CoCP are adequate to negate the need for a specific RAMS to be produced and agreed by the LPA. However, it is acknowledged that additional details would be useful to demonstrate how the other measures proposed would be implemented.
- 14.2.9 It is therefore suggested that additional details are provided regarding how the installation of ten red squirrel nesting boxes will take place. The boxes would be installed throughout the woodland in Dame Sylvia Crowe's Mound and would be

as widely spaced as possible. They would be positioned away from the edges and existing pathways through the woodland to minimise the effects of disturbance. They would be positioned under the supervision of a suitable knowledgeable ecologist, experienced in red squirrel ecology.

14.2.10 The supplementary feeding of squirrels would be carried out in accordance with the measures suggested by the JNCC in the 2004 publication¹ on feeding the species. This guidance suggests that a variety of foods should be provided every three to four days rather than having food constantly available. It is also suggested that sources of calcium are important for the species, which will also be provided in the form of cuttlefish bones at feeding stations. It is suggested that ten small feeding stations would be an appropriate number for the population present. These would be positioned in the centre of the woodland to ensure no increased risk of predation or injury via vehicle movements due to squirrels being encouraged to cross open ground. These would also be built under the supervision of an ecologist experienced in working with the species. Filling of feeding stations will be completed by the ECoW for the duration of the SPC works, with the need to continue with feeding reassessed at the end of the SPC programme of works.

Impacts on Chough

14.2.11 Responses received suggest that there is an unacceptable impact on chough and that impacts on chough during SPC works are inextricably linked to land-use proposals for the Site Campus element of the Wylfa Newydd Project, and the resulting recreational use of Wylfa Head. The National Trust therefore questions whether proposed mitigation for likely effects from works progressed under the application for development consent for the Wylfa Newydd Project should be brought forward to the SPC stage.

Horizon response

14.2.12 The SPC Environmental Statement concluded that impacts on chough would be negligible based on the following conclusions:

- nesting site and core foraging habitat at Wylfa Head is outside the SPC Application Site;
- chough foraging habitats within the SPC Application Site would not be lost; and
- SPC activities are assessed as having no greater potential to disturb chough than typical agricultural activities (and even then, only within the SPC Application Site – not at Wylfa Head).

¹ JNCC. 2004. *Advice Note: Supplementary Feeding*. Ref No. UKRSG C1. [online] Available at http://jncc.defra.gov.uk/pdf/rs_supfeed_v5.pdf. Accessed March 2018.

- 14.2.13 Horizon's position is that, because chough will be negligibly affected by the SPC works, effects resulting from construction and operation of the Site Campus will therefore be assessed as part of the application for development consent for the Wylfa Newydd Project. It therefore is also unnecessary to consider bringing forward the proposed mitigation for effects arising from construction and operation of the Site Campus, into the SPC phase of the Wylfa Newydd Project. Ultimately under either application, all possible future development scenarios would conclude with the restoration of habitats and landscape features within the proposed Site Campus area, either through implementation of the scheme of restoration for SPC or the Landscape and Habitat Management Strategy (progressed after the application for development consent for the Wylfa Newydd Project).
- 14.2.14 Other comments received relating to chough and the potential for effects on populations at Holy Island SPA are therefore also discounted as no effects are predicted on the Wylfa Head pairs during SPC works. It should also be recognised that, even if negative effects were predicted, the potential for effects to significantly alter the SPA population have been considered and disproved within the revised *Chough Baseline Report* (see appendix 14-25 of volume 3 of this Addendum).

Protected Species Receptor Sites

- 14.2.15 Responses requested further information regarding the specifications for the species receptors sites.

Horizon response

- 14.2.16 The details of the specifications for the mitigation areas can be found in ES Figures 14-1 and 14-12 submitted Environmental Statement.
- 14.2.17 Horizon is also preparing a Wylfa Head Management Plan detailing how the Arfordir Mynydd y Wylfa – Trwyn Penrhyn Wildlife Site will be managed for the valuable habitats and species for which it is designated. However, these works are not linked to the SPC TCPA Application or the associated EIA, and would be secured through the s106 process.

Impacts to the Arfordir Mynydd y Wylfa – Trwyn Penrhyn Wildlife Site

- 14.2.18 Responses raised concerns regarding inadequate assessment of effects on terns; black-headed gull; and the Arfordir Mynydd y Wylfa – Trwyn Penrhyn Wildlife Site.

Horizon response

- 14.2.19 The concerns of the RSPB regarding effects on terns are no longer considered to be relevant as the scope of the SPC works have changed to the extent that there is no potential for the species to be affected. Most notably, the operation of

plant and machinery associated with the SPC works on all land to the west of Afon Cafnan during the tern nesting season has been removed from the application.

Predator Displacement

14.2.20 Responses have raised concerns regarding the assessment of effects on predator displacement.

Horizon response

14.2.21 Surveys and desk studies to inform the SPC Environmental Statement confirmed the presence of otter and polecat within the SPC Application Site (see chapter 14 Terrestrial and freshwater ecology). Surveys indicate that the maximum number of polecat individuals known from the SPC Application Site was four and that otter was present in low numbers only. The presence of other predators such as stoat, weasel and fox within the SPC Application Site can be assumed given the nature of the habitats present. Annual site reports from the North Wales Wildlife Trust (NWWT) also confirm the presence of these species at the nearby Cemlyn Bay reserve, including instances of tern predation by otter and potentially stoat and weasel (e.g. see NWWT reports from 2011 to 2017).

14.2.22 Mustelids and other potential mammalian predators (e.g. fox and rat) may be displaced from affected areas of the SPC Application Site due to the removal of stone walls, hedgerows, trees and scrub. Theoretically, displaced mammals may increase their use of retained habitats in and around the Cemlyn Bay reserve and so increase the risk of predation of breeding terns and black-headed gulls (adults, eggs and chicks). The effects of predation can be significant, as was observed in 2017 following the abandonment of the tern colony following predation by otters. As such, there is a theoretical impact pathway to the Anglesey Terns SPA due to increased predation caused by predator displacement from the SPC Application Site.

