



## Wylfa Newydd Project

### 8.6 Wylfa Newydd Code of Construction Practice

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## Executive Summary

The Wylfa Newydd CoCP, together with location-specific sub-CoCPs, sets out how construction activities will be managed and controlled in order to deliver the mitigation commitments arising from the project. Sub-CoCPs are provided for the Main Site, Marine Works, Off-Site Power Station Facilities, the Logistics Centre, the Park and Ride Facility and the A5025 Off-line Highway Improvements. These sub-CoCPs set out specific controls relevant to those locations which are not adequately covered under the Wylfa Newydd CoCP.

# 1 Introduction

## 1.1 General

- 1.1.1 This Wylfa Newydd Code of Construction Practice (CoCP), together with the associated location-specific sub-CoCPs, sets out general and topic-specific environmental requirements, standards and measures in accordance with the mitigation described in the Environmental Statement as well as requirements identified through the other assessment processes undertaken for the Wylfa Newydd Project, such as the Welsh Language Impact Assessment (Application Reference Number: 8.21); Health Impact Assessment Report (Application Reference Number: 8.19); Shadow Habitats Regulations Assessment Report (Application Reference Number: 5.2); Water Framework Directive Compliance Assessment (Application Reference Number: 8.26); and Equality Impact Assessment (Application Reference Number: 8.22). The series of controls within this CoCP and the sub-CoCPs serve to demonstrate the effective planning, management and control of all construction activities (and, in the case of temporary Associated Developments, the decommissioning,) associated with the Wylfa Newydd Project.
- 1.1.2 This CoCP and accompanying sub-CoCPs form part of the application for a Development Consent Order (DCO) for the Wylfa Newydd Project. It is intended that these documents will be the subject-matter of, and secured through, DCO Requirements.
- 1.1.3 This CoCP and the sub-CoCPs support the planning and delivery of the Wylfa Newydd Project in as sustainable, efficient and cost-effective a manner as possible.
- 1.1.4 Horizon Nuclear Power Wylfa Ltd, places safety, health and security as top priorities and central to the Wylfa Newydd Project. The construction of the Wylfa Newydd Project is planned to maintain those priorities across the safety and well-being of all employees, the natural and historical environment, stakeholders and the public in general.
- 1.1.5 For the purposes of this CoCP and the sub-CoCPs the term 'Horizon' refers to Horizon Nuclear Power Wylfa Ltd, its appointed representatives and the appointed construction contractors.

## 1.2 Responsibilities

- 1.2.1 Horizon is the company responsible for the delivery of the Wylfa Newydd Project, in whom the powers of the DCO would be vested. It is responsible for all of the works, which include overseeing and assuring the activities carried out by their contractors, and the coordination between contractors. Horizon has appointed representatives that will procure and project-manage the supply chain of the Wylfa Newydd Project. Those appointed representatives are suitably skilled and resourced to perform those duties on behalf of Horizon.
- 1.2.2 The appointed construction contractors will be contractually required to deliver the construction works in accordance with the terms of all the DCO Requirements, including this CoCP and relevant sub-CoCPs. Any contractor



will be responsible for demonstrating compliance through appropriate monitoring and audit controls recorded as part of their Construction Environmental Management Plan (CEMP) to meet Horizon's oversight and assurance requirements. All Wylfa Newydd Project contractors and sub-contractors will be required to adhere to these requirements. Refer to section 2.4 for further detail.

## **1.3 CoCP structure**

1.3.1 As the Wylfa Newydd Project covers a number of discrete locations, this overarching CoCP sets out the project-wide controls applicable to the following aspects of the Wylfa Newydd Project regardless of site/location:

- communications and community and stakeholder liaison;
- general site management;
- traffic and transport;
- public access;
- air quality;
- noise and vibration;
- waste and materials management (including soils and land contamination);
- water;
- ecology and landscape; and
- cultural heritage.

1.3.2 Sub-CoCPs are provided for each location and provide additional controls relevant specifically to that location. The sub-CoCPs that underpin this CoCP are:

- Main Power Station Site sub-CoCP (Application Reference Number: 8.7);
- Marine Works sub-CoCP (Application Reference Number: 8.8);
- Off-Site Power Station Facilities sub-CoCP (Application Reference Number: 8.9);
- Park and Ride sub-CoCP (Application Reference Number: 8.10)
- Logistics Centre sub-CoCP (Application Reference Number: 8.11); and
- A5025 Off-line Highway Improvements sub-CoCP (Application Reference Number: 8.12).

1.3.3 The requirements for the decommissioning of temporary Associated Developments (the Logistics Centre at Parc Cybi; the Park and Ride Facility at Dalar Hir; and, the Site Campus on the Wylfa Newydd Development Area) are covered in the relevant sub-CoCPs.

1.3.4 The construction of the Wylfa Newydd Project will be carried out in accordance with this CoCP and the relevant sub-CoCPs. In the event of a conflict between the CoCP and a sub-CoCP, the controls set out in the sub-CoCP will prevail.

## 2 Approach to environmental management

### 2.1 Introduction

- 2.1.1 Figure 2-1 outlines the overall approach to environmental management across the Wylfa Newydd Project. The following sections provide further detail to the various elements of the approach.

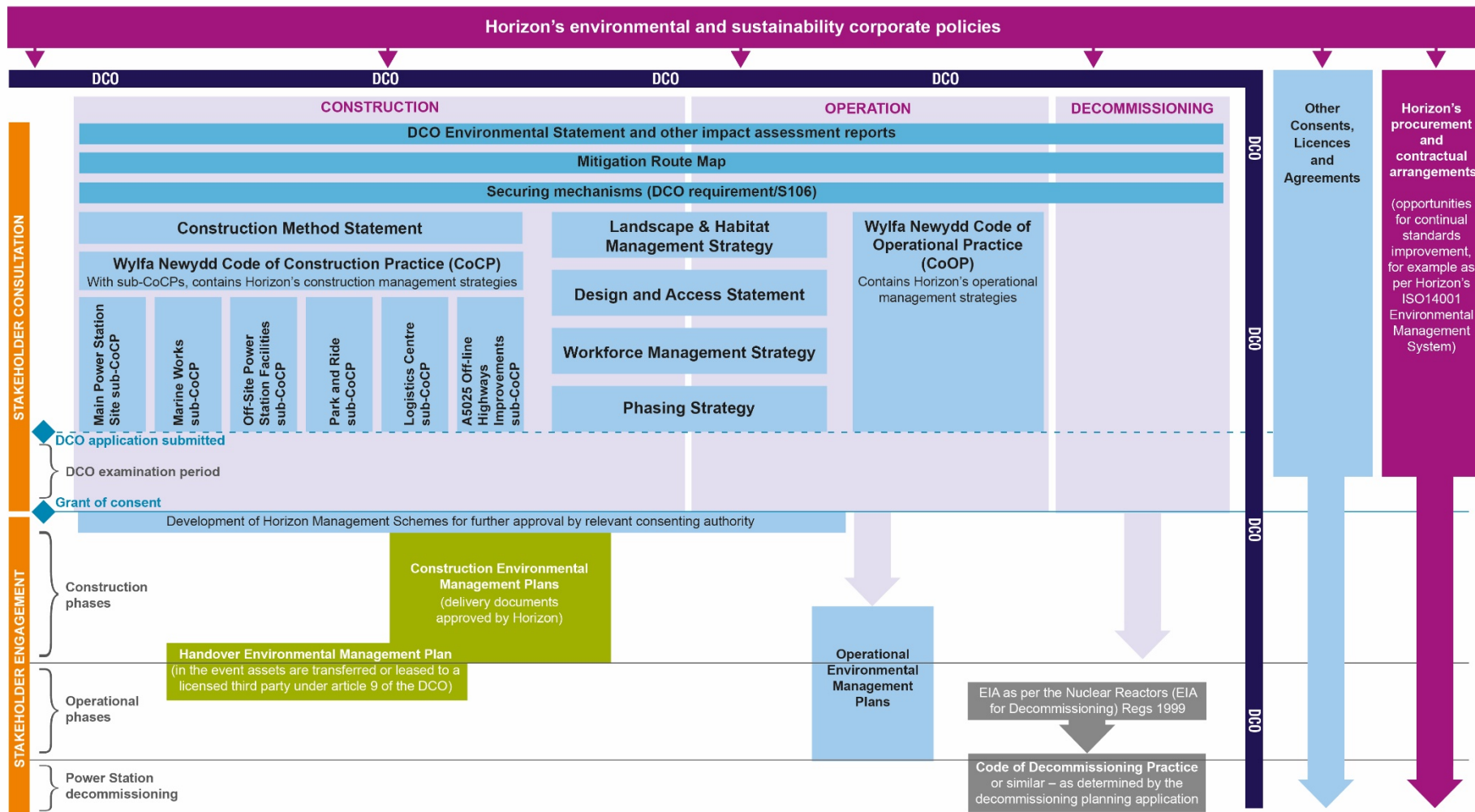
### 2.2 Environmental Impact Assessment

- 2.2.1 In preparation for the DCO application, an Environmental Impact Assessment (EIA) was carried out for the Wylfa Newydd Project and an Environmental Statement prepared in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009, as amended and the Marine Works (Environmental Impact Assessment) Regulations 2007.
- 2.2.2 Other assessments (such as Welsh Language Impact Assessment (Application Reference Number: 8.21), Health Impact Assessment Report (Application Reference Number: 8.19), Shadow Habitats Regulations Assessment (Application Reference Number: 5.2), Water Framework Directive Compliance Assessment (Application Reference Numbers: 8.26) and Equality Impact Assessment (Application Reference Number: 8.22) were carried out as part of the planning of the Wylfa Newydd Project and have informed relevant sections of this CoCP and sub-CoCPs where appropriate.
- 2.2.3 Through the assessment processes, mitigation that was identified with respect to construction-related environmental effects has been integral to developing this CoCP and the sub-CoCPs.
- 2.2.4 Horizon will be applying for various other consents and licences as outlined in Details of Other Consents, Licences and Agreements (Application Reference Number: 5.4).

#### ***Mitigation***

- 2.2.5 The term ‘mitigation’ describes committed measures used to prevent or reduce adverse environmental effects. Three types of mitigation were considered in the EIA undertaken for the Wylfa Newydd Project as follows:
- ‘Embedded mitigation’ includes all those measures to avoid or reduce environmental effects that are directly incorporated into the design of the development.
  - ‘Good practice mitigation’ contains measures that would occur with or without input from EIA feeding into the design process (for example, mitigation that represents established industry practice or would be undertaken to meet existing legal compliance).
  - ‘Additional mitigation’ measures are measures that have been identified through the EIA or other assessment processes to further reduce environmental effects.

**Figure 2-1 Approach to environmental management on the Wylfa Newydd Project**



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- 2.2.6 This approach accords with the Institute of Environmental Management and Assessment guidance [RD1], which describes ‘primary’ (embedded) mitigation, ‘secondary’ (additional) mitigation and ‘tertiary’ (good practice) mitigation.
- 2.2.7 Embedded mitigation integral to the Wylfa Newydd Project is secured within the project design information contained within ‘control’ documents, such as the Design and Access Statement (Application Reference Number: 8.2.1 to 8.2.3), Phasing Strategy (Application Reference Number: 8.29), and the Landscape and Habitat Management Strategy (Application Reference Number: 8.16), as displayed on figure 2-1.
- 2.2.8 Good practice and additional mitigation relevant to construction activities that make up the management strategies contained within this overarching CoCP (if project-wide), or the relevant sub-CoCP (in relation to specific locations), shown alongside the project design information in figure 2-1.
- 2.2.9 The Workforce Management Strategy (Application Reference Number: 8.5) is also the subject-matter of DCO Requirements and is a control document in its own right.
- 2.2.10 Other assessments such as the Health Impact Assessment Report (Application Reference Number: 8.19) and Welsh Language Impact Assessment (Application Reference Number: 8.21), as well as strategies that are not ‘control’ documents such as the Jobs and Skills Strategy (Application Reference Number: 8.3) and Workforce Accommodation Strategy (Application Reference Number: 8.4), provide information for the DCO application and are not secured by a DCO requirement in their entirety. Individual commitments are secured as appropriate, by way of entry in a control or ‘certified’ document secured by DCO requirement, such as this CoCP for example.
- 2.2.11 All mitigation measures across the Wylfa Newydd Project are described within a Mitigation Route Map (Application Reference Number: 8.14) accompanying the DCO submission, including their source reference and how delivery will be secured.

## **2.3 Code of Construction Practice**

- 2.3.1 This CoCP and the sub-CoCPs describe Horizon’s commitment to mitigating construction-related environmental effects, demonstrating that Horizon will control the potential impacts of the Wylfa Newydd Project on people, businesses and the natural and historical environment.
- 2.3.2 The content of this CoCP and the sub-CoCPs has been prepared with cognisance of Pre-Application Consultation with stakeholders and the local community, as well as ongoing focus groups with key stakeholders such as the Isle of Anglesey County Council (IACC) and Natural Resources Wales (NRW) during the development of the Wylfa Newydd Project and the associated assessment processes including the EIA.
- 2.3.3 This CoCP and the sub-CoCPs ‘management strategies’ contain sufficient detail to demonstrate that the mitigation described in the Environmental Statement will be secured.

- 2.3.4 Horizon is open to further refinement of this CoCP, the sub-CoCPs and other management strategies through the examination process, in response to comments from the Examining Authority and other parties. At the close of the DCO examination period, this CoCP and sub-CoCPs will be secured as approved documents as described in section 2.6.
- 2.3.5 Subsequent proposed revisions to this CoCP or sub-CoCPs would be submitted to and approved by the relevant planning authority. Upon approval of a revision by the relevant planning authority, the construction of the authorised development must be carried out in accordance with the revised CoCP or revised sub-CoCPs.

## **2.4 Construction Environmental Management Plans**

- 2.4.1 This CoCP and the sub-CoCPs set standards and measures that will manage and control the adverse environmental effects of construction.
- 2.4.2 The CEMP is a delivery document that details how the practical execution of the construction works will be planned, managed and controlled to meet the requirements of this CoCP and relevant sub-CoCPs, other necessary consents, legislation and common good practices.
- 2.4.3 The appointed construction contractors will be contractually required to prepare a CEMP to cover their works in accordance with this CoCP and relevant sub-CoCPs. The contractual requirement set out by Horizon Nuclear Power Wylfa Ltd is therefore one of the mechanisms that will secure the mitigation requirements set out in the Environmental Statement and other related impact assessments where the works are to be undertaken by a third party.
- 2.4.4 CEMPs will be reviewed and accepted by Horizon Nuclear Power Wylfa Ltd before the commencement of activities relevant to the construction works the CEMP covers.
- 2.4.5 CEMPs will be updated as and when required, but as a minimum CEMPs will be reviewed every six months to ensure the mitigation measures used reflect the changing needs of the works during construction and, for example, any relevant updates to industry guidance or legislation.

## **2.5 Environmental management system**

- 2.5.1 Horizon has developed and will construct the Wylfa Newydd Project under environmental management systems accredited to British Standard (BS) EN ISO 14001: Environmental Management [RD2].
- 2.5.2 Horizon will be compliant with, and maintain, ISO 14001 accreditation throughout the construction phase of the Wylfa Newydd Project. Accreditation will be periodically audited by accredited external bodies in line with ISO 14001 procedures.