14.2.23 Small mammals, notably rabbits, comprise the majority of prey for stoats, weasels and polecat (Harris & Yalden, 2008). The proposed SPC works does not involve topsoil stripping and so existing rabbit burrows/warrens would be retained. Although the proposed SPC works would require the above ground removal of hedgerows and scrub, the stumps and roots would be retained (i.e. they would not be grubbed out) and so would continue to provide a habitat for small mammals (e.g. voles). Furthermore, the post-works grassland sward structure would largely be consistent with the existing short-grazed sward structure and so the overall quality of habitat for small mammals would be unchanged. As such, it is considered unlikely that the proposed SPC works would significantly reduce the abundance of small mammals within the SPC Application site and so there would not be a large-scale displacement of mammalian predators as a result of reduced prey availability.

14.2.24 Stone walls have the potential to be used as denning sites by mustelids and so their removal may lead to the displacement of these animals into adjacent

habitats. However, not all potential denning sites will be removed from the SPC Application site. For example, rabbit warrens will not be affected as topsoil stripping is not proposed; stoats, weasels and polecat all make use of warrens as denning sites, with 49 to 80% of polecat dens being in these structures (Birks & Kitchener, 1999). Furthermore, the polecat records for the SPC Application Site (appendix 14-16 of Volume 3D) show that Dame Sylvia Crowe's Mound and Wylfa Head are important sites for this species; neither of these areas would be directly affected by the SPC works and so denning sites (and foraging resource) associated with these areas would be unaffected. As such, it is considered unlikely that the proposed SPC works would significantly reduce the abundance of denning sites within the SPC Application site and so there would not be a large-scale displacement of mammalian predators into the Cemlyn Bay reserve as a consequence.

- 14.2.25 The SPC Application site covers a large area and so is abutted by extensive areas of retained habitat, the majority of which is a great distance from Cemlyn Bay. Retained habitats suitable for mammalian predators include those at Dame Sylvia Crowe's Mound, Wylfa Head, Trwyn Pencarreg, existing farmland, and the newly created Notable Wildlife Enhancement Site located to the west of the SPC Application Site. It is therefore expected that any displaced mammalian predators would move into these adjacent areas where they would distribute themselves depending on available territory niches. The total area covered by Dame Sylvia Crowe's Mound and Wylfa Head alone is 26ha and so these retained sites are likely to make a significant contribution to polecat foraging requirements whilst also acting as a refuge for other displaced predators such as stoat and weasel. As such, it is considered unlikely that Cemlyn Bay would be the focus of displaced mammalian predators due to the wide abundance of suitable alternative habitats.
- 14.2.26 The Notable Wildlife Enhancement Site is an off-site enhancement area that has been secured by Horizon for the next 15 years (see figure 14-12 of the ES and the ecology and landscape management strategy in the CoCP). It is approximately 15ha and is designed to provide refuge and foraging opportunities for a wide range of species that will potentially be displaced from the SPC Application Site, including polecat and other mammalian predators. The Notable Wildlife Enhancement Area is designed principally to provide a strong corridor (in terms of cover and foraging opportunity) through which any displaced animals can move from the Wylfa Newydd Development Area and into adjacent habitats and the wider landscape. Although the Notable Wildlife Enhancement Site is principally designed to mitigate the effects associated with the Wylfa Newydd Development (i.e. extensive topsoil stripping), its presence would further reduce any possible reliance that mammalian predators displaced by the proposed SPC works might have on Cemlyn Bay as a foraging resource.
- 14.2.27 The tern and gull colony at Cemlyn Bay is likely to be a high-value foraging resource for mammalian predators. Polecat, stoat and weasel all have large ranges and are highly mobile meaning that Cemlyn Bay is within the theoretical range of most individuals within the SPC Application Site. Hypothetically, these individuals could already make use of Cemlyn Bay as a foraging resource and so

any displacement away from the SPC Application site would not automatically lead to a net-increase in predation. Until 2017, predation by mammals has not been reported by the Cemlyn Bay wardens as being a significant issue (e.g. see NWWT reports from 2011 to 2016), although increased monitoring of predators was recommended due to an increase in otter observations in 2016 (Holton & Wilde, 2016). During 2017, disturbance and predation of breeding terns and black-headed gull, predominantly by otters, caused total failure of the breeding colony with no chicks fledged (Wilde & Wright, 2017). Based on the information contained within the wardens' reports, it is considered that predation by otters is the principal issue affecting the tern and gull colony, with only limited records of predation by other mustelids. The proposed SPC works is predicted to result in a negligible effect to otter (see chapter 14 Terrestrial and freshwater ecology) and so displacement of this species from the SPC Application Site is not anticipated.

- 14.2.28 Based on the above, likely significant effects to the Anglesey Terns SPA as a result of increased predation by displaced mammalian predators are not expected.

Impacts on Chough

- 14.2.29 Responses raised concerns regarding the assessment of effects on chough, in particular the loss of grazing of habitats used for foraging by the species.

Horizon response

- 14.2.30 Environmental Impact Assessment methodology for ecological receptors was informed by the latest CIEEM guidelines (2016)² as well as current best practice guidance documents for the survey and assessment of specific species and habitats. In the case of chough, surveys followed recognised good practice bird survey methodologies as described by Bibby et al. (2000) and Gilbert et al. (1998)³; nest search methods described by Monaghan et al. (1989)⁴; chough-specific winter survey methods recommended by the RSPB; and the pursuit approach described by Whitehead et al. (2005)⁷.

- 14.2.31 Data on chough were gathered during breeding and over-wintering bird surveys together with information supplied by the Cross and Stratford Welsh Chough Project and Cofnod. Historic data were available for breeding seasons between 2007 and 2015. Breeding and wintering bird surveys were undertaken each year

² Chartered Institute of Ecology and Environmental Management (CIEEM). 2016. Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal. 2nd Edition. Winchester: Chartered Institute of Ecology and Environmental Management.

³ Monaghan, P., Uttley, J.D. and Okill, D. 1989. Terns and sandeels: seabirds as indicators of change in marine fish populations. *Journal of Fish Biol.* 35(Suppl A):339–340

⁴ Whitehead, S., Johnstone, I. and Wilson, J. 2005. Choughs *Pyrrhocorax pyrrhocorax* breeding in Wales select foraging habitat at different spatial scales: Capsule – At coarse spatial resolution breeding Choughs showed strongest selection for grazed habitats, while at a finer resolution they selected areas with shorter swards and more friable soils. *Bird Study.* 52(2): 193-203.

between 2009 and 2015. Chough-specific surveys took place between January and July 2017. Full details are provided in the latest version of the *Chough Baseline Report* (see appendix 14-25).

14.2.32 Based on the data obtained from the surveys outlined above, the SPC Environmental Statement concluded that impacts on chough would be negligible:

- nesting site and core foraging habitat at Wylfa Head is outside the SPC Application Site;
- chough foraging habitats within the SPC Application Site would not be lost; and
- SPC activities are assessed as having no greater potential to disturb chough than typical agricultural activities (and even then, only within the SPC Application Site – not at Wylfa Head).

14.2.33 Note that sheep grazing will continue to be used to manage habitats at Wylfa Head for the duration of the SPC works.

14.2.34 Due to the nature of the SPC works, even with a far less robust baseline and extreme application of the precautionary principle, it would be difficult to justify any conclusion other than 'negligible effects'.

Impacts on Fungi-rich Grassland

14.2.35 Responses requested further information regarding the fungi assemblages in the SPC Application Site.

Horizon response

14.2.36 Further fungi survey work was undertaken in autumn 2017 and the data were assessed alongside previous survey data from 2012, 2013 and 2016. The associated report is appended to this document (appendix 14-26 of volume 3 of this Addendum). The report identifies three areas considered to be nationally important (Areas 1-3) and three areas considered to be regionally important (Areas 4-6) with regard to their waxcap (*Hygrocybe* spp.) conservation value. These are shown in appendix 14-26. It is therefore considered that fungi should be scoped in as a receptor in the Environmental Statement for the SPC works.

14.2.37 The pathways for effects on fungi are considered to be limited to habitats loss only. The other potential effect pathway is changes in air quality affecting the overlying grassland habitats, but as stated in para 14.7.11 of the SPC Environmental Statement, with the application of embedded and good practice mitigation (see chapter 9 of the SPC Environmental Statement), this pathway is not predicted to result in any negative effects on any sensitive ecological receptors.

14.2.38 Of these six important fungi areas, Area 5 is the only one that would be affected by the SPC proposals, as it the only area that overlaps with the proposed contaminated land remediation works area and therefore habitat loss could

occur. However, it is considered fungi should be valued as high, based on the areas of national and regional importance in the study area as a whole.

- 14.2.39 Within Area 5, three species of Clavariaceae, 11 *Hygrocybe* spp., two *Entoloma* spp. and two *Geoglossaceae* spp. have been recorded (see Table 18 in appendix 14-26). None of these species have been exclusively found in Area 5. There would therefore be no loss in species diversity in the fungi study area as a result of any loss of fungi habitats in Area 5 due to SPC works.
- 14.2.40 The extent to which Area 5 will be affected by SPC works is dependent on the scale of the contaminated land remediation. The total loss of all fungi grassland within this area is not likely, but is assessed as the worst case scenario.
- 14.2.41 The loss of Area 5 (2.5ha), would represent 10.7% of the total area of nationally and regionally important areas in the study area. This is predicted to be a small magnitude of change. A minor adverse effect is therefore predicted which would not be significant and would not be mitigated for.

Reptile Receptor Area

- 14.2.42 Responses requested further information regarding the determination of the size of the reptile receptor area and its associated design.

Horizon response

- 14.2.43 While Horizon did previously undertake a reptile habitat suitability assessment of the SPC Application site in 2016 (primarily to help inform SPC scheduling works), these data were not included as part of the SPC TCPA Application because they are not necessary to demonstrate that the scheme of restoration for SPC would deliver a net increase in suitable reptile habitat. The SPC Environmental Statement states (in paragraph 14.7.84) that 7.1ha of suitable scrub habitat and 4.7ha of suitable rank grassland would be cleared during the SPC works, as well as the removal of suitable field boundaries. Given that the scheme of restoration (see Table 14.24 in the SPC Environmental Statement) include the replanting of 3.67ha of coarse grassland; 6.75ha of replanted tree or areas of coppice regrowth and 23.26 km of field boundaries all suitable for reptiles, the net increase in suitable reptile habitat is already evident.
- 14.2.44 Prior to the recent works undertaken to establish 5ha of high quality reptile habitat at the Mynydd Ithel Reptile Receptor Site, the area was predominantly close-grazed horse pasture and was therefore considered only likely to support small numbers of reptiles (if any) in peripheral areas. As a result, reptile population surveys were not considered appropriate at Mynydd Ithel. Instead, the potential carrying capacity of the Reptile Receptor Site was estimated based on its area and a conservative prediction of the quality of the reptile habitat that could be created.
- 14.2.45 The HGBI publication *Evaluating local mitigation/translocation: best practice and lawful standards* indicates that a medium density population of common lizard would be 40 individuals per hectare and a medium population density of adder

would be up to four individuals per hectare. Extrapolation of these figures suggests that, even on a precautionary assumption that the enhanced habitats would only be able to support medium populations, the 5ha reptile receptor site would have capacity for 200 common lizards and 20 adders. The proposed reptile receptor site is therefore considered to be more than sufficient for the low numbers of common lizard and adder assessed as being present within the SPC Application Site.

- 14.2.46 In the unlikely event that larger numbers of reptiles (i.e. more than 200 common lizard and 20 adder) are found during the SPC works, additional suitable receptor areas would need to be identified, such as the retained habitat at Wylfa Head.
- 14.2.47 Paragraph 14.7.85 of the SPC Environmental Statement acknowledges that the 5ha Reptile Receptor Site is smaller than the total area of suitable reptile habitat which will be lost and concludes a residual minor adverse effect. Should the scheme of restoration for SPC be implemented and managed, this reduction in habitat area would be a temporary effect, with the scheme leading to substantial net increases in suitable reptile habitat area and connectivity.
- 14.2.48 Prior to enhancement works taking place at the reptile receptor site the area was predominantly close-grazed horse pasture and was therefore considered only likely to support small numbers of reptiles (if any) in peripheral areas. Following the completion of works 5ha of high quality reptile habitat will establish (see ES Figure 14-1) and will continue to be managed for the remainder of the 15-year lease.

Management of Habitats at Wylfa Head

- 14.2.49 Responses requested further information regarding the proposed management of habitats at Wylfa Head in relation to chough.