## **2.6 Enforcement**

- 2.6.1 This Wylfa Newydd CoCP is a certified document and will be approved under article 76 of the draft Wylfa Newydd (Nuclear Generating Station) Order 201 ("draft DCO").
- 2.6.2 The Requirements in Schedule 3 of the draft Order state that the construction of the Wylfa Newydd Project (as described in Schedule 1 of the Draft Development Consent Order must be carried out in accordance with this CoCP and the relevant sub-CoCP applying to a specific site, unless otherwise agreed by the IACC as the relevant planning authority. The inclusion of *unless otherwise agreed by the IACC* enables Horizon scope to propose revisions to these documents, provided IACC is satisfied that the proposed revision is unlikely to give rise to any materially new or materially different environmental effects from those assessed in the Environmental Statement. Where a revision is approved, construction of the Wylfa Newydd Project must then be carried out in accordance with the revised Wylfa Newydd CoCP or relevant sub-CoCP.
- 2.6.3 In the event of conflict between the Wylfa Newydd CoCP and any sub-CoCP, The DCO Requirements are clear that the relevant sub-CoCP will prevail. This is reiterated in each of the site-specific requirements relating to sub-CoCPs in Schedule 3 of the draft DCO.
- 2.6.4 As Work No.s 3 (Site Campus), 6 (Park and Ride Facility) and 7 (Logistics Centre) will be operational during construction of the Power Station, the controls and measures relating to the operation of these facilities are included within the Wylfa Newydd CoCP, which must be complied with during the operation of those facilities.
- 2.6.5 Breach of terms of a DCO is a criminal offence under Section 161 of the Planning Act 2008. Therefore, non-compliance with any of the Requirements in Schedule 3, including the requirement to comply with the Wylfa Newydd CoCP and sub-CoCPs, will expose Horizon to potential enforcement action under the Act. As Horizon will not be undertaking all construction activities itself, it will ensure that contractors' comply with the controls in the draft DCO through the construction contractual arrangements.

### 3 Communications and community/stakeholder liaison management strategy

#### 3.1 General

- 3.1.1 Horizon's communications and community/stakeholder liaison management is based on the requirements set out in this CoCP and relevant sub-CoCPs.
- 3.1.2 Any site specific mitigation requirements to be implemented for communications and community/stakeholder liaison are described in section 3 of the relevant sub-CoCPs.

#### 3.2 Wylfa Newydd engagement framework

- 3.2.1 Figure 3-1 below shows the framework under which monitoring in relation to the Wylfa Newydd Project will be carried out and disseminated.

**Figure 3-1 Wylfa Newydd engagement framework**



- 3.2.2 Horizon will provide regular reports on monitoring of air quality, noise and water management to the Environment and Built Heritage sub-group; and on traffic to the Transport sub-group.
- 3.2.3 Horizon will provide monitoring in relation to socio-economic impacts through the relevant engagement sub-group identified above, for example, monitoring data from the Workforce Accommodation Management Service (WAMS) will be provided to the Accommodation and Tourism Services sub-group.
- 3.2.4 The engagement sub-groups above will provide information in relation to decisions and actions taken in relation to monitoring activity to the Community Liaison Group (CLG).



### ***Programme Board***

- 3.2.5 The Programme Board will be comprised of representatives from the following organisations:
- Horizon;
  - IACC;
  - Welsh Government;
  - NRW; and
  - Emergency Services.
- 3.2.6 It will be the responsibility of the Programme Board to consider the findings of monitoring reports and determine whether additional mitigation or further action is required. This could include the release of funds agreed through the Section 106. Any changes shall be consistent with any monitoring set out within this CoCP and secured by the DCO.
- 3.2.7 It will be the responsibility of the Programme Board to determine precise monitoring requirements and timing in relation to each of the topics identified in this section of the CoCP, following recommendations from the relevant Engagement sub-group.
- 3.2.8 The Programme Board shall also be responsible for reviewing the monitoring programme and making recommendations for any changes as appropriate, including whether monitoring in relation to any additional topics is required.
- 3.2.9 The Programme Board will also be responsible for the oversight of funding from Section 106.

### ***Engagement sub-groups***

- 3.2.10 Membership of the engagement sub-groups shall be agreed by the Programme Board.
- 3.2.11 The Programme Board shall also review the potential for amalgamating the engagement sub-groups, where there are common areas of interest and it would be expedient to do so.
- 3.2.12 It will be the responsibility of the engagement sub-groups to make recommendations on the frequency, location and method of monitoring and reporting for the topic areas within their remit. For example, the Transport sub-group shall consider the frequency and location of traffic surveys required following the start of construction; and the Environment and Built Heritage sub-group shall consider the frequency and location of noise monitoring.
- 3.2.13 The Programme Board shall have overall responsibility for determining appropriate monitoring activity, subject to recommendations from the engagement sub-groups.

### ***Approach to monitoring of socio-economic effects***

- 3.2.14 Horizon will provide monitoring in relation to socio-economic impacts across the Key Socio-Economic Study Area, unless otherwise agreed by the Programme Board.
- 3.2.15 A detailed list of socio-economic impacts related to the Wylfa Newydd Project that require monitoring will be agreed by the Programme Board. At this stage, it is anticipated that it could include:
- data on accommodation choices from the WAMS;
  - data on worker dependants from the WAMS;
  - data on language choices from the WAMS;
  - visitor surveys;
  - school enrolment data;
  - community safety indicators;
  - impact on public services, e.g. leisure;
  - supply chain performance from the Supply Chain Service (see below);
  - performance of the Employment and Skills Service (see below);
  - data on homelessness;
  - data on anti-social behaviour and crime;
  - health and well-being indicators, for example:
    - access to community healthcare services;
    - respiratory health;
    - accident hotspots;
    - housing market pressures (from the WAMS, see above);
    - recruitment rates from local communities (from the Supply Chain Service, see above);
    - safeguarding with regard to vulnerable adults and children; and
    - community lifestyles, behaviour, including community cohesion, and physical activity levels.
- 3.2.16 It is recognised that some of the above data would come from monitoring carried out by IACC and other organisations, including emergency services, e.g. school enrolment and homelessness, and that not all monitoring information would be provided by Horizon.
- 3.2.17 The Programme Board shall also agree performance indicators as appropriate, to assist in determining the effectiveness of the proposed mitigation strategies. This could include, for example, the percentage of contracts let to firms within the Key Socio-Economic Study Area, or percentage of local workforce.

### ***Relationship to the WAMS***

- 3.2.18 Horizon will establish a WAMS as set out in the Workforce Accommodation Strategy (WAS) (Application Reference: 8.4). The WAMS will include an Oversight Board which will include Horizon, IACC and Gwynedd County

Council. The WAS explains how the Oversight Board will consider regular monitoring reports collected from the accommodation portal. To be effective, the Oversight Board needs to be relatively flexible to target mitigation and properties available on the Portal as appropriate, depending on information that is emerging on worker choices.

- 3.2.19 The WAMS Oversight Board will be a function of the Accommodation and Tourism Services sub-group.

***Programme, timing and duration***

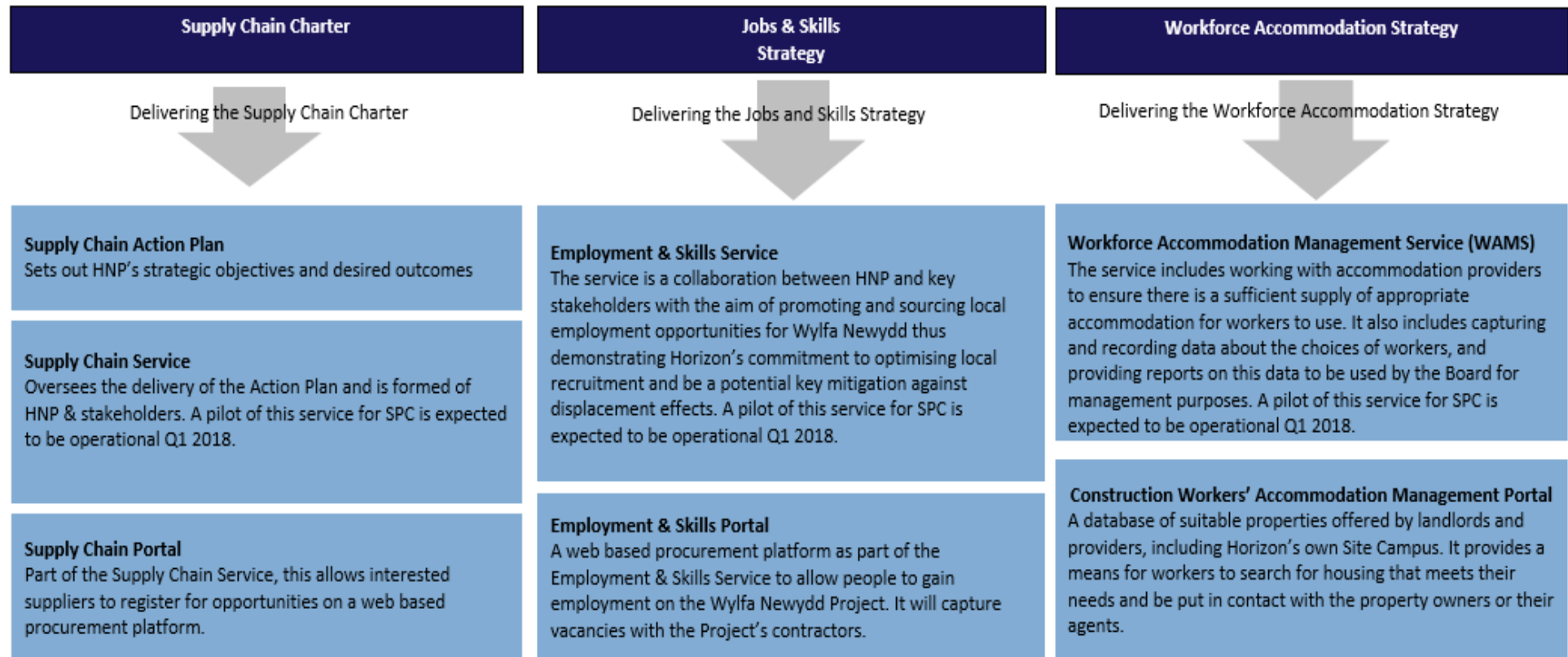
- 3.2.20 Horizon will provide annual monitoring reports covering the topics listed above for the Programme Board to review.
- 3.2.21 More frequent monitoring reports may be appropriate for particular topics, at a frequency to be recommended by the relevant Engagement sub-group and agreed by the Programme Board.
- 3.2.22 Monitoring shall continue for 2 years following completion of the construction phase of Project, unless otherwise agreed by the Programme Board.

***Relationship to the services***

- 3.2.23 Part of the role of this monitoring framework as described above is to consider monitoring reports generated by the three services proposed by Horizon as part of the Wylfa Newydd Project.
- 3.2.24 These services are summarised in figure 3-2 below for ease of reference.

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**Figure 3-2 Wylfa Newydd services**



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### ***Community Liaison Group***

- 3.2.25 Horizon will coordinate a series of regular communication meetings with key stakeholders and local communities.
- 3.2.26 A CLG will consist of a group of local residents from the immediate local communities, businesses and representatives of local groups. The purpose of the CLG is to exchange information and dialogue between Horizon and the local community during construction. Typically, a CLG meeting will be held locally on a quarterly basis (or as required) and chaired by an independent facilitator. A Horizon representative will be present. Representatives of IACC will be invited where appropriate, dependent on the issues arising and agenda items to be addressed.
- 3.2.27 The criteria for CLG membership will include:
- the ability to demonstrate strong links with the local community;
  - willingness and ability to represent a range of interests and project issues;
  - availability to attend quarterly evening meetings; and
  - supporting a collaborative and partnership approach to issues resolution.
- 3.2.28 The CLG will focus on issues specifically associated with construction effects and progress of the Wylfa Newydd Project. The objectives of the CLG, to be developed with the group, will be set around:
- establishing relationships between Horizon and key stakeholders and the wider community;
  - providing a conduit for the dissemination of information to, and input from, community members and other key stakeholders;
  - identifying and commenting on concerns raised by the community during construction, with suggested action that could be undertaken to alleviate these concerns; and
  - discussion of construction issues and providing suggestions for mitigating the local construction effects.
- 3.2.29 Horizon, through its Community Involvement Officers, will provide information packs to nearby residents which will include information on (where appropriate):
- the potential for short-term peaks in air pollution concentrations;
  - the potential for dust concentrations;
  - anticipated noise and construction activities;
  - any mitigation that will be put in place to manage these peaks and concentrations (if practical); and
  - details of the Community Involvement Officers and avenues to register any complaints.
- 3.2.30 Horizon will notify occupiers of nearby properties in advance of works taking place that will potentially affect them. Information will include a description of

the works to be carried out, expected duration and level of disruption, and an explanation of the measures being implemented to mitigate adverse effects of the works. Community information sheets will be circulated at least two weeks before construction works start.

- 3.2.31 Horizon will display the name and contact details of the person(s) accountable for construction works on the site boundary. This may be the environment manager/engineer or the site manager. Horizon will also display the head or regional office contact information on the site boundary.
- 3.2.32 All notifications will be bilingual in Welsh and English, and accompanied with a contact name, telephone number and address to which enquiries should be directed (see section 3.3). Stakeholders will be kept informed of progress throughout the construction phase of the Wylfa Newydd Project. Updates will also be provided on the Wylfa Newydd Project website. The Project Website will also contain more information about the Wylfa Newydd Engagement Framework including details of membership of the Programme Board and each engagement sub-group, which will be updated regularly.
- 3.2.33 All matters related to construction activities will follow a standardised communications protocol across the Wylfa Newydd Project. Community Involvement Officers will be appointed across dedicated geographical areas of responsibility to liaise with local communities during the construction phase and take effective action to deal with any complaints (see section 3.3).
- 3.2.34 Horizon will identify and further consult with groups who represent people with characteristics protected under the Equality Act 2010 in order to determine whether there are any additional issues which may require reasonable adjustments to be made.
- 3.2.35 Horizon will advertise posts through recruitment channels that target a Welsh-speaking audience specifically as part of broader recruitment strategies. This will include a Wylfa Newydd Employment & Skills Service as well as other partners that engage with a Welsh-speaking audience. All job advertisements will be posted in English and Welsh.
- 3.2.36 Horizon will distribute information on the Welsh language and culture as part of recruitment materials. This will include a general statement on the value Horizon places on Welsh language skills, the level of skills required for a post as well as background information on the Welsh language.
- 3.2.37 Horizon will consider what Welsh language skills are required as part of the recruitment process when developing construction and operational job profiles for each post at Wylfa Newydd.
- 3.2.38 Horizon will include a Welsh-speaking staff on interview panels for jobs where Welsh language skills are required in order to understand linguistic skills.
- 3.2.39 Horizon will develop and circulate welcome packs to all families of Wylfa Newydd workers who move to the Key Socio-economic Study Area.
- 3.2.40 Horizon will provide language awareness training to all construction staff to demonstrate linguistic courtesy and awareness of Horizon's Welsh language corporate policy. Horizon will also develop a programme of Welsh language



training at different levels for Horizon Wylfa Newydd construction staff where this is a relevant requirement within a post. Horizon will establish a Welsh language mentoring scheme for learners. Horizon will maintain a Welsh speaker 'badge' scheme.

- 3.2.41 All permanent and temporary public signs relating to the Wylfa Newydd Project will be bilingual.
- 3.2.42 Horizon will set up a management group to have oversight of/be accountable for the delivery of Welsh language and culture mitigation strategies contained within this CoCP. Furthermore, Horizon will establish and chair an external stakeholder group (Welsh Language and Culture Co-Ordinator) to monitor the implementation of these strategies and provide advice on Welsh language and culture mitigation delivery.
- 3.2.43 Horizon will require its construction workers to register with, and, prioritise the use of the on-site medical and healthcare services rather than using the community National Health Service (NHS) services.
- 3.2.44 Horizon would comply with all relevant legislation to protect health and to eliminate work related ill-health. It would promote measures for the protection of health and the maintenance of a healthy workforce, and, where appropriate, will align with health promotion initiatives run by Welsh Government, Betsi Cadwaladr University Health Board, Public Health Wales or the voluntary sector.