Horizon response

- 14.2.50 The SPC Environmental Statement concluded that impacts on chough would be negligible:
- nesting site and core foraging habitat at Wylfa Head is outside the SPC Application Site;
 - chough foraging habitats within the SPC Application Site would not be lost; and
 - SPC activities are assessed as having no greater potential to disturb chough than typical agricultural activities (and even then, only within the SPC Application Site – not at Wylfa Head).
- 14.2.51 Due to the nature of the SPC Proposal, even with a far less robust baseline and extreme application of the precautionary principle, it would be difficult to justify any conclusion other than ‘negligible effects’.

14.2.52 Horizon is currently preparing a Wylfa Head Management Plan for Wylfa Head and the adjacent coastal strip to the east and is undertaking management works at Wylfa Head to enhance habitats for chough this winter. However, these works are not linked to the SPC TCPA Application or the associated EIA, and would be secured through the s106 process.

Impacts to Holy Island SPA

14.2.53 The NWWT has requested further information regarding the evidence supporting the lack of a functional linkage between chough in the SPC Application Site and the Holy Island SPA

Horizon response

14.2.54 Evidence supporting the lack of a functional linkage between chough in the SPC Application Site and the Holy Island SPA is provided within appendix 14-25 to this document. However, this issue is not considered relevant to the SPC Application given the effects from the SPC works on the Wylfa Head chough population are assessed as being negligible (see chapter 14 of the SPC Environmental Statement).

Management of Notable Wildlife Enhancement Area

14.2.55 The NWWT has requested further information regarding the proposed duration of management of the Notable Wildlife Enhancement Area and Reptile Receptor Area.

Horizon response

14.2.56 The duration of the leases for the Notable Wildlife Enhancement Site and the Reptile Receptor Site was set at 15 years in order to allow sufficient time for establishment of landscaping on the completed landform surrounding the proposed power station. The lease commenced mid-2017 and will terminate mid-2032, seven years after the current programme date for completion of the power station. Given that much of the landform creation and landscaping would be completed years in advance of the completion of the power station, based on the current programme, even if the programme were to slip by five years, the leases should be sufficient for the Notable Wildlife Enhancement Site and Reptile Receptor Site to serve their purposes.

GCN Data

14.2.57 The NWWT has requested clarification on the age of data used to inform the assessment of effects on GCN now, and in the event that SPC is delayed.

Horizon response

14.2.58 Pre-construction GCN surveys were undertaken by Jones Brothers Balfour Beatty in 2017 and are presented in appendix 14-27. These surveys reported

that there were no ponds within the SPC boundary which supported GCN, but that one metapopulation, based within Cae Gwyn SSSI remained.

14.2.59 All other specific comments made in relation to surface water and groundwater have been addressed within the Responses Table which can be found in Appendix 05-04 of Volume 3 of this Addendum.

14.3 Implications for Environmental Statement Effects

14.3.1 The implications for the Environmental Statement are that fungi have now been scoped in as a high value receptor to the assessment.

14.3.2 There were no other implications for the Environmental Statement.

14.4 Implications for Environmental Statement Residual Effects

14.4.1 The inclusion and subsequent assessment of effects on fungi found that the SPC works would result in a minor adverse residual effect due to habitat loss within one of the regionally important grassland fungi areas (Area 5). This effect would not be significant and no mitigation is proposed.

14.5 Conclusion

14.5.1 The clarity provided in Horizons responses relating to the issues raised in section 14.4, as well as the Responses table, are considered to appropriate to be able to close-out comments on the following issues:

- INNS;
- all Schedule 1 birds;
- red squirrels;
- chough;
- interaction with effects proposed cause by construction and operation of the site campus;
- Arfordir Mynydd y Wylfa – Trwyn Penrhyn Wildlife Site;
- Interactions with effects likely during works progressed following the application for development consent for the Wylfa Newydd Project;
- reptiles;
- great crested newts;
- Notable Wildlife Enhancement Area;
- terns;
- black-headed gull; and
- predator displacement.

14.5.2 For fungi, consultation has resulted in the receptor being included on the basis that up to 2.5ha of grassland supporting a regionally important assemblage of grassland fungi species could be lost. This would not adversely affect the integrity of the fungi assemblage in the study area as a whole and there would not be any loss of fungi species. However, a small magnitude change is predicted, and as fungi has been valued as being a high value receptor, an additional residual minor adverse effect is predicted. This would not be significant and no mitigation is presented.

15 Marine environment

15.1 Introduction

- 15.1.1 This chapter summarises and addresses the issues raised by the Regulation 22 request, as well as other comments made on the application, in relation to marine environment.
- 15.1.2 The chapter outlines any changes to the proposed development and/or the associated assessment as a result of the consultation responses and offers points of clarity where deemed necessary.

15.2 Key Issues from Statutory Consultation

- 15.2.1 No key issues were raised in relation to the marine environment as part of the planning application consultation. Other comments have been addressed within the Responses Table which can be found in Appendix 05-04 of Volume 3 of this Addendum.

15.3 Implications for Environmental Statement Effects

- 15.3.1 There are no implications for the effects identified in the Environmental Statement as a result of the comments received.

15.4 Implications for Environmental Statement Residual Effects

- 15.4.1 There are no implications for the residual effects identified in the Environmental Statement as a result of the comments received.

15.5 Conclusion

- 15.5.1 No additional information or changes to the residual effects identified in the Environmental Statement are required due to the comments received.

16 Landscape and visual

16.1 Introduction

- 16.1.1 This chapter summarises and addresses the issues raised by the Regulation 22 request, as well as other comments made on the application, in relation to landscaper and visual.
- 16.1.2 The chapter outlines any changes to the proposed development and/or the associated assessment as a result of the consultation responses and offers points of clarity where deemed necessary.

16.2 Key Issues from Statutory Consultation

- 16.2.1 Responses highlighted concerns regarding absence of a detailed site survey, definitions of the levels of significance and requested clarity on the restoration proposals.

Detailed Survey

- 16.2.2 Responses requested a detailed survey of the existing landscape components of the site, similar to the Tree Survey in Appendix 16-09 of the SPC Environmental Statement. It was requested that this also include all field and roadside boundaries, including stone walls, cloddiau, etc and all footpath routes, surfacing and means of access, including gates, styles etc., with the losses of these and all trees, groups of trees, woodland, hedgerows, etc. quantified and assessed in the LVIA.