### **3.3 Enquiries and complaints**

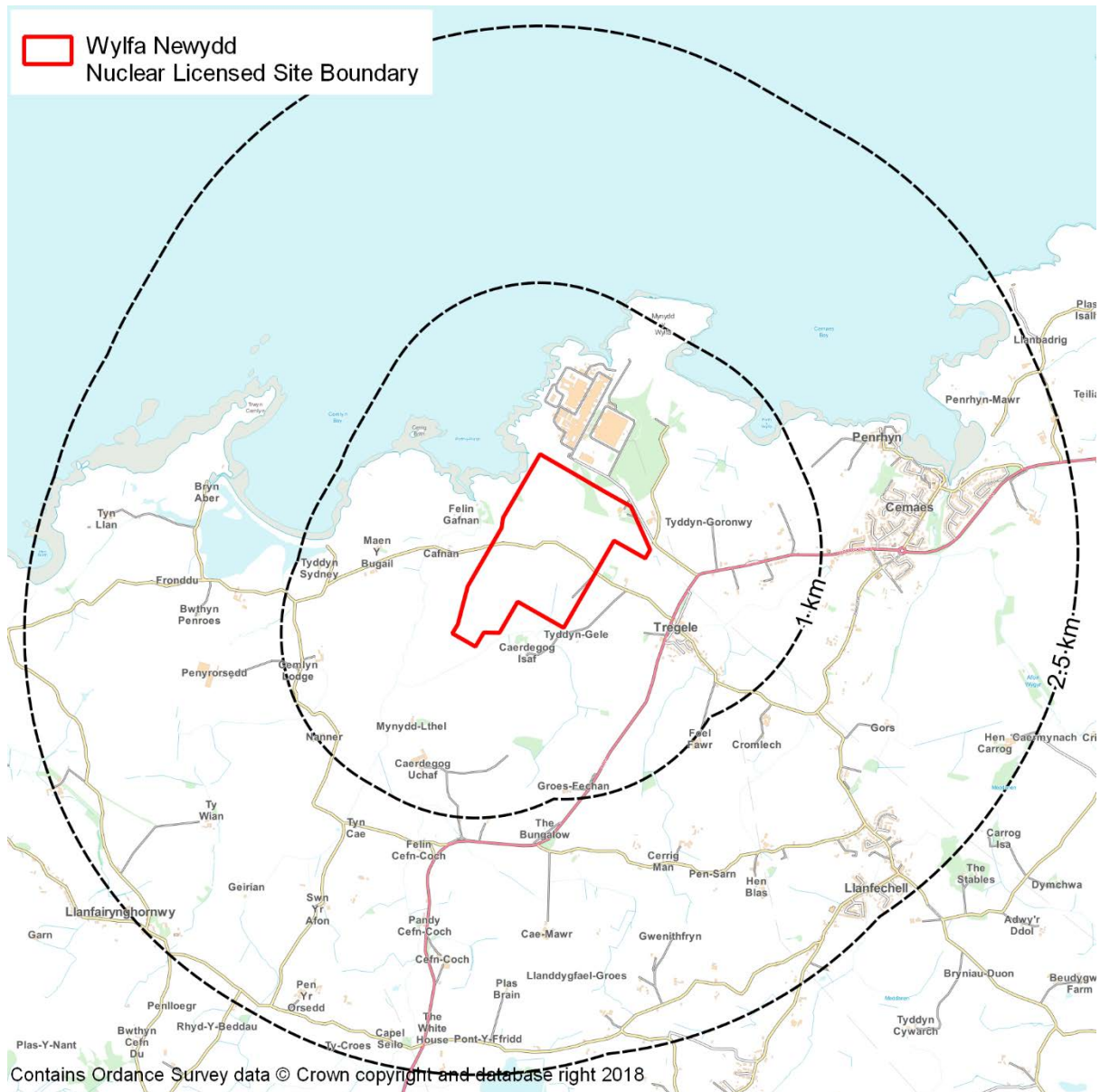
- 3.3.1 Horizon will establish a dedicated and free telephone hotline to be available for anyone with concerns about the construction programme or Project. It will deal with enquiries or complaints from the public, the IACC or other key stakeholders and ensure appropriate action is taken in response to concerns or questions arising from construction arrangements or consented plans.
- 3.3.2 The system will be staffed by bilingual personnel. The system will be widely advertised by appropriate means, particularly on construction site boundaries across the Wylfa Newydd Project. The system will be held to set response times and key performance indicators to enable the efficiency or effectiveness of the helpline to be monitored or measured.
- 3.3.3 The system will ensure that appropriate action is taken in response to any non-compliance with approved plans or construction arrangements, or in the event of physical damage, in accordance with an enforcement protocol.
- 3.3.4 A complaints register will be maintained by Horizon. All calls will be logged and mapped, together with a record of the responses and action taken. Mapping will be used to record where key concerns are raised by individuals, local communities or other stakeholders. The complaints register will be made available to the IACC upon request.
- 3.3.5 Horizon will deal with minor construction-related, residential, business or agricultural claims up to a pre-determined value on a case-by-case basis. The

administration of the claims procedure will be standard across the Wylfa Newydd Project.

### **3.4 Community Safety Management Strategy**

- 3.4.1 This section sets out Horizon's approach to developing a Community Safety Management Strategy (CSMS) with respect to the management and communication of matters relating to community safety to ensure that members of the public are properly informed and prepared, in advance, about what to do in the event of an emergency occurring. It also sets out an approach for how Horizon will monitor and manage the effects of the Wylfa Newydd Project on community safety during construction on the emergency services, including in relation to resourcing.
- 3.4.2 The CSMS will establish a framework of communication routes and measures which will be formalised and developed further through detailed consultation with relevant bodies and organisations.
- 3.4.3 The CSMS will include details of the following as a minimum:
- Ways of working
  - Contingency response arrangements
  - Service planning
  - Resourcing
- 3.4.4 Horizon will contribute to the additional resourcing required to maintain community safety as a direct result of the Project through the Community Safety contribution. The approach to drafting s.106 Heads of Terms is set out in the Planning Statement (Application Reference Number: 8.1). The precise quantum of this contribution is still to be agreed, following discussion with IACC, the emergency services and other relevant parties.
- 3.4.5 The CSMS will focus on a geographical area extending to approximately 2.5km from the Wylfa Newydd Nuclear Licensed Site Boundary, including Tregale, Cemaes, and Llanfechell, as illustrated in figure 3-3.

**Figure 3-3 Community safety consultation zone**



## **Community Safety Management Strategy - Principles**

### **Emergency Services Engagement Sub-Group**

3.4.6 Horizon will establish a joint working group (the Emergency Services Engagement Sub-Group) to work collaboratively on development of the CSMS. As this stage it is anticipated that the Engagement Sub-Group will be attended by the following key parties:

- North Wales Police
- North Wales Fire and Rescue Service
- The Ambulance Service
- Community liaison group

- Isle of Anglesey County Council Emergency Planning Service
- Health and Safety Executive
- Nuclear Safety Advisory Committee

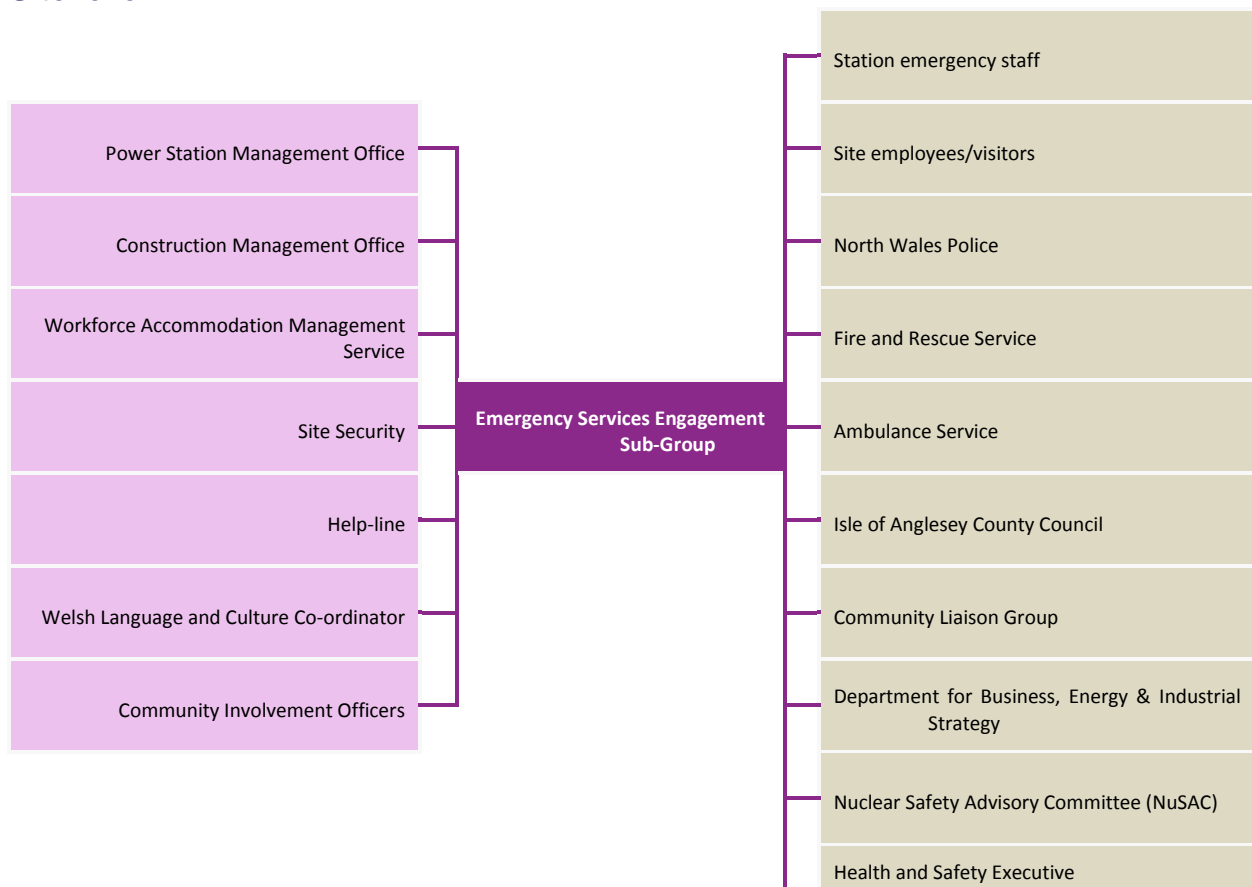
3.4.7 The Emergency Services Engagement Sub-Group will co-ordinate the notification and liaison of various bodies in response to incidents at the Wylfa-Newydd site and to maintain appropriate community safety during the construction phase of the Project. The Group will meet on a quarterly basis, with the frequency of meetings regularly reviewed to reflect the stage of construction and complexity of activities. The notification procedure will vary depending on the scale of the incident, with two levels of incident identified:

- **Site level:** Emergency or incident generally contained within the boundary fence (with the exception of small scale incidents such as trips, falls, minor spills etc.)
- **Off-site level:** Emergency or incident which results, or could potentially result in hazardous conditions beyond the security fence boundary requiring immediate response

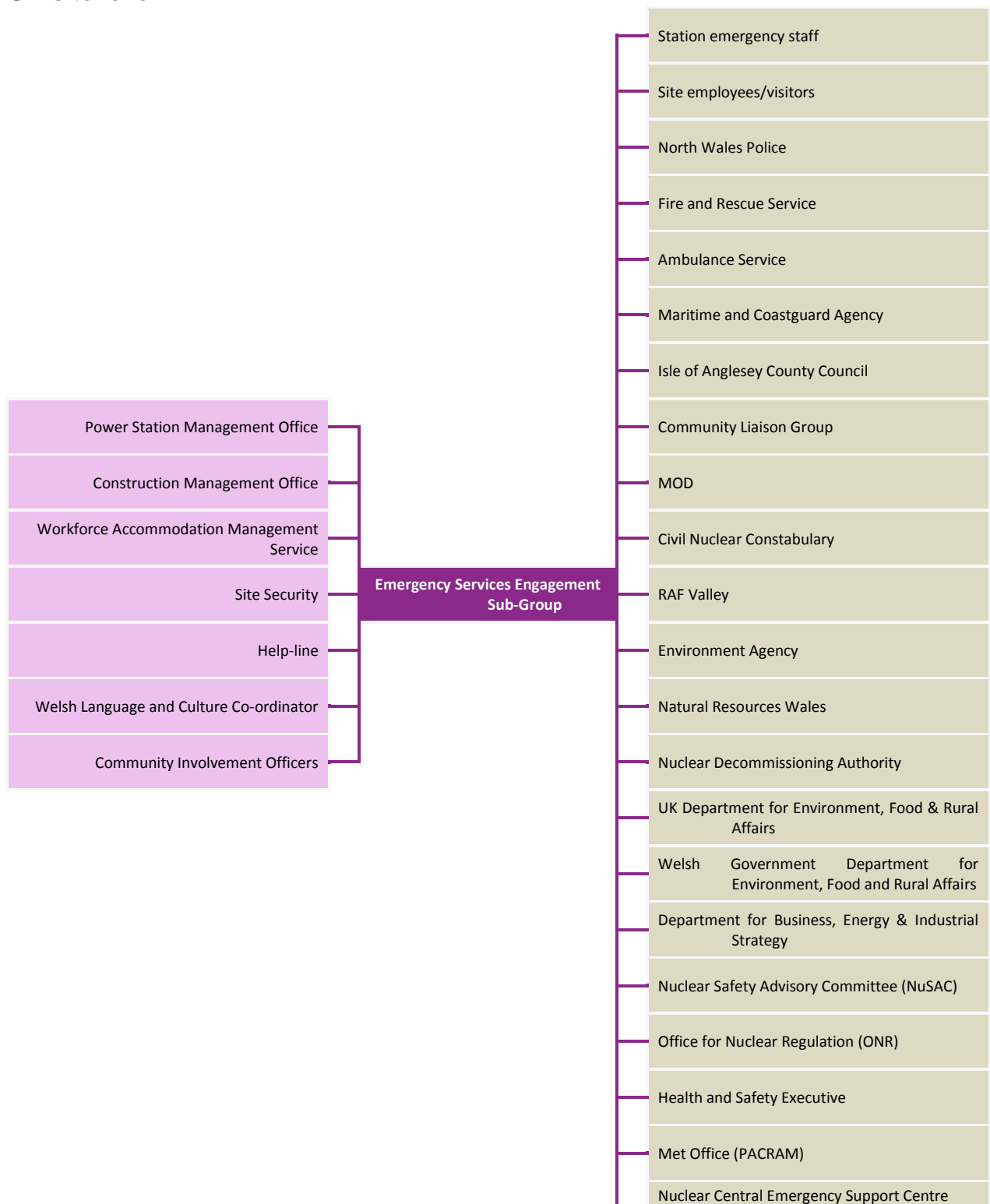
3.4.8 The Emergency Services Engagement Sub-Group will work closely with representatives of emergency services to ensure that effective communications are maintained and that appropriate resources are available on a day-to-day basis throughout the construction period. The Group will also establish procedures to ensure that requisite training is provided to construction personnel and that the Workforce Code of Conduct is adhered to in consultation with relevant bodies.

3.4.9 The diagrams below illustrate the lines of communication which would be established in consultation with relevant parties:

**Site level:**



**Off-site level:**



## Preparation for emergencies

### **General**

- 3.4.10 The Emergency Services Engagement Sub-Group will identify preparation measures in the very unlikely event of an emergency situation. They will:
- Identify the emergencies likely to have community safety implications, such as; explosion, fire, chemical spills, release of radioactivity, flooding
  - Agree measures and resourcing required to deliver the above, insofar as they relate to the impacts of the Project, including;
    - How the alarm will be raised
    - Production of road plans showing emergency service access routes and locations of hazardous items
    - Locations of emergency equipment
    - Emergency escape routes
    - Training of local community representatives as appropriate to co-ordinate with the Emergency Services Engagement Sub-Group
  - Agree a detailed Community Safety Management Strategy (CSMS)
  - Consider any monitoring with respect to the CSMS and make recommendations to target mitigation accordingly, for final decision by the Programme Board

### **Training**

- 3.4.11 Horizon will ensure that all personnel with a responsibility under emergency management arrangements, or working with or near pollution hazards, receive appropriate training. Where appropriate, site inductions will include pollution prevention and response information. Horizon will ensure site work teams receive regular and appropriate ongoing information on the potential environmental impacts of their work and how to prevent and respond to potential pollution incidents.
- 3.4.12 Horizon will provide and maintain environmental emergency response materials/equipment appropriate to the risk of its activities. Such materials will be stored at strategic locations on site and on vehicles, be suitably sized according to the risk, and easily identified.
- 3.4.13 All staff that work with or near pollution hazards must receive training on:
- how to recognise a pollution event and the scale of response required to manage it;
  - what the best materials to use are in order to manage the pollution;
  - initial actions following the identification of a pollution incident;
  - what the reporting procedure is; and
  - the appropriate method of disposal of materials used during pollution response.

- 3.4.14 All those that work with chemicals will receive training from approved training providers.
- 3.4.15 All staff will be trained in the emergency procedures, and training exercises will be undertaken throughout the construction period to ensure that the procedures are implemented correctly and areas of improvement identified.
- 3.4.16 Horizon's response procedures will ensure swift action is taken to protect the public, workers, environment and plant whilst maintaining site security.
- 3.4.17 The above principles will enable Horizon to work collaboratively with the emergency services to ensure that community safety principles are applied throughout the construction of the Project and to manage the impacts of the Project, as appropriate.
- 3.4.18 Horizon will work with relevant organisations and the community to develop a detailed CSMS which builds on the above principles and responds to likely potential impacts on community safety as a direct result of the Wylfa Newydd DCO Project. Horizon will also ensure that communities are aware of measures that will be put in place and the associated notification procedures should an incident occur.
- 3.4.19 The obligation for Horizon to prepare and submit for approval a final CSMS in accordance with the principles set out in this document will be secured under a DCO Requirement. Once approved, Horizon will be required to implement the CSMS for the construction of the power station.

#### **Workforce code of conduct**

- 3.4.20 The CSMS will set out the ways in which Horizon and the emergency services will work together to enforce the principles of the Workforce Code of Conduct, including implications on resourcing, joint ways of working and identifying key responsibilities of each organisation in relation to community safety.



## **4 General site management strategy**

### **4.1 General**

- 4.1.1 Horizon's site management strategy is based on the requirements set out in this CoCP and relevant sub-CoCPs.
- 4.1.2 Any site specific mitigation requirements to be implemented for site management are described in section 4 of the relevant sub-CoCPs.

### **4.2 Construction**

- 4.2.1 The term "construction" or "construction activities" in this CoCP and sub-CoCPs includes but is not restricted to all site preparation, demolition, excavation (which in turn includes earthworks and deep excavations), material delivery, excavated material disposal, waste removal and all related engineering activities. In the case of temporary Associated Development, the term also applies to decommissioning activities.
- 4.2.2 The Wylfa Newydd Project consists of a number of locations and requires a number of construction sites. The constituent locations are described in the sub-CoCPs and listed in paragraph 1.3.2.

### **4.3 Working hours**

- 4.3.1 Activities at the worksites across the Wylfa Newydd Project will be varied. Required working hours and shift patterns for the various parts of the Wylfa Newydd Project are set out in the relevant sub-CoCPs.

### **4.4 Site layout**

- 4.4.1 Horizon has ensured (and will continue to ensure) that site layouts and appearance are designed according to the following requirements.
  - Noise-generating activities will be sited away from noise-sensitive receptors where practicable, or screened so as not to exceed agreed levels within the Section 61 consent (see section 8).
  - Storage sites, temporary offices, fixed plant and machinery equipment will be positioned to reduce as far as practicable the environmental impacts, having due regard to the constraints of each site.
  - Internal vehicle routes will be arranged to reduce the risk of carrying mud out of the site.
  - Information boards will be displayed at appropriate locations on the boundaries of the sites warning of the hazards on-site as well as containing contact names, telephone numbers, addresses and a helpline number (see section 3).
  - Horizon will promote and enforce 'good housekeeping' arrangements on all construction sites to ensure the sites remain clean, tidy and safe.

- Measures will be implemented to provide effective preventative pest and vermin control and prompt treatment of any pest and vermin infestation. Horizon will ensure that the risk of infestation by pests and vermin is managed to be as low as reasonably possible. Adequate arrangements will be made for disposing of food waste or other material attractive to vermin. If infestation occurs, Horizon will take action to eliminate the infestation and prevent further occurrence.
- Welfare facilities will be provided for the construction staff, appropriate to the type of site.
- Horizon will encourage sustainable water and energy consumption initiatives where practicable across all working methods.

## **4.5 Site lighting**

- 4.5.1 The lighting designs will be developed to reduce light spill onto sensitive receptors (including ecological receptors) to below thresholds where significant effects are predicted where practicable; maintain a uniform lighting solution to reduce dark and light spots; and limit visibility of new lighting at distant receptors. Technologies used would include the use of a CMS (Central Management System).
- 4.5.2 The lighting used during construction and decommissioning of the Off-Site Power Station Facilities will be designed to reduce light spill and limit the effects on both habitats of most value to sensitive ecological receptors as well as on night-time human viewers, for example local communities.
- 4.5.3 Site lighting management will be overseen by Horizon for each construction site according to the following controls and high level requirements:
- Site lighting will primarily be provided to ensure safe working conditions and to maintain security on all construction sites, while having regard to sensitive ecological receptors or occupied residential properties.
  - Lighting will be positioned and directed so as not to spill unnecessarily from construction sites.
  - Lighting will be switched off when not required to ensure safe working conditions and site security.
  - Construction site lighting will, as far as practicable, be designed to ensure that any artificial light emitted from a site does not prejudice health or create a nuisance, as required by the Environmental Protection Act 1990.
  - To avoid sky glow, lighting would be kept at zero degrees tilt to keep the ULR at 0%, where practicable.
  - Cowls would be used if the tilt required on floodlights is greater than 5 degrees, where practicable.
  - Construction vehicle headlights would be dipped when approaching the site perimeter to limit light spill and glare beyond the site boundary.

- 4.5.4 Appropriate good practice lighting control measures will be identified, giving consideration to BS EN 12464-2:2014 [RD3] and Guidance Notes for the Reduction of Obtrusive Light GN01:2011[RD4].
- 4.5.5 Horizon will provide blackout blinds or alternative mitigation in unforeseen cases of sleep disturbance. A mechanism would be put in place for residents to apply for installation of blackout blinds.
- 4.5.6 Where required, sub-CoCPs contain further detailed site lighting arrangements to demonstrate how these controls will be met by Horizon in relation to local receptors.

## **4.6 On-site communications**

- 4.6.1 A process of on-site communications, such as daily shift and activity briefings, will be used to advise the site workforce of health, safety, environmental and community matters. This will include information obtained from CLG meetings (see section 3.2), such as noise generation and access issues, together with constraints detailed in the contracts (e.g. working hours) and other documents, such as the DCO and this CoCP and the sub-CoCPs, regulating the Wylfa Newydd Project.
- 4.6.2 Appropriate information will be addressed to all members of the workforce by way of an induction, including sub-contractors, before any person commences work.
- 4.6.3 Toolbox talks or other appropriate means will be employed to disseminate information to the workforce on a routine basis.

## **4.7 Security**

- 4.7.1 Horizon will ensure that all construction sites are secure at all times, setting out security requirements including the following as a minimum:
- use of perimeter fencing as necessary for site security and public safety, that is located so that Public Rights of Way (PRoW) are maintained or appropriately diverted;
  - completion of a site-specific security risk assessment and implement appropriate control measures to deter, detect and respond to security incidents; including criminal acts and civil issues such as trespass;
  - pedestrian and vehicle access points will be lit to the luminosity necessary to perform security tasks in accordance with Centre for the Protection of National Infrastructure guidelines for UK Critical National Infrastructure;
  - Closed Circuit Television (CCTV) incorporating infra-red lighting and alarm systems where required, some of which may be mobile CCTV towers;
  - vehicular and foot security patrols will be conducted at all sites 24 hours a day, seven days a week, 365 days a year;
  - consultation with Crime Prevention Design Advisors on Associated Development site security proposals;

- immobilisation of plant, securing of materials, equipment fuel storage containers;
  - development and Implementation of a protest management strategy in consultation with North Wales Police and other relevant stakeholders;
  - access to sites will be limited to specified entry points and all personnel entrances/exits will be recorded and monitored for security, health and safety purposes;
  - Horizon has a statutory duty to prevent unauthorised access to sites and will complete site-specific assessments of the security and trespass risk at each site and implement appropriate control measures;
  - the site boundary will be secured and constructed such that it limits opportunities for unauthorised entry; and
  - Horizon will conduct regular security patrols of the site boundary on a 24 hour basis and should the site boundary suffer any damage, it will be immediately rectified.
- 4.7.2 Horizon will cooperate with relevant authorities with regard to site security matters, including the Office for Nuclear Regulation and the Civil Nuclear Constabulary.
- 4.7.3 Access to and from the Wylfa Newydd Development Area will be security monitored/controlled. Restrictions on private/personal transportation will be put in place and workers will be encouraged to utilise Project-sponsored transportation arrangements (i.e. Park and Ride and shuttle buses to Holyhead, e.g. ferry port and local railway stations).

## **4.8 Environmental emergency management strategy**

- 4.8.1 Horizon will conduct environmental emergency management in line with the measures detailed in this CoCP and the relevant sub-CoCPs, as well as relevant health, safety and environmental legislation.
- 4.8.2 Horizon will manage emergency pollution control measures in keeping with Pollution Prevention Guidelines (PPGs) previously issued by the Environment Agency<sup>1</sup> (until replaced by corresponding guidance for pollution prevention) and NRW's *How to comply with your environmental permit* [RD5] including at a minimum, the following measures:
- the amount of potentially polluting substances stored will be limited as much as practicable, stored in suitable and secure storage facilities (including the adequate bund capacity), and in line with relevant legislation (such as the Environmental Permitting (England and Wales) Regulations 2016 and the

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<sup>1</sup> Although the Environment Agency withdrew their collection of PPGs in 2015, they remain a source of information on good industry practice and Horizon considers them relevant to the control of construction activities on the Wylfa Newydd Project until they are replaced by GPPs.

Water Resources (Control of Pollution) (Oil Storage) (Wales) Regulations 2016);

- plant and equipment containing potentially polluting substances will be stored in areas with impermeable ground or hardstanding (in order of preference) and at least 15m away from a watercourse, drainage feature, ditch or other pathway;
- all fuel storage will be within engineered containment facilities including suitably bunded tanks;
- chemicals will be stored and transferred in appropriate chemical storage facilities with the correct segregation of chemicals according to the requirements of the Control of Substances Hazardous to Health Regulations 2002;
- all plant and equipment will be maintained in line with manufacturer's instructions and checked before use to ensure it is in good working order with no obvious defects;
- if any defects are identified, the item of plant/equipment will not be used until the defect has been rectified;
- records of plant, equipment and storage checks will be made and kept for inspection;
- appropriate measures to prevent incidents as far as practicable from small plant and containers containing potentially polluting substances; and
- appropriate management arrangements for refuelling of plant and equipment proportionate to the risk, for example in designated areas on impermeable ground or hardstanding and at least 15m away from pathways or sensitive receptors, never leaving refuelling activities unattended, and ensuring any nearby surface water drains are covered and receiving oil interceptors are functional before refuelling commences.

- 4.8.3 Horizon will provide construction staff emergency phone numbers and a means of notifying local authorities, statutory authorities and local community representatives as part of site induction programme. Contact numbers for the employer and contractor's key staff will also be included.

### ***Preparation for environmental incidents/emergencies***

- 4.8.4 Horizon will ensure that all personnel with a responsibility under emergency management arrangements, or working with or near pollution hazards, receive appropriate training.
- 4.8.5 Where appropriate, site inductions will include pollution prevention and response information. Horizon will ensure site work teams receive regular and appropriate ongoing information on the potential environmental impacts of their work and how to prevent and respond to potential pollution incidents.
- 4.8.6 Horizon will provide and maintain environmental emergency response materials/equipment appropriate to the risk of its activities. Such materials

will be stored at strategic locations on site and on vehicles, be suitably sized according to the risk, and easily identified.

- 4.8.7 All staff that work with or near pollution hazards must receive training on:
- how to recognise a pollution event and the scale of response required to manage it;
  - what the best materials to use are in order to manage the pollution;
  - initial actions following the identification of a pollution;
  - what the reporting procedure is; and
  - the appropriate method of disposal of materials used during pollution response.
- 4.8.8 All those that work with chemicals will receive training from approved training providers.
- 4.8.9 Horizon will plan to hold appropriate environmental emergency response tests to ensure its environmental emergency management procedures are effective.
- 4.8.10 Horizon will produce and display in an accessible and visible place, a Site Environmental Drawing in every site compound, showing all sources, pathways and receptors related to the area. Where relevant, content will consist of:
- access routes and rendezvous points for emergency services;
  - buildings (permanent and temporary) labelled to show what they are;
  - water treatment facilities used during the works;
  - oil and chemical storage used during the works;
  - waste storage relevant to the works including segregated hazardous waste;
  - impermeable and permeable areas;
  - location of static environmental emergency response materials (and type e.g. chemical or oil spill kit) and equipment;
  - water abstraction and discharge points;
  - location of any sewage facilities;
  - direction of flow of all drainage (including foul and surface water);
  - any natural or man-made water feature;
  - drainage inspection points;
  - oil separators/interceptors;
  - ecologically sensitive areas; and
  - pollution control features (e.g. shut-off valves/penstocks fitted on drainage systems etc.).
- 4.8.11 The Site Environmental Drawing will be explained using a toolbox talk to key site personnel, including those that manage the storage of potentially polluting

materials/equipment and those with any responsibility under environmental management arrangements.

### ***Emergency/incident recording***

4.8.12 Incident reports will be prepared in accordance with the arrangements set out in Horizon's Environmental Management System. The following details will be recorded as a minimum:

- names of people involved in the incident and response;
- location (as specific as possible);
- date and time;
- description of the incident (with timeline);
- immediate actions taken;
- what further actions need to be taken;
- actions to prevent reoccurrence of the incident; and
- relevant photographs.

4.8.13 In accordance with The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR), and Horizon's Health and Safety Policy, appropriate records will be maintained, and relevant bodies notified depending on the nature of the emergency or incident.

## **4.9 Fire prevention and control**

4.9.1 Horizon will have in place appropriate management controls to prevent fires on all its construction sites and associated accommodation and welfare facilities

4.9.2 Horizon's response procedures will ensure swift action is taken to protect the public, workers, environment and plant whilst maintaining construction site security.

4.9.3 Horizon will not allow open fires or the burning of waste materials.

## **4.10 Construction Worker Code of Conduct**

4.10.1 Expected standards to be placed on construction workers in relation to their conduct and behaviour whilst employed on the Wylfa Newydd Project are set out in the Workforce Management Strategy (Application Reference Number: 8.5).

4.10.2 This includes expected standards of behaviour in the local community, housekeeping and behaving in an environmentally and socially responsible manner.

## **5 Traffic and transport management strategy**

### **5.1 General**

- 5.1.1 Horizon's traffic and transport management is based on the requirements set out in this CoCP and relevant sub-CoCPs.
- 5.1.2 Any site specific mitigation requirements to be implemented for traffic and transport are described in section 5 of the relevant sub-CoCPs.
- 5.1.3 Access routes for Heavy Goods Vehicles (HGV), buses and abnormal indivisible loads (AILs) to the individual sites which comprise the Wylfa Newydd Project have been identified. The prioritised routing to be used is along the A55 from the mainland via Britannia Bridge to Valley and then the A5025 north.
- 5.1.4 There will be some exceptions to this, for example, the north and east of Anglesey shuttle buses which will be routed via the A5025 on the eastern side of Anglesey to pick up construction workers living in settlements in eastern Anglesey and transport them to the Wylfa Newydd Development Area and other Wylfa Newydd Project sites.
- 5.1.5 All members of staff will be required to pre-register any vehicle parking on site and no unauthorised vehicles will be allowed to park on site.

### **5.2 Logistics Centre**

- 5.2.1 The Wylfa Newydd Project incorporates a Logistics Centre at Parc Cybi. The role of the Logistics Centre would be to control the flow of goods vehicles along the A5025 during the construction phase of the Power Station.
- 5.2.2 The Logistics Centre will manage the frequency and volume of traffic movements along the A5025 by road-based freight by:
  - requiring LVGs and HGVs to pass through the Logistics Centre;
  - managing deliveries at the Power Station; and
  - maintaining a delivery booking system to manage deliveries according to the capacity of the loading facilities.
- 5.2.3 In order to mitigate the impacts of HGV and bus traffic on existing flows, and recreational cyclists, a delivery window on the A5025 for the construction materials has been identified. The delivery window would run from 07:00 to 19:00, Monday to Friday, with restrictions during school start times (between 08:00 and 09:00) and end times (between 15:00 and 16:00) in advance of the A5025 Off-line Highway Improvements being operational. It is anticipated that deliveries may occasionally be undertaken outside of these times, but they will be limited, whenever practicable.
- 5.2.4 Specific requirements relating to the Logistics Centre are set out in the Logistics Centre sub-CoCP (Application Reference Number: 8.11).