Horizon response

- 16.2.3 This detailed survey is provided on drawing 60P08028_LSC_D_00025 and the requested information on quantities has been made available and can be found at Appendix 16-12 of Volume 2 of this Addendum. It should be noted that in addition, the Ecology chapter of the ES provides details of habitat losses, including lengths of hedgerow and areas of woodland. It would not however, be necessary to refer to these quantities in the Landscape and visual chapter of the ES because landscape and visual impact assessment (LVIA) is a predominantly qualitative process.

Definitions of Levels of Significance

- 16.2.4 Responses also requested definitions of the levels of significance due to the assertion that levels of significance of moderate and above are considered to be significant in EIA terms (i.e. material to the planning balance).

Horizon response

- 16.2.5 It is not considered appropriate to provide definitions for levels of significance. Significance levels have been assessed by considering assessments of the level

of sensitivity of a receptor to change, in conjunction with assessments of the magnitude of effect. Definitions for the components of sensitivity (value and susceptibility to change) and magnitude (size and scale, geographical extent and duration) are provided in the landscape and visual chapter 16 of the ES. This is consistent with the approach to assessing significance set out in chapter 6 of the ES, Overview of the assessment process.

- 16.2.6 It is confirmed that levels of significance of moderate and above are considered to be significant in EIA terms.

Restoration Proposals

- 16.2.7 Responses raised concerns over the lack of clarity on the longer-term restoration proposals via the proposed Habitat and Landscape Management Strategy, and highlighted a need to understand how the future strategy sits alongside the proposed SPC restoration scheme. It was highlighted that the cut off point for the initiation of restoration remains an unresolved issue particularly if future decision making is delayed. It was felt that uncertainty could place a large-scale planning blight into a landscape of national and international quality.

Horizon response

- 16.2.8 It is assumed that the comment relating to the 'Habitat and Landscape Management Strategy' refers to the 'Landscape and Habitat Management Strategy' currently being developed for the DCO. The 'Landscape and Habitat Management Strategy' does not form part of the SPC Application.
- 16.2.9 The timescale and trigger mechanism for the SPC Restoration Scheme is anticipated to be secured through a pre-commencement planning condition.
- 16.2.10 All other specific comments made in relation to surface water and groundwater have been addressed within the Responses Table which can be found in Appendix 05-04 of Volume 3 of this Addendum.

16.3 Implications for Environmental Statement Effects

- 16.3.1 There are no implications for the assessment of landscape and visual effects already set out in chapter 16.

16.4 Implications for Environmental Statement Residual Effects

- 16.4.1 There are no implications for the assessment of residual landscape and visual effects already set out in chapter 16.

16.5 Conclusion

- 16.5.1 A full response to comments made by consultees on landscape and visual issues has been provided, including minor clarifications on information set out in the ES.

17 Cultural heritage

17.1 Introduction

- 17.1.1 This chapter summarises and addresses the issues raised by the Regulation 22 request, as well as other comments made on the application, in relation to cultural heritage.
- 17.1.2 The chapter outlines any changes to the proposed development and/or the associated assessment as a result of the consultation responses and offers points of clarity where deemed necessary.

17.2 Key Issues from Statutory Consultation

- 17.2.1 Responses highlighted concerns regarding impacts on Cestyll Garden Registered Historic Park and Garden and its Essential Setting, as well as the protection of its historic features.

Protection of Historic Features

- 17.2.2 Cadw sought assurances as to how the protection of historic features relating to the Cestyll Garden Registered Historic Park and Garden and its Essential Setting (HLT 2), including those relating to the walled garden, valley garden, house site, historic entrance drive, boundary walls and entrance gateposts would be achieved.

Horizon response

- 17.2.3 As noted in paragraph 17.4.16 of chapter 17 (Cultural heritage), and as shown, for example, on figures 3-2, 17-18 and 17-19 of the Environmental Statement, Cestyll Garden is located outside the SPC Application Site. There would therefore be no physical effect on this heritage asset. It is through this heritage asset being located outside the SPC Application Site and the temporary fence that this heritage asset would be protected. To reduce the potential for accidental damage, a toolbox talk will be provided to those erecting the fence to provide them with an understanding of the sensitivity of Cestyll Garden.

Effects on Cestyll Garden

- 17.2.4 In their response on archaeology and historic environment, the IACC and GAPS requested additional information in relation to potential effects on Cestyll Garden (HLT 2) as detailed below:
- Visual change;
 - What will be the extent and nature of visual intrusion?
 - What will be the duration of this?
 - Noise change;

- What will be the extent and nature of noise intrusion (e.g. how would this be experienced?)
- What will be the duration of this?
- Vibration change;
- Not assessed – can it be confirmed that vibration would not be experienced
- Dust and air pollutant emissions
- What is the evidence that there will be no effect from this?
- Are mitigation measures (e.g. dust suppression) to be used
- Water quality/flows (effect on stream running through garden)
- What is the evidence that there will be no effect from this?
- Are mitigation measures (e.g. drainage/run-off management) to be used?

Horizon response

Visual change

- 17.2.5 As a consequence of the watercourse realignment being removed from the scope of the SPC works the construction programme will be reduced from 15 to 13 months.
- 17.2.6 Potential effect on Cestyll Garden (HLT 2), including potential effects resulting from visual intrusion such as construction activities, resulting from Site Preparation and Clearance activities are presented in paragraphs 17.7.11 and 17.9.5 and tables 17-15 and 17-19 of chapter 17 (Cultural heritage) of the Environmental Statement.
- 17.2.7 Due to the presence of the shelter belt around the valley garden (which is located outside the SPC Application Site and would be retained), the orientation of the garden with a Significant View to the north-northwest away from the SPC Application Site (please refer to figure 17-19 in the Environmental Statement) and local topography, views of construction activities to the east and south would be restricted to those which take place immediately adjacent to the valley garden. Due to the shelter belt, views of these activities would also be glimpsed. While construction activities would be visible in the views from the valley garden to the south-southwest, these would be distant and, due to topography, partially screened.
- 17.2.8 While the Significant View from the kitchen garden and site of Cestyll House (Asset 132) is to the north-northwest, away from the SPC Application Site (please refer to figure 17-19 in the Environmental Statement), due to the more open landscape and lack of intervening vegetation, views of construction activities would be possible from both here and the Essential Setting.
- 17.2.9 However, there would be no physical effect on Cestyll Garden, no activities would take place within the Essential Setting, activities would not be visible in Significant

Views from the valley garden or the kitchen garden and the site of Cestyll House (please refer to figure 17-19) or affect the visual relationship between the valley garden, the kitchen garden and the former site of Cestyll House (Asset 132). Based on this, and the temporary nature of the activities, the effects on Cestyll Garden have been assessed to be of Minor significance.