### **5.3 Park and Ride and associated shuttle buses**

- 5.3.1 The Wylfa Newydd Project incorporates a Park and Ride facility located immediately adjacent to the A55 but close to the A5025 at Valley. The proposed site is at Dalar Hir at A55 Junction 4.
- 5.3.2 The purpose of the Park and Ride facility is to serve construction workers, providing for the transfer of construction workers to shuttle buses, reducing the number of private vehicle movements to and from the Wylfa Newydd Development Area.
- 5.3.3 Requirements relating to the Park and Ride facility are set out in the Park and Ride sub-CoCP (Application Reference Number:8.10).

#### **Horizon shuttle buses**

- 5.3.4 Shuttle bus services from the Park and Ride to the site will reduce potential effects from emissions due to road traffic.
- 5.3.5 Horizon will provide a dedicated shuttle bus service for construction workers living in Anglesey i.e. in Holyhead, Bangor, Caernarfon, Amlwch, Cemaes and Benllech as needed, to reduce the number of private vehicle movements to the Park and Ride or the Wylfa Newydd Development Area.
- 5.3.6 All buses procured for the Wylfa Newydd Project will meet a minimum standard for emissions, at least Euro IV diesel engines.
- 5.3.7 Horizon will restrict the use of parking spaces at the Power Station Site to encourage use of the shuttle buses and reduce the numbers of private vehicles being driven to site.

### **5.4 Abnormal indivisible loads (AIL)**

- 5.4.1 An AIL is defined in the Road Vehicles (Authorisation of Special Types) (General) Order 2003 (STGO) as a load that cannot, without undue expense or risk of damage, be divided into two or more loads for the purpose of being carried on a road, and that, owing to its dimensions or its weight, cannot be carried on a motor vehicle that complies in all respects with the Road Vehicles (Construction and Use) Regulations 1986 (C&U Regulations) or the Road Vehicles (Authorised Weight) Regulations 1998 (AW Regulations).
- 5.4.2 An AIL can be carried on special types of vehicle that do not meet the C&U and AW Regulations but can be used outside these rules under the authority of the STGO.
- 5.4.3 AILs will be used subject to the correct implementation of procedures for their use on the road network between their origin and the Wylfa Newydd Development Area and Associated Developments.

#### **Signing of HGV, bus and AIL access route**

- 5.4.4 Bilingual temporary signing will be erected along the A55/A5025 access routes to the proposed developments. The locations of temporary signage would be

drafted and agreed in plain format. The purpose of the signs will be to ensure effective route management.

### **Temporary Traffic Management procedures**

- 5.4.5 Temporary Traffic Management procedures will be used, where required, at each of the proposed sites that would affect the public highway, for example, temporary traffic signals or manned stop-and-go boards. Horizon will work with the appropriate authorities to agree the appropriate traffic management arrangements.
- 5.4.6 If Temporary Traffic Management procedures affect bus stops, Horizon will liaise with the relevant bus companies about any necessary repositioning of bus stops. Horizon will work to ensure that disruption from moving any bus stops will be reduced, as far as practicable.

### **Information packs and training inductions**

- 5.4.7 Information packs containing the Construction Traffic Management Strategy will be provided to all construction workers at their induction. The information packs will contain, but not be limited to, the following:
- HGV routes and route restrictions (if appropriate);
  - safety and operational requirements;
  - construction vehicle routes (if appropriate);
  - non-compliance guidance;
  - complaints procedure; and
  - available transport options, including bus routes.
- 5.4.8 Construction workers will be bound to comply with the above by the Code of Conduct in line with the principles set out in the Workforce Management Strategy (Application Reference number 8.5).

### **Car-sharing**

- 5.4.9 Horizon will promote car sharing and lift sharing between employees using internal media, for example, the intranet or a mobile application. Car sharing will also be promoted using other appropriate methods, which if required, could include a suitable car share website or a web-based platform which may use information from the Construction Workers' Accommodation Management Portal (refer to section 3.2).
- 5.4.10 This will allow potential car sharers to be matched so that workers travelling from a similar area by car can share their journey. The car sharing strategy will be promoted, monitored and managed and enforced by Horizon through its supply chain. Workers will be recommended via appropriate channels including the Construction Workers' Accommodation Management Portal, to car share with others to reduce the number of journeys being made, in particular across the Britannia Bridge.

### **Freight movement**

- 5.4.11 The construction and use of a Marine Off-Loading Facility (MOLF) to deliver the bulk of materials to the Wylfa Newydd Development Area will significantly reduce the number of HGV movements on the road network. This will lead to lower NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> concentrations particularly at those human receptor locations close or adjacent to the A5025. This will also lead to lower NO<sub>x</sub> concentrations and deposition rates of nitrogen and acid at sensitive ecological receptors in close proximity to the A5025 and A55 and the wider road network.
- 5.4.12 The MOLF is expected to receive at least 60% of the total material required for the construction of the Wylfa Newydd Project, once it is operational (although Horizon would seek to increase this amount up to 80% where possible). This will limit the amount of material required to travel by road.
- 5.4.13 Horizon commits to limiting the number of HGV movements by road so to not exceed a maximum of 40 HGV deliveries (80 movements) per hour and 160 HGV deliveries (320 movements) per day.
- 5.4.14 Horizon will monitor freight vehicle movement including HGV numbers and deliveries via the MOLF using the delivery booking system to ensure compliance with the above. There may be exceptional circumstances, for example, adverse weather that disrupts the normal operation of the MOLF, which makes compliance with this difficult. Horizon will prepare contingency arrangements in agreement with IACC and the Welsh Government to manage such events.

## **5.5 Traffic Incident Management**

- 5.5.1 Horizon will assist with incident management of Wylfa Newydd Project construction traffic including providing key points of contact in the instance of an incident, relaying incident-related information to construction traffic operators.

## **5.6 Monitoring measures**

- 5.6.1 Horizon will monitor the effectiveness of its traffic management through a suite of indicators consistent with appropriate good practice and guidance. The following monitoring methods may be adopted:
- monitoring and analysis of HGV movements at the Logistics Centre and Wylfa Newydd Development Area;
  - a quarterly review of travel behaviour; and
  - monitoring of issues reported by the public or stakeholders as described in section 3.3 of the Wylfa Newydd CoCP.

## 6 Public access management strategy

### 6.1 General

- 6.1.1 Horizon's public access management is based on the controls set out in this CoCP and relevant sub-CoCPs.
- 6.1.2 Any site specific mitigation requirements to be implemented for public access are described in section 6 of the relevant sub-CoCPs.
- 6.1.3 Horizon will put in place mitigation to reduce as far as practicable adverse effects of permanently closing, temporarily closing or diverting Public Rights of Way (PRoW) in particular on the surrounding PRoW network as well as the environment and local communities.

### 6.2 Works on a Public Right of Way

- 6.2.1 PRoW will be kept open or temporarily diverted wherever practicable throughout construction. However, where closures are unavoidable, they will be authorised through DCO Requirement, or in cases where closures are required outside of the Order limits, by using the appropriate means, such as Temporary Traffic Regulation Orders (TTROs) under the Road Traffic Regulations Act 1984. When TTROs are used to temporarily close a PRoW, they will be for the shortest duration practicable for the works required.
- 6.2.2 When temporary PRoW closures are required, Horizon will submit the TTRO application to the IACC in sufficient time for approval, but no less than six weeks in advance of a required closure of up to six months, no less than two weeks for a closure of up to two weeks.
- 6.2.3 Horizon will provide temporary footpaths where practicable and appropriate, to ensure that pedestrians are able to maintain necessary access without coming into conflict with construction activities or other obstacles.
- 6.2.4 Horizon will delineate the diverted footpaths clearly and adequately and will provide all signage (indicating diversions and closures) clearly in both Welsh and English.
- 6.2.5 Horizon will undertake all works necessary to make the ground on diverted paths suitable for pedestrians, including reasonable adjustments to maintain or achieve inclusive access, where reasonably practicable.
- 6.2.6 Horizon will monitor all PRoW closures and diversions, to ensure damage from construction activities is appropriately repaired and signs are maintained in working order.
- 6.2.7 Horizon will ensure that diversions are fully accessible and comply with the requirements of the Equality Act 2010, as far as practicable and in the context of the route to be closed temporarily (e.g. in the context of footways within communities).
- 6.2.8 Where a need is identified through community liaison, Horizon will review access and pedestrian routes. The review would determine whether additional

measures or reasonable adjustments may be required for the purposes of ensuring accessibility by mobility-impaired people.

- 6.2.9 Horizon will maintain any required fencing around actual and diverted PRow corridors.
- 6.2.10 Horizon will ensure safe pedestrian access is provided to Tregele to access the proposed new alignment of the Wales Coast Path and onward PRow to Cemaes.
- 6.2.11 Horizon will support and enhance active travel access for people using the Copper Trail which currently links to the A5025 in Tregele. At this point, Horizon will provide a dedicated cycle way/footpath to Nanner Road.
- 6.2.12 Horizon will ensure vehicles interact with the public highway and PRow in a safe manner using measures such as:
- use of appropriate traffic management (such as stop-go boards) at relevant locations giving priority to non-construction vehicles;
  - the method for crossing PRow in a manner which gives priority to walkers; and
  - temporary closures and or diversions where appropriate.

### **6.3 Public Right of Way reinstatement**

- 6.3.1 If temporary alterations to a PRow occur as a result of the Wylfa Newydd Project, Horizon will ensure that reinstatement is carried out to at least the original condition.
- 6.3.2 Horizon will conduct and record appropriate surveys to establish the condition of the PRow network around constructions areas, within and immediately adjacent to the Order Limits, prior to commencement and after completion of all relevant construction works in that area. Ongoing maintenance of any new PRowS created as part of the Wylfa Newydd Project within the Wylfa Newydd Development Area is set out in the Wylfa Newydd Code of Operational Practice (Application Reference Number: 8.13).

### **6.4 Maintenance of access arrangements**

- 6.4.1 Existing access for residential properties and local businesses will be maintained where possible, and incorporation of replacement points of access, where necessary, to agricultural landholdings from A5025 bypasses and bend improvements.
- 6.4.2 Horizon will provide replacement means of access for residential properties, businesses and community services where necessary (in cases where existing access cannot be maintained) through the modification of roads and junctions, and the re-use of existing sections of carriageway.

## 7 Air quality management strategy

### 7.1 General

- 7.1.1 Horizon's air quality management is based on the controls set out in this CoCP and relevant sub-CoCPs.
- 7.1.2 Any site specific mitigation controls to be implemented for air quality are described in section 7 of the relevant sub-CoCPs.
- 7.1.3 Horizon will comply with the Wylfa Newydd CoCP with regard to dust, noise, congestion and nuisance controls.
- 7.1.4 Horizon has developed mitigation to reduce as far as practicable adverse effects relating to dust and air quality on the surrounding environment.
- 7.1.5 The EIA process identified that the Wylfa Newydd Project can manage the potential effects of dust and air quality with the application of appropriate good practices.
- 7.1.6 Dust and air quality monitoring procedures will include equipment specification, monitoring locations, duration, setting of alert thresholds, and reporting requirements.
- 7.1.7 Arrangements will be put in place to manage contingencies, for example due to adverse weather conditions (e.g. forecasting of future dry and windy periods in order to increase the dust suppression capability and frequency of application) or and a rapid response to the breakdown of dust suppression equipment (e.g. arrangements in place to repair or replace dust suppression equipment at short notice). Construction workers will be trained as appropriate to increase their awareness of community issues in environmental concerns including dust management and on-site management techniques relating to these issues. This training will be conducted via, but not limited to, site inductions, on-the-job training and toolbox talks

### 7.2 Vehicle and plant emissions

- 7.2.1 Construction of the Logistics Centre will allow traffic flows along the A5025 to be managed to reduce peak time deliveries to the Power Station, reducing the potential for congestion which will lead to higher emissions of NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub>.
- 7.2.2 The A5025 Off-line Highway Improvements, will lead to lower NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> concentrations at human receptor locations close to the existing A5025 alignment and reduce the number of properties and other human receptor locations which would experience an increase in pollutant concentrations.
- 7.2.3 Construction and use of the Park and Ride facilities will significantly reduce the number of car movements on the A5025. This will lead to lower NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> concentrations at human receptor locations and lower NO<sub>x</sub> concentrations and deposition rates of nitrogen and acid at sensitive ecological receptors close, or adjacent to, the A5025.

7.2.4 Horizon will ensure that the adverse effects of vehicle and plant emissions are controlled wherever safe and practicable. Measures for limiting emissions will include the following as a minimum:

- ensuring that the engines of all vehicles and plant on-site are not left running unnecessarily;
- compliance with the EU Stage IIIB emission standards for non-road mobile machinery (EC Directive 97/68/EC) introduced in January 2011 for the larger engine sizes relevant to the works;
- maintain construction plant and machinery in accordance with the manufacturers' instructions to reduce the risk of elevated emissions due to poor engine/emissions, maintain abatement performance and ensure that any malfunctions are swiftly repaired;
- avoid the use of diesel or petrol-powered generators and use mains electricity or battery-powered equipment where practicable; and
- manage and reduce where practicable the movement of construction traffic around the site in both site layouts and routine operations.

### **7.3 Dust and air quality control measures**

7.3.1 The key method for controlling dust emissions is through good process, site design and good housekeeping.

7.3.2 The dust control measures implemented will be based on the following hierarchy:

- adopt activities that do not give rise to dust releases;
- good process design to reduce dust emissions (such as reducing drop heights/where possible covering stockpiles, reduction of vehicle speed);
- abatement systems or control measures in place (water bowsers); and
- daily vigilance and mitigation.

7.3.3 Good practice measures to control dust during construction are derived from the Institute of Air Quality Management [RD6].

7.3.4 The requirements for all sites across the Wylfa Newydd Project are set out here in this CoCP:

- conduct community engagement before work commences on site (refer to section 3.2 of this CoCP);
- display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary (refer to section 3.2 of this CoCP);
- display the head or regional office contact information (refer to section 3.2 of this CoCP);
- record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner and record the measures taken (refer to section 3.3 of this CoCP);

- make the complaints log available to the IACC when asked (refer to section 3.3 of this CoCP);
- record any exceptional incidents that cause dust and/or air emissions, either on-site or off-site, and the action taken to resolve the situation;
- hold regular liaison meetings with other potentially high-risk construction sites within 500m of Horizon's construction sites, and ensure plans are co-ordinated with any works – it is important to understand the interactions of the off-site transport/deliveries which might be using the same strategic road network routes;
- plan site layouts so that machinery and dust causing activities are located away from receptors, as far as is practicable;
- control site runoff of water or mud;
- keep the security fencing around the construction site, barriers and scaffolding clean, where practicable and safe to do so;
- ensure that all construction activities, including materials stored on site that have a potential to produce airborne dust are subject to appropriate site management controls necessary to prevent/mitigate the identified risk;
- all vehicle engines to be switched off when stationary, wherever practicable and safe to do so;
- avoid the use of diesel or petrol powered generators and use mains electricity or battery powered equipment where practicable;
- use lower power settings where practicable;
- where there is a risk of dust nuisance, use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques;
- ensure an adequate water supply on site for effective dust/particulate matter suppression/mitigation;
- where, there is a risk of dust nuisance, use enclosed chutes and conveyors and covered skips, where practicable;
- where there is a risk of dust nuisance, control drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate;
- ensure equipment is readily available on-site to clean any dry spillages, clean up spillages as soon as reasonably practicable, and use wet cleaning methods where appropriate;
- ensure there will be no bonfires and burning of waste materials (refer to section 4.9 of this CoCP);
- ensure effective water suppression is used during demolition operations, for example hand-held sprays and high-volume water suppression systems;



- produce specific method statement and risk assessment if the need to remove biological materials is identified through demolition activities;
- avoid scabbling (roughening of concrete surfaces) if possible;
- ensure sand and other aggregates brought on to site are stored so as not to be allowed to dry out unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place;
- use water-assisted dust sweeper(s) on the access and local roads to remove, as necessary, any material tracked out of the site;
- ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport; and
- implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site).