17.2.10 Potential visual effects on Cestyll Garden were also assessed and are presented in chapter 16 (Landscape and Visual). As noted in paragraph 16.6.8, as the Significant Views (please also refer to figure 17-19) look outwards towards the sea, there would be no views of the SPC Proposals. Due to this, and the lack of public access, visual receptors using these gardens were therefore scoped out of the assessment of visual effects.

Noise change

17.2.11 Potential effect on Cestyll Garden (HLT 2), including potential effects resulting from noise intrusion, from Site Preparation and Clearance activities are presented in paragraphs 17.7.11 and 17.9.5 and tables 17-15 and 17-19 of chapter 17 (Cultural heritage) of the Environmental Statement. As stated in paragraph 17.1.3, the assessment presented in chapter 17 (Cultural heritage) took into account the results of the noise assessment presented in chapter 10 (Noise and vibration). This included the information presented on figures 10-2 to 10-12, which present predicted noise contours for each month of the SPC works indicative programme. Please note that, as there are no noise-generating works scheduled to take place over months 11 to 15, contours were not prepared for these months. As noted above the as a consequence of the watercourse realignment being removed from the scope of the SPC works this 15-month period will be reduced to 13 months. This however does not affect the results of the noise assessment presented in the Environmental Statement.

17.2.12 As identified on figures 10-2 to 10-12, while the eastern extent of the Essential Setting of Cestyll Garden would experience temporary noise levels of up to 65dB LAeq, the noise levels experienced by the majority of the Essential Setting and the valley garden (where the existing tranquil noise environment contributes most significantly to the value of the heritage asset), the kitchen garden and the site of Cestyll House (Asset 132) would generally be below 60 dB LAeq. The magnitude of this effect has been assessed to be small and the significance of effect minor adverse. This is supported by paragraph 43 of MPG11 which states that a noise level of 65dB(A) represents an appropriate limit for “open spaces which the public uses for relaxation”.

Vibration

17.2.13 As stated in paragraph 17.1.3, the assessment presented in chapter 17 (Cultural heritage) took into account the results of the assessment presented in chapter 10 (Noise and vibration). Please refer to chapter 10 (Noise and vibration) for more information on the vibration assessment method.

- 17.2.14 As it is primarily rural, the Essential Setting of Cestyll Garden was not assessed to contain any buildings or structures susceptible to vibration and therefore scoped out from any further assessment of vibration effects.
- 17.2.15 At its closest point, the Kitchen Garden and site of Cestyll House (Asset 132) are located approximately 315m from the nearest location where a vibratory roller would be used (please refer to table 10-15 in chapter 10 (Noise) and figure Appendix A-2 in volume 3A of the SPC Environmental Statement). As they are located more than 200m from the nearest location where a vibratory roller would be used, using the method presented in chapter 10 (Noise) (see paragraph 10.4.96), the kitchen garden and site of Cestyll House (Asset 132) were scoped out from any further assessment of vibration effects.
- 17.2.16 At its closet point, the Valley Garden is located 190m from the nearest location where a vibratory roller would be used (please refer to table 10-15 in chapter 10 (Noise) and figure Appendix A-2 in volume 3A of the SPC Environmental Statement). Based on the method presented in chapter 10 (Noise) (please refer to table 10-22), the peak particle velocity mm/s is predicted to be <1.0mm/s. Based on this, the magnitude of impact has been assessed to be negligible and the significance of effect negligible.

Dust and air pollutant emissions

- 17.2.17 The predicted maximum oxides of nitrogen (NO_x) and sulphur dioxide (SO₂) concentrations at Cestyll Garden are shown in table 17-1.

Table 17-1 Predicted maximum NO_x and SO₂ concentrations at Cestyll Garden

Pollutant	Averaging period	Critical level (CLE) (µg/m ³)	PC (µg/m ³)	PEC (µg/m ³)	PC/CLE (%)	PEC/CLE (%)	Further consideration required?
NO _x	Annual mean	30	0.33	6.00	1%	20%	No
	Maximum 24-hour mean	200	8.39	19.71	4%	10%	No
SO ₂	Annual mean	20	0.001	1.91	<0.01%	10%	No

- 17.2.18 The predicted annual mean NO_x and SO₂ concentrations at Cestyll Garden are well below the relevant critical levels (please refer to table 9-14 in chapter 9 (Air quality) of the Environmental Statement). The predicted maximum 24-hour mean NO_x concentrations were also considerably lower than the relevant critical level. The predicted concentrations are also below the criteria for identifying where further consideration would be required by ecology (see the criteria adopted for ancient woodland and Wildlife Sites in paragraph 9.4.66 in chapter 9 of the Environmental Statement).
- 17.2.19 The predicted nitrogen and acid deposition rates at Cestyll Garden are set out in table 17-2 and table 17-3.

Table 17-2 Predicted maximum nutrient nitrogen deposition at Cestyll Garden

Vegetation type	Nutrient nitrogen deposition (kgN/ha/year) ¹					
	Critical load (CLO)	Existing deposition	PC	PEC	PC/CLO (%)	PEC/CLO (%)
Short	n/a	9.9	0.034	9.97	n/a	
Tall		16.0	0.067	16.03		

Note 1: kgN/ha/year - Kilograms of nitrogen per hectare per year

Table 17-3 Predicted maximum acid deposition at Cestyll Garden

Vegetation type	Acid deposition (keq/ha/year) ¹					
	CLO (CLMaxN)	Existing acid deposition (N + S)	PC	PEC	PC/ CLO (%)	PEC / CLO (%)
Short	n/a	0.85	0.0025	0.85	n/a	
Tall		1.32	0.0050	1.32		

17.2.20 There are no relevant nitrogen or acid critical loads available for vegetation within managed gardens such as Cestyll Garden. Therefore, it is not possible to assess the predicted increases in deposition against a critical load or the criteria set out in chapter 9 of the Environmental Statement. However, the predicted increases in acid and nitrogen deposition represent very small increases to the existing deposition rates, with the maximum increase equivalent to a 0.4% increase on existing deposition rates.