7.3.5 Individual sub-CoCPs contain further specific additional measures to control dust where warranted in that location due to the construction activities planned to take place there or with respect to nearby receptors.

## **7.4 Dust and air quality thresholds**

7.4.1 Horizon will derive amber and red trigger levels for dust deposition at human receptors from existing baseline dust deposition data following the principles of relevant guidance (Vallack and Shillito, 1998) [RD7]. These will be set in agreement with the IACC.

7.4.2 Should any of the monthly measured dust deposition rates exceed an amber or red trigger level then the following actions will be implemented:

- inform the relevant site team;
- review the meteorological conditions for the sampling period (e.g. wind direction, dry and windy periods);
- compare the results against other dust deposition results, including those recorded at the control location.
- Based on the above reviews, if site activities are identified as the cause of the high dust deposition rates the following actions will be taken (response will be proportionate to whether the exceedance is due to an amber or red trigger level):
- review the complaints log for dust complaints;
- obtain and review the activity log and visual inspections for the monitoring period;
- if specific site activities are determined to be contributing to the breach in the agreed trigger level, the specific site works and current mitigation measures shall be reviewed;

- implement other feasible and reasonable measures (such as additional dust suppression, altering working methods and other appropriate measures); and
- continue monitoring (including additional monitoring, if required) undertake further monitoring to verify that the control measures have reduced levels to acceptable level at the relevant receptors.

7.4.3 All exceedances of triggers levels and outcomes and responses will be recorded. The amber and red trigger levels may be adjusted during the construction works in agreement with the IACC and/or NRW's following review of the effectiveness of the thresholds to indicate the potential for adverse effects at off-site locations.

## **7.5 Dust and air quality monitoring**

7.5.1 Where required, the appropriate monitoring methodologies, metrics and equipment types/specification, including requirement for visual observations/inspections will be set out in the relevant sub-CoCPs. Particular controls relevant to specific locations are detailed in the relevant sub-CoCPs.

7.5.2 Dust and air quality monitoring equipment will be installed prior to the commencement of construction works and continue until all construction works are complete.

7.5.3 Horizon will undertake regular on-site and off-site inspection, where receptors (including roads) are nearby, to monitor dust and record inspection results, and make the log available to the IACC when asked (this includes regular dust soiling checks of surfaces, such as street furniture, cars and window sills, in the vicinity of and within 100m of the site, with cleaning to be provided if necessary).

7.5.4 Horizon will provide a weather station, at an appropriate location, measuring wind speed, wind direction, temperature and rainfall. Where feasible, construction activities will be managed appropriately during times of drought and winds that could raise the potential for increased dust deposition at local receptors.

7.5.5 The frequency of site inspections by the person accountable for air quality and dust issues on site will be increased when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.

7.5.6 Horizon will keep records of the visual inspections conducted, including inspections of haul routes.

7.5.7 Horizon will ensure that dust suppression and monitoring equipment is always available when required, that it functions as intended, and it is maintained in accordance with manufacturer's instructions.

7.5.8 Horizon will provide details of how monitoring data will be interpreted and presented. Any particular controls relevant to specific locations are detailed in the relevant sub-CoCPs.

- 7.5.9 Horizon will ensure competent persons are employed to undertake the installation and servicing of the monitoring systems or undertaking the monitoring/observations.

## 8 Noise and vibration management strategy

### 8.1 General

- 8.1.1 Horizon's noise and vibration management is based on the controls set out in this CoCP and relevant sub-CoCPs.
- 8.1.2 Any site specific mitigation controls to be implemented for noise and vibration are described in section 8 of the relevant sub-CoCPs.
- 8.1.3 Horizon's noise and vibration management will be mobilised prior to construction activities commencing. Horizon will put in place mitigation to reduce as far as practicable noise and vibration effects on the surrounding environment.
- 8.1.4 The EIA process has identified that the Wylfa Newydd Project has the potential to cause significant effects at nearby receptors. Horizon will ensure that noise and vibration effects are reduced as far as is practicable.
- 8.1.5 Horizon will:
- employ specific and appropriate noise and vibration control methods;
  - make applications for prior consent for noisy works under Section 61 of the Control of Pollution Act 1974 in accordance with the procedures outlined in this CoCP;
  - monitor noise and vibration levels according to requirements set out in the relevant sub-CoCPs; and
  - undertake relevant actions if thresholds are exceeded.
- 8.1.6 All construction work will be undertaken in accordance with the following measures which are consistent with the guidance considering generic measures consistent with the guidance in BS 5228-1:2009+A1:2014 [RD8] and BS 5228-2:2009+A1:2014 [RD9]:
- Prior to the commencement of construction activities, the preferred construction methodology and equipment will be reviewed by Horizon to identify any reasonable opportunities to reduce construction noise and vibration and potential impacts on sensitive receptors. Where reasonable opportunities are identified, Horizon will adopt these as part of its construction methodology. Preference will be given to the selection of electrically powered equipment rather than diesel or petrol powered.
  - Heavy plant and equipment will comply with the noise limits outlined in the relevant European Commission Directive 2000/14/EC which is enacted in the Noise Emission in the Environment by Equipment for use Outdoors Regulations 2001 (SI) 2001/1701. All plant and equipment will be maintained on a regular basis to ensure good working order and compliance with these limits.
  - All heavy plant and equipment which are fitted with noise abatement covers, will not be operated with noise abatement covers open or removed,

to ensure that the acoustic insulation they are fitted with remains effective. The effectiveness of acoustic insulation and silencers fitted to plant would be monitored and assessed on a monthly basis. Any plant or equipment identified to have defective or underperforming insulation or silencers would be immediately investigated and repaired.

- Heavy plant, equipment and vehicles in intermittent use will be shut down or throttled down to a minimum during waiting periods as far as is practicable.
- Preference will be given to fabrication off-site or within purpose-built buildings on site, rather than in the open at work area.
- Consideration will be given to site layout in order to eliminate or reduce emissions received at sensitive locations.
- Noisy plant and plant producing high levels of vibration will be kept as far away as possible from sensitive areas.
- Vehicles and mechanical plant employed for any activity associated with the construction works will be fitted with effective exhaust silencers/suppression equipment.
- Plant employed for any activity associated with the construction works will be operated in a manner such that noise and vibration emissions will be controlled and limited as far as reasonably practicable.
- Vehicles will not wait or queue on the public highway with engines running (unless the engine was required to power the operation of the vehicle e.g. concrete wagon).
- All materials will be handled in a manner that would reduce noise.
- Noise from reversing alarms will be limited by designing circulation routes to avoid the need for vehicles to reverse as far as practicable, using banksmen where appropriate. To reduce noise, reversing alarms fitted to all vehicles will incorporate one or more of the following features:
  - highly directional sounders;
  - broadband or warbling signals;
  - self-adjusting output sounders (also known as ‘smart sounders’); and
  - flashing lights.
- The location of static equipment (such as generators, compressors and pumps) will be positioned to reduce noise at sensitive receptors as far as practicable.
- Localised noise screens or enclosures will be placed around small scale and comparatively immobile equipment, where practicable.
- Vibratory rollers will not be started, stopped, or the direction of travel reversed close to sensitive receptors unless no alternate option is available.

- Considerate working practices and behaviours will be communicated to the workforce, through at least (but not restricted to) site inductions, shift briefings and toolbox talks.
- Horizon will ensure all site personnel with responsibility for operating plant and machinery, in particular the working methods required by relevant Section 61 consents are suitably trained and qualified.
- Horizon will ensure vehicle fleets undergo regular checking and maintenance.

## 8.2 Section 61 applications

### *General procedure for Section 61 applications*

- 8.2.1 Horizon will submit Section 61 applications to cover appropriate periods of works, and any associated variations and dispensations.
- 8.2.2 For each Section 61 application, Horizon will ensure that the IACC are provided with sufficient time to review each application.
- 8.2.3 Horizon will maintain regular communication with the IACC to discuss the progress of Section 61 consent applications.
- 8.2.4 Section 61 applications will be made using the template in appendix A and containing the information set out in table 8-1.

**Table 8-1 Required contents of Section 61 applications**

Section of Section 61 Application	Required information
Scheme of work	Horizon will provide a description of the works to be carried out, working methods, type and quantity of plant to be used, and the duration of the works.
Programme	Horizon will detail the location (on site layout drawings) and duration of each activity with a potential to cause a noise or vibration impact at local receptors.
Working hours	Horizon will provide a definition of the working hours required.
Plant noise data	Horizon will provide sound power levels or sound pressure levels at 10m for each proposed item of plant.
Best Practicable Means (BPM) measures	Horizon will describe steps to reduce noise and vibration as far as practicable during the works.
Predicted noise and vibration levels	Horizon will undertake predictions of noise and vibration levels in accordance with BS 5228 Parts 1 and 2 [RD8, RD9].

Section of Section 61 Application	Required information
Proposed noise/vibration limits	Horizon will provide proposed noise/vibration limits applicable to normal operations described in the Section 61.
Proposed short-term higher noise/vibration limits	Where required, Horizon will propose limits for predicted short-term higher noise/vibration effects and associated durations, for consideration by the IACC.
BPM justification for short-term higher noise/vibration operations	Horizon will provide a detailed justification that the method and plant proposed represents BPM in terms of noise and vibration control. The duration of effect will be described.
Details of monitoring programme for noise and/or vibration	Horizon will provide details (including proposed monitoring locations, equipment, standards and personnel) of the proposed monitoring regime.

- 8.2.5 In the event that works for which Section 61 consent has been applied for, need to be rescheduled or modified (for example, using different plant, working methods or working hours), Horizon will apply for a dispensation or variation from the IACC before commencing those works.
- 8.2.6 The person(s) responsible for preparing applications for Section 61 consent or variation on behalf of Horizon and for the associated noise and vibration calculations must be suitably qualified and experienced.
- 8.2.7 Horizon will undertake a vibration risk assessment as part of the Section 61 application for any construction activity involving vibratory or impact equipment to be used on the Main Site.

## 8.3 Local Noise Mitigation Strategy

- 8.3.1 Noise resulting from the construction and operation of the Wylfa Newydd Project will be mitigated through a combination of embedded, good practice and additional mitigation measures. There will however remain some residual noise effects with the potential to adversely affect certain properties within the vicinity of the Wylfa Newydd Development Area and along road transport access routes.
- 8.3.2 Horizon is committed to a voluntary Local Noise Mitigation Strategy (LNMS) which offers secondary glazing to properties within LNMS boundary areas for the main site and along the A5025.
- 8.3.3 Horizon are also committed to ongoing monitoring of noise effects and considering potentially additional eligibility of affected properties during construction as part of the Section 61 process in due course.

### ***Applicability***

- 8.3.4 The Environmental Statement finds that noise insulation measures set out in the LNMS could be of particular benefit to certain properties affected by noise due to:
- construction activities within the Wylfa Newydd Development Area; and
  - noise relating to traffic.
- 8.3.5 These two aspects form the focus for the LNMS. In all cases, the LNMS noise insulation measures would be applicable to bedrooms and living rooms where there is a greater sensitivity to noise. Other rooms, conservatories, outhouses, sheds and other outbuildings are excluded.
- 8.3.6 The effect of noise due to the construction of the Off-site Power Station Facilities and the Associated Developments will be adequately addressed through effective planning, management and control of the various construction processes, including embedded and good practice and other additional mitigations. This LNMS will therefore not apply to the construction of these facilities.

### ***Eligibility (noise due to construction activities within the Wylfa Newydd Development Area)***

- 8.3.7 In order to qualify for the additional mitigation under the LNMS, a property will need to be:
- situated within the LNMS Construction Boundary Plan area (figure 8.1, and
  - a residential property, guest house, bed and breakfast or hotel where:
    - the applicant is the property owner or the holder of a long lease (with at least three years remaining), and
    - the property is lawfully occupied as a permanent dwelling at the date the DCO is granted.
- 8.3.8 The Environmental Statement concludes that some additional properties outside of the LNMS Construction Boundary Plan may also benefit from noise insulation measures. The LNMS Construction Boundary Plan will therefore be reviewed to take account of more accurate and detailed information associated with the Section 61 applications, prior to and throughout the construction period. Horizon will notify owners of any additional properties identified through this review that they may apply for the LNMS noise insulation measures subject to meeting the other eligibility criteria described in paragraph 8.3.7.
- 8.3.9 During construction, monitoring will be undertaken at selected locations around the site, and properties outside of the published LNMS Construction Boundary Plan area will qualify if they meet the ‘residential property’ criteria set out in paragraph 8.3.7, and in addition:
- are found to meet the example noise insulation thresholds published in Table E.2 of BS 5228 [RD8] (reproduced below in table 8-2), and



- the noise effect exists for a period of 10 or more days of working in any 15 consecutive days or for a total number of days exceeding 40 in any six consecutive months.

**Table 8-2 Information extracted from BS 5228 (Table E.2) [RD8]**

Time	Relevant time period	Averaging time, T	Noise insulation trigger level dB $LA_{eq,T}^{A)}$
Monday to Friday	07:00-08:00	1h	70
	08:00-18:00	10h	75
	18:00-19:00	1h	70
	19:00-22:00	3h	65
	22:00-07:00	1h	55
Saturday	07:00-08:00	1h	70
	08:00-13:00	5h	75
	13:00-14:00	1h	70
	14:00-22:00	3h	65
	22:00-07:00	1h	55
Sunday	07:00-21:00	1h	65
	21:00-07:00	1h	55

A) All noise levels are predicted or measured at a point 1m in front of the most exposed of any windows and doors in any façade of any eligible dwelling.

### ***Eligibility (noise relating to traffic)***

8.3.10 The LNMS also supports those affected by road traffic noise associated with the Wylfa Newydd Project, due to increases in traffic on existing road alignments as well as the A5025 Off-line Highways Improvements. The output of the Environmental Statement modelling work has been used to develop LNMS Highways Boundary Plans (referred to collectively as the LNMS Highways Boundary Plan – figure 8.2), adopting the following criteria:

8.3.11 Daytime qualification criteria:

- traffic noise levels during the construction or operation of the Wylfa Newydd Project are predicted to exceed 68dB  $LA_{10\ 18\ hr}$ ;
- the Wylfa Newydd Project is predicted to experience an increase traffic noise levels by at least 1dB(A), when compared to the baseline (i.e. without the Wylfa Newydd Project) in the year 2020 when the A5025 offline highway improvements are to be finished; and
- the property is within 300m of any highway which would carry traffic generated by the Wylfa Newydd Project.

8.3.12 Night-time qualification criteria:

- traffic noise levels during the construction or operation of the Wylfa Newydd Project are predicted to exceed 60dB  $L_{AF\ max}$ ;
- the Wylfa Newydd Project is predicted to increase traffic noise levels by at least 1dB(A), when compared to the baseline (i.e. without the Wylfa Newydd Project) in the year 2020 when the A5025 Offline Highway Improvements are to be finished;
- traffic noise levels during the construction or operation of the Wylfa Newydd Project are predicted to exceed 55dB(A)  $L_{night}$ ; and
- the property is within 300m of any highway which would carry traffic generated by the Wylfa Newydd Project.

8.3.13 In order to qualify for the additional mitigation under the LNMS, a property will be:

- situated within the LNMS Highways Boundary Plan area (which includes the 300m buffer around applicable on-line and off-line highways), and
- notified by Horizon that EIA modelling indicates that the property would qualify, and
- a residential property, guest house, bed and breakfast or hotel where:
  - the applicant is the property owner or the holder of a long lease (with at least three years remaining), and
  - the property is lawfully occupied as a permanent dwelling at the date of the DCO is granted.