17.2.21 Due to construction lasting a relatively short period of time in the lifespan of woody species and the ability of the soil to buffer against acidification from increased nitrogen deposition the effects of changes in air quality on woody species are likely to be limited. Such effects are most likely to manifest as enhanced growth.

17.2.22 Species such as rhododendrons and azaleas may benefit from an increase in nitrogen and acidity levels due to their preference for soils with a low pH, between 4.5-6.0, and these species can also survive healthily down to pH levels around 3.5 although growth rates would be likely to be slowed. The current soil pH ranges between 4.75-5.91 which indicates that even with the potential for soil acidification, the pH is likely to remain within a healthy range for these types of plants.

17.2.23 Due to the small increase in deposition predicted, the short duration of works and the acidic nature of the soil at Cestyll Garden, it is therefore considered highly unlikely that such small changes in nitrogen or acid deposition would affect the vegetation within the managed garden of Cestyll Garden.

17.2.24 With regard to dust emissions from the SPC works and the application of mitigation measures, this was addressed in paragraph 4.1.15 of appendix 9-02 of the Environmental Statement which stated:

“...Cestyll Garden (Registered Historic Park and Garden Grade II) is adjacent to the SPC Application Boundary and has been identified as having vegetation that may be sensitive to dust deposition. Although not assessed specifically in this dust assessment, as its designation relates to its cultural heritage value rather than its ecological value, the application of mitigation measures applied to reduce the risks of dust effects at the assessed ecological receptors within or adjacent to the SPC Application Site (i.e. the Tre'r Gof SSSI and Cae Gwyn SSSI) would also reduce the risk of dust effects at Cestyll Garden...”

17.2.25 The mitigation measures to prevent and control the emissions of dust with regard to the protection of vegetation at human and ecological receptors (including the vegetation within Cestyll Garden) are set out in the SPC CoCP.

Water quality/flows

17.2.26 As stated in paragraph 17.1.3, the assessment presented in chapter 17 (Cultural heritage) took into account the results of the assessment presented in chapter 13 (Surface water and ground water).

17.2.27 As identified in paragraph 13.7.5 and 13.7.6 of chapter 13 (Surface water and ground water), the significance of effect of changes in water quality on surface water receptors, including Afon Cafnan which runs through Cestyll Garden (HLT 2) has been assessed to be of negligible magnitude and negligible or minor significance. Based on this no effect on Cestyll Garden is predicted from changes from water quality.

17.2.28 As identified in paragraph 13.7.7 of chapter 13 (Surface water and ground water), the significance of effect of changes in water availability on surface water receptors, including Afon Cafnan which runs through Cestyll Garden (HLT 2) has been assessed to be of negligible significance. Based on this no effect on Cestyll Garden is predicted from changes in flows.

17.2.29 As stated in 13.7.7 of chapter 13 (Surface water and ground water) as no significant effects were identified following the implementation of embedded and good practice mitigation measures (identified in paragraphs 13.4.20 and 13.4.21 of Chapter 13), no additional mitigation measures were required.

17.2.30 All other specific comments made in relation to surface water and groundwater have been addressed within the Responses Table which can be found in Appendix 05-04 of Volume 3 of this Addendum.

17.3 Implications for Environmental Statement Effects

17.3.1 None. The significance of effect for Cestyll Garden and other heritage assets would remain as assessed in the Environmental Statement.

17.4 Implications for Environmental Statement Residual Effects

- 17.4.1 None. The residual significance of effect for Cestyll Garden would remain as assessed in the Environmental Statement.

17.5 Conclusion

- 17.5.1 As presented in chapter 17 (Cultural heritage) there would be effects on Cestyll Garden (HLT 2) resulting from noise and visual intrusion. The magnitude of the change has been assessed to be negligible and the significance of effect minor adverse. A photographic survey of views from Cestyll Garden towards the location of the SPC works will be undertaken to record these views and to supplement the Level 2 Historic Landscape Survey identified as mitigation for the effects on Cemlyn Coastal Strip (HLT 9) (the HLT adjacent to Cestyll Garden) identified in paragraph 17.8.10 and table 17-19 in chapter 17 (Cultural heritage) of the Environmental Statement. However, this mitigation would not reduce the magnitude of change and the residual significance of effect has been assessed to be minor adverse, as identified in paragraph 17.9.5 of the ES.
- 17.5.2 Horizon will continue to work with GAPS to integrate the mitigation works proposed in the SPC with the ongoing archaeological investigations to avoid conflict.

18 Combined topic effects

18.1 Introduction

- 18.1.1 This chapter summarises and addresses the issues raised by the Regulation 22 request, as well as other comments made on the application, in relation to combined topic effects.
- 18.1.2 The chapter outlines any changes to the proposed development and/or the associated assessment as a result of the consultation responses and offers points of clarity where deemed necessary.

18.2 Key Issues from Statutory Consultation

- 18.2.1 The key issues raised from statutory consultation related to combined topic effects highlighted the potential for combined dust, air quality and noise emissions from the SPC works having a negative impact on local amenity and a lack of suitable mitigation to prevent the realisation of these effects.

Horizon response

- 18.2.2 Given the negligible air pollutant concentrations reported in Chapter 9 of the Environmental Statement, Chapter 9 of this Addendum and the Air Quality Technical Note in Appendix 09-05 Horizon do not consider the SPC works likely to have significant combined topic effects. Notwithstanding the above the proposed Community Resilience Contribution makes provisions for precautionary and necessary mitigation as required as a result of unforeseen adverse environmental effects and/or to enhance or capture the potential benefits of the development. It is anticipated that this will be secured through a section 106 agreement.
- 18.2.3 All other specific comments made in relation to Combined Topic Effects have been addressed within the Responses Table which can be found in Appendix 05-04 of Volume 3 of this Addendum.

18.3 Implications for Environmental Statement Effects

- 18.3.1 The number of potential combined topic effects reported in chapter 18 of the Environmental Statement is now reduced due to the removal of the watercourse diversion from the application which reduces both noise and air quality emissions to receptors in the vicinity of those works.

18.4 Implications for Environmental Statement Residual Effects

- 18.4.1 There are no implications for the assessment of identifiable residual effects already set out in chapter 18 of the submitted Environmental Statement. However, it should be noted that the creation of the proposed Community

Resilience Contribution, to be secured through the Section 106, would help mitigate combined topic effects for the local communities surrounding the Wylfa Newydd Development Area in the event that unforeseen adverse environmental effects occur.