Figure 8-1 LNMS Construction Boundary Plan

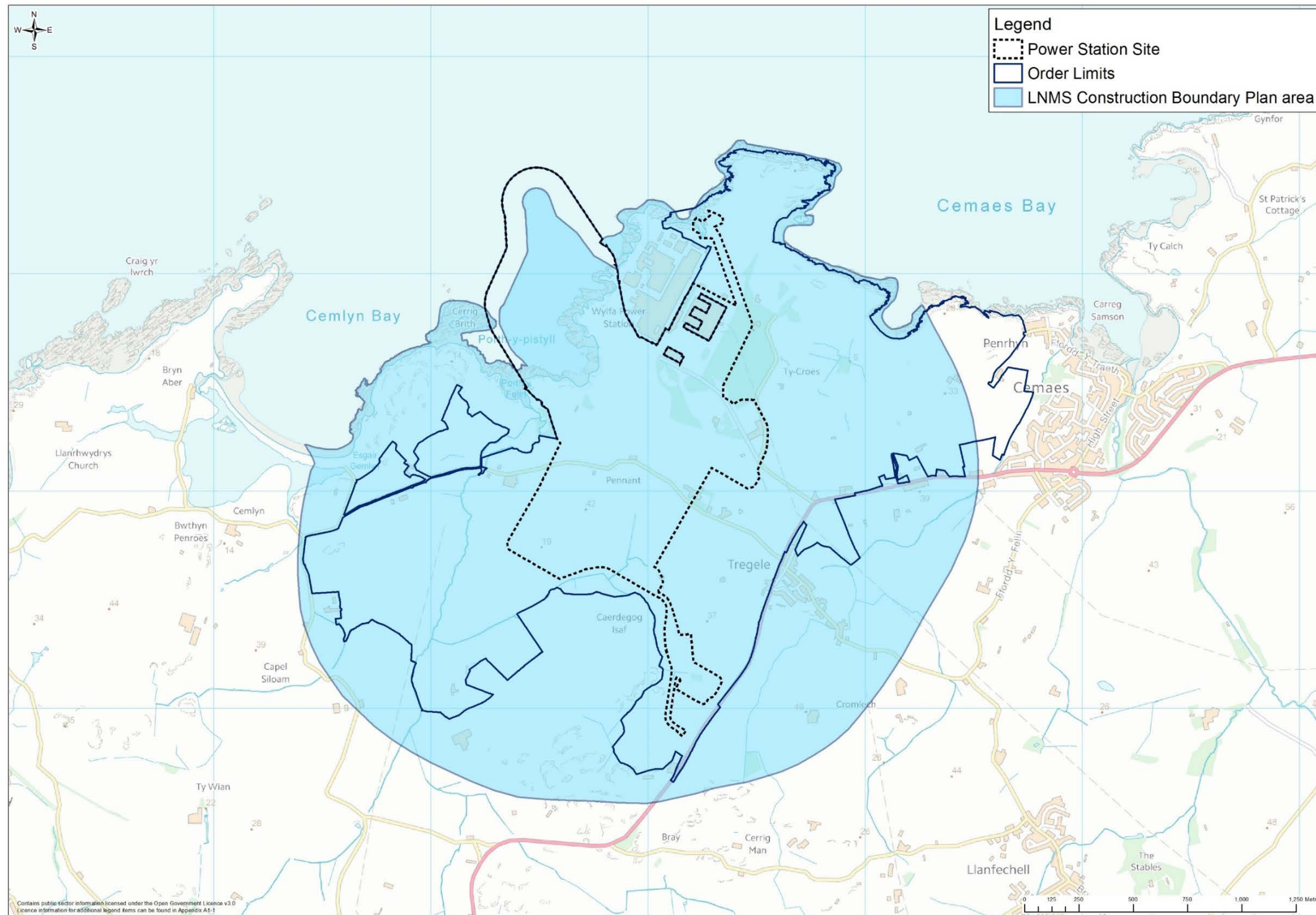
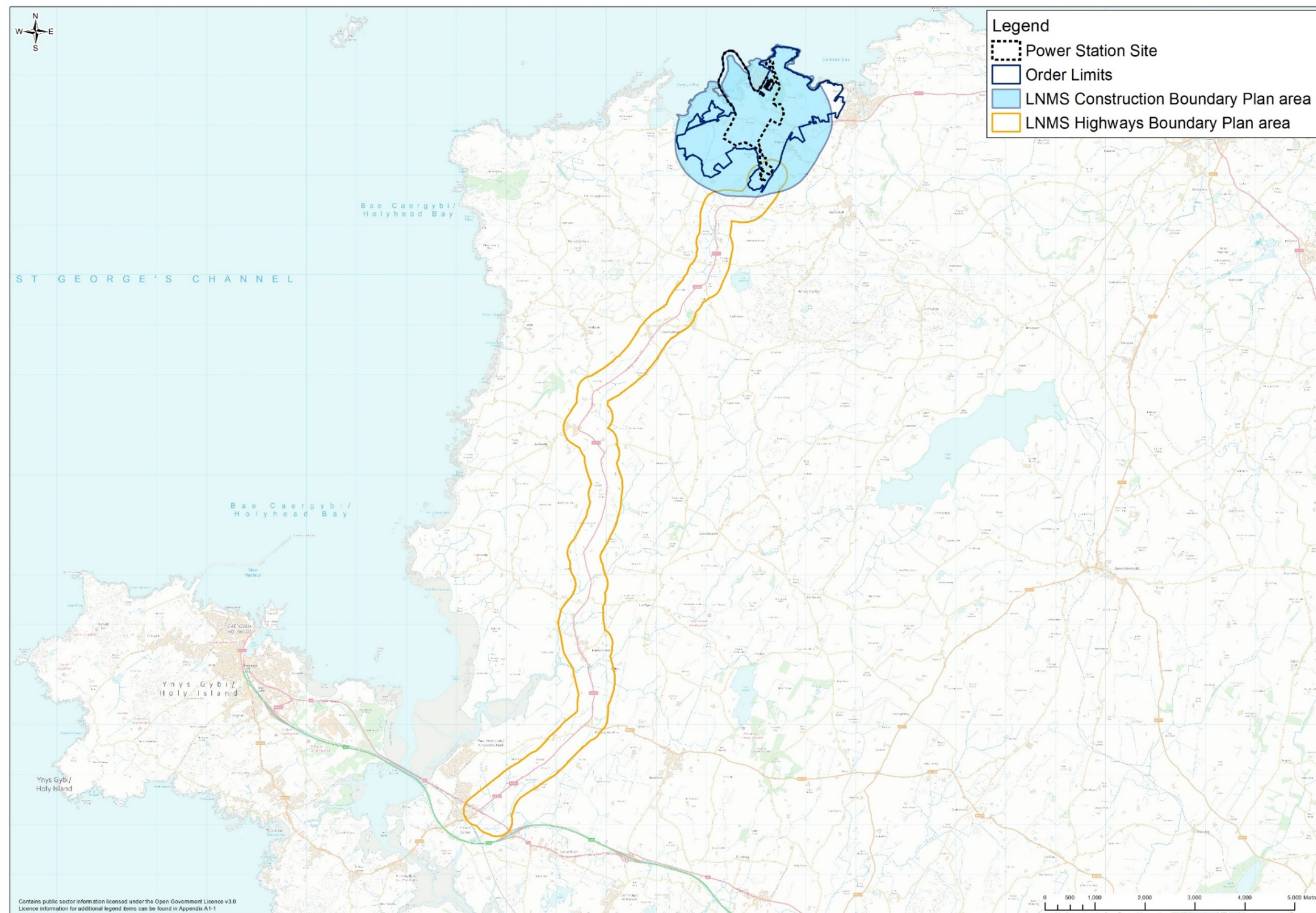




Figure 8-2 LNMS Construction Boundary Plan



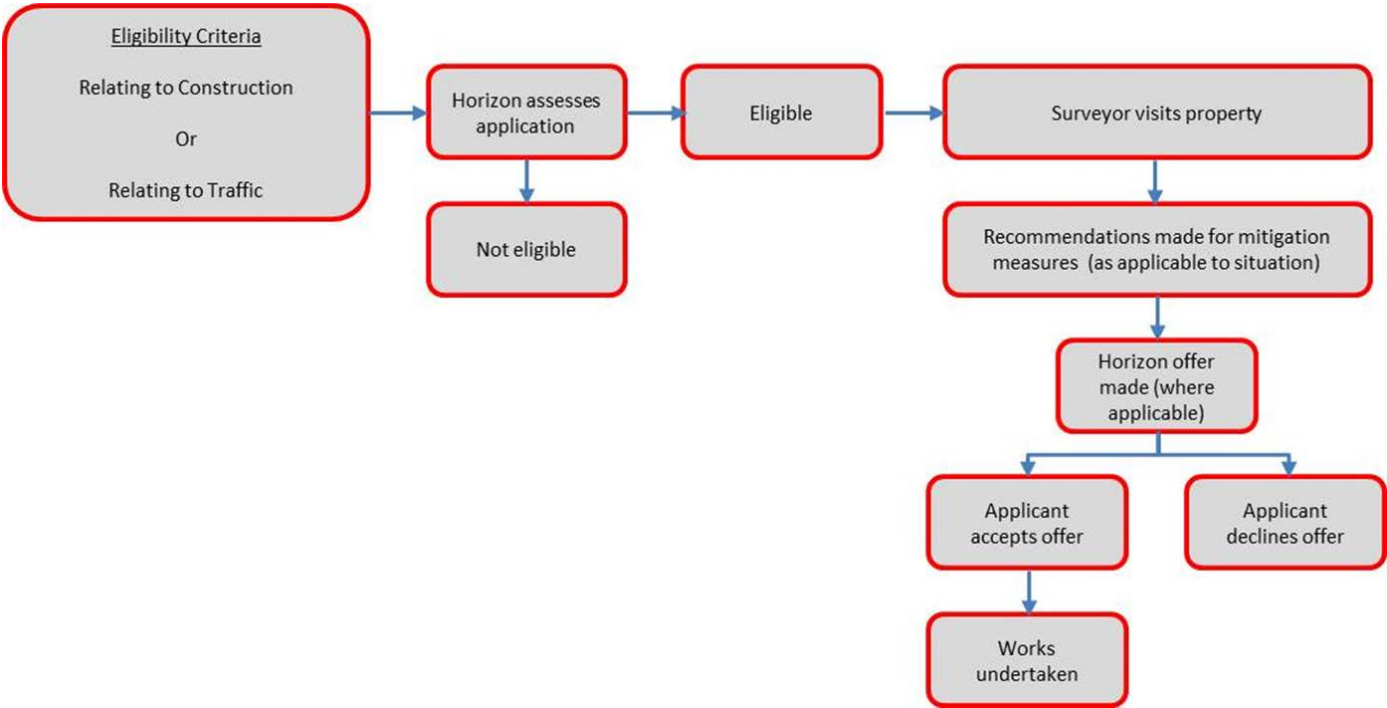
### ***Sensitive receptors***

- 8.3.14 The Environmental Statement identifies a number of potentially sensitive receptors such as schools that could be adversely affected by noise and where LNMS noise insulation measures may provide benefit. Guided by the Environmental Statement modelling work, Horizon will approach such receptors on a case by case basis to discuss this further.
- 8.3.15 Night workers, those needing a particularly quiet home environment to work in, or those that have a medical condition which will be seriously aggravated by construction noise, will also be considered on a case by case basis.

### ***Implementation and operation of the LNMS***

- 8.3.16 Following the grant of a DCO, owners of properties within the LNMS Boundary Plans will be notified that they may be eligible to receive additional noise mitigation, and will be provided with further information to enable them to apply. Notification will also be given to any additional properties resulting from any subsequent expansion of the LNMS Boundary Plans.
- 8.3.17 Applications received will be checked against the eligibility criteria set out above. Compliant applications will then be taken forward and Horizon will arrange for surveys to be undertaken to recommend any improvements that would benefit the occupants. Typically, consideration will be given to secondary or double glazing, insulated doors and additional (noise insulated) ventilation to compensate for windows needing to be kept closed, particularly at night. If an offer of improvements is subsequently made, and property owners opt to take up the offer, Horizon will then arrange for installation. The applicant is at liberty to choose whether or not to take up the offer, but no cash alternative will be available in lieu of undertaking the improvements.
- 8.3.18 Figure 8.3 shows in schematic form key principles for how the scheme will operate.

Figure 8-3 Operation of the LNMS – schematic flowchart



## **8.4 Noise and vibration monitoring**

8.4.1 The aims of monitoring noise and vibration levels will be to:

- satisfy the requirements of consent obtained under Section 61 of the Control of Pollution Act 1974;
- provide confidence in the calculations undertaken to inform the Section 61 process;
- monitor compliance with the noise/vibration limits agreed during the Section 61 process; and
- inform response to complaints about noise and vibration.

8.4.2 Noise measurements are to be undertaken at regular intervals by suitably qualified and experienced personnel.

8.4.3 Where monitored noise or vibration levels are found to be above either the limits set out in the relevant Section 61 approval covering the works at the time, the following actions will be undertaken immediately upon any breach being discovered:

- review works in the area likely to be causing the breach and consider any necessary mitigation actions (including if necessary, temporary suspension of works);
- confirm that monitored levels are not being impacted by other noise or vibration sources;
- determine whether the exceedance is due to a particular activity or item of equipment, and if so, identify if the equipment can be substituted for an alternative piece of equipment;
- implement other feasible and reasonable measures (which may include modifying time of works, using an alternate construction methodology, or a combination of these); and
- continue monitoring (including additional monitoring, if required) to verify that the control measures have reduced the noise levels to acceptable level at the relevant receptors.

8.4.4 Horizon will be responsible for preparing summary reports of noise monitoring and vibration monitoring for IACC. These will be prepared by a suitably qualified and experienced person.



## 9 Waste and materials management strategy, including soils and land contamination

### 9.1 General

- 9.1.1 Horizon's waste and materials management is based on the controls set out in this CoCP and relevant sub-CoCPs.
- 9.1.2 Any site specific mitigation controls to be implemented for waste and materials are described in section 9 of the relevant sub-CoCPs.
- 9.1.3 Horizon will manage all materials and waste for the Wylfa Newydd Project during construction in an integrated approach according to a waste and materials management strategy. The strategy will:
- apply a waste hierarchy which encourages a pro-active management of materials to reduce the amount that is discarded and seeks to recover the maximum value from the wastes that are produced with disposal as a final option;
  - establish safety controls;
  - accounts for waste; and
  - protect human health and the environment, now and in the future.
- 9.1.4 Modular buildings can be disassembled and relocated/refurbished with greater ease and efficiency, potentially reducing decommissioning waste.

### 9.2 Materials management

- 9.2.1 Horizon will conduct its materials management at each site following the process set out in *The Definition of Waste: Development Industry Code of Practice* [RD10]. Horizon materials management be will appropriate by providing that material is not a waste by giving sufficient consideration to the following four factors:
- protection of human health and the environment;
  - suitability for use, without further treatment;
  - certainty of use; and
  - quantity of material.
- 9.2.1 Horizon will ensure a Contaminated Land: Applications in Real Environments (CL:AIRE) qualified person is employed within its management systems to review, approve and verify site materials management. The CL:AIRE qualified person will not play an active part in the elements of the Wylfa Newydd Project associated with materials management as they must be independent.
- 9.2.2 In accordance with the CL:AIRE code of practice, Horizon will:
- collate information on how excavated materials are to be reused at each site, or within the Wylfa Newydd Project;



- prepare plans and/or schematics showing the proposed materials management, including excavations, stockpiles and any areas where material will be treated;
- apply suitable for use criteria, that can be used to decide if a material is suitable or if it is a waste;
- gather evidence to demonstrate that the materials are certain to be used, for example site layout plans or design drawings showing where material is needed to develop the site;
- prepare a breakdown of the quantity of excavated material being used on each site, including quantities of different types of material;
- gather details of how much material will be placed at each site or sub area of each site;
- use a tracking system that will be used to monitor materials movements so that accurate records are available of what was placed where; and
- review all waste management licences, environmental permits or exemptions of services Horizon procure to ensure all waste carriers, brokers and holders are licenced and permitted to handle the specific types of wastes in transit, from transfer from sites or offices to the final point of disposal.

9.2.3 When construction works are complete, Horizon will produce a document that sets out in detail how materials were actually managed on each site.

### **9.3 Site waste management**

9.3.1 All waste arising from the Wylfa Newydd Project will be managed in a responsible manner with the clear intention of applying Horizon's waste hierarchy and in line with all relevant waste legislation and regulation during the construction of the Wylfa Newydd Project.

9.3.2 Horizon will implement its waste management arrangements before construction works begin on site. Throughout construction Horizon will prepare a report for each construction site detailing the waste management processes that were followed including:

- project details;
- named persons and their roles and responsibilities;
- waste minimisation actions and owners;
- forecast of waste types and volumes including European Waste Catalogue codes;
- names and Duty of Care information for waste carriers expected to be used;
- names, locations and Duty of Care information for waste management facilities expected to be used on the Wylfa Newydd Project; and
- list of sub-contractors engaged with the Wylfa Newydd Project.