18.5 Conclusion

- 18.5.1 The removal of the watercourse diversion will reduce the combined topic effects to receptors in the vicinity of that area of the SPC application site. In the event that unforeseen adverse environmental effects occur the proposed Community Resilience Fund will mitigate the impact of unforeseen significant combined topic effects.

19 Cumulative effects

19.1 Introduction

- 19.1.1 This chapter summarises and addresses the issues raised by the Regulation 22 request, as well as other comments made on the application, in relation to cumulative effects.
- 19.1.2 The chapter outlines any changes to the proposed development and/or the associated assessment as a result of the consultation responses and offers points of clarity where deemed necessary.

19.2 Implications for Environmental Statement Cumulative Effects

- 19.2.1 When considering the predicted effects of the SPC Works, and each of the other individual developments within the Project, it should be noted that upon submission of the SPC application a limited temporal overlap between the SPC Works and works associated with the Main Power Station Site and other elements of the wider Wylfa Newydd Project was reported within the ES. Specifically, it was determined that the only remaining SPC activities that may be undertaken alongside the DCO Works would be the re-alignment of the watercourse to the south of the SPC Application Site, and the demobilisation of the SPC contractor (removal of compounds etc). The assessment was undertaken and submitted on a worse-case scenario basis under the premise that the DCO application was submitted in August 2017 and that the 15-month SPC programme would not be completed in advance of the commencement of works of the wider DCO project.
- 19.2.2 Following design changes to the SPC Works the parameters under which the cumulative assessment was originally undertaken have changed and can be summarised as follows:
- The removal of the watercourse realignment from the SPC Works now reduces the overall programme from 15 to 13 months, as outlined in Chapter 3 of the ES Addendum;
 - The DCO application has not been made at the time of the submission of this information; and
 - The most optimistic programme for the submission, consideration of and determination of the DCO application followed by the discharge of any pre-commencement requirements would be a minimum of 22 months (taking into account the acceptance and pre-examination period; the statutory timeframes for examination and post-examination; the nature and complexity of the project; and any pre-commencement requirements).

- 19.2.3 Given the shorter SPC programme and the best-case DCO programme it is suggested that the SPC Works now achieve a temporal separation with works proposed under the DCO. This is still the case even when considering a conservative six-month programme for the discharge of SPC Pre-commencement conditions. It is therefore reasonable to conclude that a temporal link between substantive SPC Works and the Wylfa Newydd Project would not exist.
- 19.2.4 However, following concerns registered by IACC, the cumulative air quality effects at Cemlyn Bay SAC, Cae Gwyn SSSI and Tre'r Gof SSSI have been re-considered on a precautionary basis. The detailed reporting of this can be found in Appendix 09-05 of this Environmental Statement Addendum. The main conclusions remain that there are no cumulative effects from Air Quality on designated sites beyond those reported in the Environmental Statement.

19.3 Conclusion

- 19.3.1 The changes introduced to the works since the submission of the Site Preparation and Clearance TCPA application have not introduced any new cumulative effects not already reported in the Environmental Statement.
- 19.3.2 The shorter programme for the SPC Works and the current timetable for the DCO submission have established a temporal separation between the two developments.

20 Schedule of environmental commitments

20.1 Introduction

- 20.1.1 This chapter summarises and addresses the issues raised by the Regulation 22 request, as well as other comments made on the application, in relation to the schedule of environmental commitments.
- 20.1.2 The chapter outlines any changes to the proposed development and/or the associated assessment as a result of the consultation responses and offers points of clarity where deemed necessary.

20.2 Implications for Environmental Commitments

- 20.2.1 In response to consultee comments the restriction of works to the West of the Afon Cafnan during the Tern breeding period of (7 March to 15 August) has been incorporated into the proposals to ensure no disturbance to the terns at Cemlyn Bay SAC. Further detail on the wider implications of this mitigation can be found in Chapter 10 of this Addendum. It is anticipated that this mitigation will be secured through an appropriate planning condition.
- 20.2.2 The proposed section 106 agreement provides both planning and non-planning obligations designed to help minimise unforeseen environmental effects that may arise, as far as is reasonably practicable. However, these are not identified as environmental commitments in this chapter as the associated environmental effects have not been identified by the Environmental Statement or this Addendum.

20.3 Conclusion

- 20.3.1 The proposed stand-off to the West of the Afon Cafnan during the tern nesting season is an additional precautionary environmental commitment in order to address concerns raised by consultees. This is in addition to those set out in Chapter 20 of the submitted Environmental Statement.
- 20.3.2 The proposed s106 obligations, whilst not environmental commitments in their own right, will directly mitigate identified effects and address unforeseen environmental effects, as far as is reasonably possible.

21 Schedule of significant residual effects

21.1 Introduction

- 21.1.1 This chapter summarises and addresses the issues raised by the Regulation 22 request, as well as other comments made on the application, in relation to schedule of significant residual effects.
- 21.1.2 The chapter outlines any changes to the proposed development and/or the associated assessment as a result of the consultation responses and offers points of clarity where deemed necessary.

21.2 Implications for Environmental Statement Residual Effects

- 21.2.1 The submitted Environmental Statement contained one moderate adverse noise effect (significant) arising from the SPC Works. The primary cause of this noise effect was to implement the watercourse diversion, however, since the design has developed and this has now been removed from the application, this significant moderate adverse effect would not occur.
- 21.2.2 No other residual effects have arisen or reduced as a result of consultee comments or additional assessment undertaken to inform this Addendum.

21.3 Conclusion

- 21.3.1 There has been an overall reduction in significant effects since the submission of the application due to the removal of the watercourse realignment from the proposed development. Whilst additional mitigation and commitments are proposed through the s106, these commitments are to reduce unforeseen environmental effects.

CONTACT US:

If you have any questions or feedback regarding the Wylfa Newydd Project you can contact us on our dedicated Wylfa Newydd freephone hotline and email address, by calling on **0800 954 9516** or emailing **wylfaenquiries@horizonnuclearpower.com**

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Horizon Nuclear Power
Sunrise House
1420 Charlton Court
Gloucester Business Park
Gloucester, GL3 4AE

T +44 (0)1242 508508

www.horizonnuclearpower.com

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