9.3.3 The report will also:

- complete and finalise its waste reporting requirements;
  - conduct a comparison of the forecast and actual reported quantities for each waste type;
  - describe lessons learnt from any differences between the concept phase and how Horizon actually performed during execution and implementation; and
  - generate an estimate of any cost savings achieved.
- 9.3.4 Throughout the construction period, and at regular intervals, Horizon will update:
- actual waste types and volumes including European Waste Catalogue codes;
  - names and duty of care information for waste carriers and waste management facilities that were used;
  - progress on waste minimisation actions; and
  - updated list of sub-contractors working on the Wylfa Newydd Project.
- 9.3.5 Within three months of the completion of construction works, Horizon will complete and finalise its waste reporting requirements including preparing a final report which;
- includes a comparison of the forecast and actual reported quantities for each waste type;
  - describe lessons learnt from any differences between the concept phase and how Horizon actually performed during execution and implementation; and
  - generates an estimate of any cost savings achieved.

### ***Waste controls on all sites***

- 9.3.6 Horizon will procure waste management services for the Wylfa Newydd Project. Horizon will implement waste controls to manage waste including:
- optimising opportunities for reuse, recycling and recovery of wastes;
  - storing non-hazardous stored in labelled bins or skips in designated areas. If the designated areas are external, they will be enclosed to prevent rainwater accumulating and material degradation;
  - storing inert waste generated by Horizon's activities in inert skips or in designated storage area(s);
  - appropriately identifying, managing and storing hazardous waste in designated area(s) in appropriately labelled, enclosed skips or receptacles in accordance with legislative requirements; and
  - in the event that waste is suspected of being radioactive, it must be left *in situ* and advice sought immediately from the Corporate Radioactive Waste Adviser Body on its management and disposal and the Corporate Radiation

Protection Adviser Body on the associated radiological safety aspects e.g. dose and exposure.

### ***Waste Duty of Care***

- 9.3.7 Horizon will categorise waste according to the European Waste Catalogue, and classify materials as hazardous, non-hazardous or inert according to their physical, chemical and biological properties.
- 9.3.8 Horizon will comply with, and ensure that others under Horizon's control comply with, their statutory obligations with respect to waste including the 'duty of care' requirements which will apply under Section 34 of the Environmental Protection Act 1990, and the requirement to arrange legal and compliant waste management services, including review of the transfer note (non-hazardous) or consignment note (hazardous) as part of Horizon's compliance with its statutory obligations.

## **9.4 Land contamination management**

- 9.4.1 Horizon will assess and manage land contamination in accordance with guidance within the *Model Procedures for the Management of Land Contamination* [RD11]. This will include undertaking appropriate ground investigation, assessment and where necessary, remediation, to deal with any risks from land contamination that are identified.
- 9.4.2 In order to address any areas of unexpected contamination encountered on all sites, an unexpected contamination scheme for all sites will be prepared prior to the commencement of any activities that involve ground disturbance. Processes and procedures will be established that clearly set out the method for dealing with any material affected by contamination encountered during construction works.
- 9.4.3 As a minimum, the processes and procedures should include specific methodologies that provide a means of safely managing the unexpected contamination and minimising potential environmental impacts and should cover the following:
- stopping work and notifying the Environmental Supervisor or Environmental Clerk of Works (or similar) when unexpected contamination is encountered;
  - isolating the affected area or segregating the affected material (if already excavated), with specific guidance to be provided on the management of any potential asbestos containing materials;
  - undertaking sampling and assessment of the affected area/material;
  - recording of assessment findings and subsequent management of the material within the verification report; and
  - liaison with regulators, if necessary.

## **9.5 Soils**

- 9.5.1 Horizon will ensure that suitably qualified and experienced personnel are employed to supervise the management of soil resources during soil stripping, handling, storage and reinstatement so that soil quality is retained, as far as practicable.
- 9.5.2 Horizon will follow guidance within the Construction code of practice for the sustainable use of soils on construction sites [RD12] and Good Practice Guide for Handling Soils [RD13] with regards to soil management.
- 9.5.3 In addition, Horizon will give consideration to the following:
- BS 3882:2015 *Specification for topsoil* [RD14];
  - BS 8601:2013 *Specification for subsoil and requirements for use* [RD15];
  - *The Definition of Waste: Development Industry Code of Practice* [RD10];
  - The Waste (England and Wales) Regulations 2011; and
  - The Environmental Permitting (England and Wales) Regulations 2016.
- 9.5.4 In accordance with the guidance presented in *Construction code of practice for the sustainable use of soils on construction sites* [RD12], a soil resource survey will be undertaken prior to earthworks commencing. This information will be used to better understand the nature of soils on-site so that they can be managed appropriately.
- 9.5.5 General controls to be employed by Horizon when managing soil resources include, but are not limited to the following.
- Soil handling works will cease when soil moisture exceeds limits determined by the suitable qualified and experienced personnel working to the *Construction Code of Practice for the Sustainable Use of Soils on Construction Sites* [RD12].
  - Topsoil and subsoil (where necessary), will be stripped as per good practice construction techniques from all areas of the main site and off-site locations, where development is taking place, with the exception of environmental buffer areas. This will be undertaken towards the start of the construction works.
  - Topsoils and subsoils, as well as soils of distinctly different qualities, types or composition will be stripped separately and segregated during storage and reinstatement as far as practicable, informed by properties such as (but not limited to) texture, stoniness, pH and nutrient levels.
  - Soils will be stockpiled using methods appropriate to the soil moisture conditions and stored in secure designated areas.
  - Soil storage mounds will have slopes of 1 in 2 (approximately 25°) or less where practicable.
  - Where soils will be stored for longer than 60 days, stockpiles will be seeded with an appropriate low-maintenance seed mix.

- The topsoil (and subsoil, where necessary), would then be reused sustainably within the Wylfa Newydd Project or at a suitable third-party receptor site (e.g. via the CL:AIRE register of materials).
- Topsoils will be reinstated to depths recommended by guidance, i.e. 150–300mm for grassland and 150–400mm for woodland, and subsoil will be placed beneath topsoil.
- Appropriate decompaction measures will be undertaken during reinstatement for topsoils, subsoils and their receiving substrates, including loosening with ripping equipment.
- Made ground materials and potentially contaminated materials will be stockpiled separately from natural materials to prevent cross contamination.
- Stockpiles considered to be contaminated will be stored on an impermeable base and have suitable containment and drainage to prevent potentially contaminated waters and sediments escaping.
- Chemical testing of stockpiles made of ground will be undertaken where required with testing results compared to relevant target values prior to reuse.
- If it is envisaged that soil will need to be stored for in excess of one year, a storage time limit will be agreed with NRW.

## 10 Water management strategy

### 10.1 General

- 10.1.1 Horizon's strategy to protect water resources is based on the controls set out in this CoCP and relevant sub-CoCPs.
- 10.1.2 Any site specific mitigation controls to be implemented for water management are described in section 10 of the relevant sub-CoCPs.
- 10.1.3 These documents will underpin the framework of controls for matters related to water resources that are set out within the Environmental Permit and deemed Marine Licence.
- 10.1.4 Horizon will comply with relevant legislation (including, but not limited to, the Water Resources Act 1991, the Environmental Permitting Regulations 2016 and the Land Drainage Act 1991 (as amended)).
- 10.1.5 Horizon will implement working methods to protect surface water and groundwater from pollution and other adverse impacts, including changes to flow, flood storage volume, water levels and water quality.
- 10.1.6 Construction Industry Research and Information Association (CIRIA) Guidance will be adopted as appropriate from the following publications:
- *Environmental Handbook for Building and Civil Engineering Projects* (three parts, C512, C528, C529) [ RD16, RD17, RD18];
  - *Control of water pollution from construction sites. Guidance for consultants and contractors (C532)* [RD19];
  - *Environmental good practice on site guide (fourth edition) (C741)* [RD20];
  - Land use management effects on flood flows and sediment – guidance on prediction (C719D) [RD21];
  - *The SuDS Manual (C753)* [RD22];
  - *Development and flood risk – guidance for the construction industry (C624)* [RD23]; and
  - *Culvert Design and Operating Guide (C689)* [RD24].

### 10.2 Protection of watercourses

- 10.2.1 Horizon will ensure suitable procedures are in place to provide protection for watercourses (refer to section 4.8), such as appropriate control measures and resources to manage the risk of spills and accidents.
- 10.2.2 In line with CIRIA Guidance C741, *Environmental Good Practice on Site Guide* [RD20], buffer zones will be established adjacent to watercourses. Requirements for specific surface water receptors are set out in the sub-CoCPs.

- 10.2.3 Horizon will carry out a risk assessment for all works within surface water buffer zones, including but not limited to, vegetation management adjacent to watercourses, construction of bridges and drainage outfalls. Furthermore, a risk assessment will be undertaken for use of any cementitious materials within 50m of any active watercourse. Appropriate controls, proportionate to the level of risk identified, will be applied to the works.
- 10.2.4 Adequate drainage systems will be installed prior to construction works with appropriate treatment prior to discharge. This will include sediment treatment and the inclusion of oil separators where necessary.
- 10.2.5 The drainage system will be appropriately maintained throughout the works such that it remains efficient, sediment would go to sediment lagoons.
- 10.2.6 Measures will be taken to prevent the deposition of silt or other material arising from work operations in existing watercourses or catchment areas. The measures will accord with the principles set out in industry guidelines, including *Guidance for Pollution Prevention: Works and maintenance in or near or water: GPP 5* [RD25]. Measures include use and maintenance of temporary lagoons, tanks, bunds, silt fences or silt screens, as well as consideration of the type of plant used and the time of year for working in watercourses.
- 10.2.7 In addition, relevant guidance including the following PPGs and GPPs will be followed, including:
- *PPG1: Understanding Your Environmental Responsibilities – Good Environmental Practices* [RD26];
  - *GPP 2: Above ground oil storage tanks* [RD27]
  - *PPG6: Working at construction and demolition sites* [RD28];
  - *GPP 13: Vehicle washing and cleaning* [RD29];
  - *GPP 20: Dewatering underground ducts and chambers* [RD30];
  - *GPP 21: Pollution Incident Response Plans* [RD31]; and
  - *PPG 26: Safe storage – Drums and intermediate bulk containers* [RD32].
- 10.2.8 Horizon's management of construction activities will be updated by the Environment Agency's GPPs, as they are made available.
- 10.2.9 Measures will be taken with regard to any works within a watercourse to restrict the release of suspended sediment and solids into the water column, as far as practicable.

### **10.3 Site drainage**

- 10.3.1 Where practicable, sustainable methods will be utilised for discharges including site drainage, surface runoff and dewatering discharges.
- 10.3.2 Horizon will ensure runoff is managed appropriately, according to the controls within this CoCP and relevant sub-CoCPs as well as any permits or other relevant approvals being obtained. This will include use of sediment settlement ponds and other appropriate treatment to manage flows and meet water quality thresholds as per the findings of the Wylfa Newydd Project Water

Framework Directive Compliance Assessment (Application Reference Number: 8.26).

- 10.3.3 Horizon will ensure sufficient drainage is installed prior to topsoil strip or major works occurring in a particular area (including construction of site compounds) to comply with the controls in this CoCP and relevant sub-CoCPs.
- 10.3.4 Horizon will ensure all relevant construction activities are managed within the limits of an obtained Environmental Permit, for example keeping within limits on the concentrations of substances to be discharged, as far as possible, to protect receiving surface waters.
- 10.3.5 All temporary hardstanding (on non-foreshore sites), as far as is reasonably practicable, will incorporate permeable surfacing unless there is a risk of surface water or groundwater pollution from contaminants.
- 10.3.6 Wherever practicable, permeable surfacing will be used for minor tracks, haul roads, compounds and laydown areas in order to avoid any increase in flood risk. Permanent tracks, and haul roads, and larger compounds that will house heavy equipment will be designed to avoid increases in flood risk. Discharge from any areas storing fuels and oils will be via an oil interceptor.
- 10.3.7 Oil interceptors will be provided to areas of hardstanding where there is a potential risk from oil/fuel contamination (e.g. at car parking areas).

## 10.4 Control of pollution

### *Surface water*

- 10.4.1 Horizon will ensure that protection measures to control the risk of pollution to surface water are adopted, including the following:
- All deemed requirements of the Environmental Permitting (England and Wales) Regulations 2016.
  - Any containers of contaminating substances on-site will be leak-proof and kept in a safe and secure building or compound from which they cannot leak, spill or be open to vandalism. The containers will be protected by temporary impermeable bunds (or drip trays for small containers) with a capacity of 110% of the maximum stored volume. Areas for transfer of contaminating substances (including refuelling areas) will be similarly protected and have appropriate spill kits.
  - In addition, any permanent oil storage tanks and temporary storage of over 200 litres of oil in drums and mobile bowers, as well as ancillary pipe work, valves, filters, sight gauges and equipment will be stored within secondary containment, e.g. bunding or drip trays (Water Resources (Control of Pollution) (Oil Storage) (Wales) Regulations 2016) with a capacity of at least 110% of the maximum contents of an oil tank, mobile bowser or intermediate bulk container.
  - No fuel, oil or chemical substances will be stored within 15m of a watercourse.



- Above-ground pipework will be properly supported and underground pipework will be protected from physical damage and subject to adequate leakage detection. Mechanical joints on oil pipes will be inspectable. Oil and hydrocarbon underground pipes will not extend into the groundwater saturated zone.
- All refuelling, oiling and greasing will take place above drip trays or on impermeable surfaces (e.g. plant nappy) with sealed drainage and an oil interceptor, which provides protection to underground strata and watercourses, and away from drains as far as is reasonably practicable. Vehicles and plant will not be left unattended during refuelling. Appropriate spill kits will be easily accessible during these activities.
- All construction equipment and vehicles will be maintained in line with manufacturer's instructions to ensure it is in good working order. Should any oil or fuel leaks occur, corrective action will be taken.
- Drip trays will be placed below static mechanical plant.
- All washing-down of vehicles (including wheel washing) and equipment will take place in designated areas and wash water will be prevented from passing untreated into watercourses and groundwater in accordance with the Environment Agency's GPP 13 [RD29] and subject to Environmental Permit requirements if discharged to controlled waters.
- The Environment Agency's GPP 5 [RD25] will be followed when carrying out maintenance of structures over water. Where practicable, only biodegradable hydraulic oils will be used in equipment working in or over watercourses.
- Appropriate measures will be taken to protect erodible earthwork surfaces, such as the use of sheeting.

### ***Groundwater***

- 10.4.2 Horizon will employ protective measures to control the risk of pollution to groundwater, which will, in particular, be consistent with the Environmental Permitting (England and Wales) Regulations 2016.
- 10.4.3 Horizon will address the handling of material from excavations being a potential source of contamination. Horizon will ensure measures will be put in place to prevent contaminated runoff reaching open ground.
- 10.4.4 In addition, Horizon will avoid using materials that could result in direct or indirect discharge of hazardous substances or non-hazardous pollutants to groundwater.

## **10.5 Flooding**

- 10.5.1 Horizon will ensure that flood risk is managed safely throughout the construction period and that all designs comply with the flood consequence

assessment in appendix D8-4 (Flood Consequence Assessment) (Application Reference Number: 6.4.29).

- 10.5.2 A documented flood mitigation action plan will be developed to ensure that in the event of flooding occurring on site appropriate plans are in place to manage the risks and ensure that there is no increased risk to human health and that risks to property are managed appropriately. The plan would, as a minimum, include details of the requirements for monitoring regulatory flood warning alerts, identification of safe meeting areas, access and egress routes, activities required to secure plant and equipment in the event of a flood being forecast, checking of drainage systems, roles and responsibilities and checking procedures.
- 10.5.3 Horizon's flood risk compliance will be based upon a risk-based precautionary approach, using the source-pathway-receptor concept, drawing information from NRW's online flood warning advice [RD33], or other such reputable service as appropriate.

## **10.6 Monitoring**

- 10.6.1 Where required, the monitoring of aspects such as water quality, groundwater, fluvial geomorphology will be carried out by Horizon.
- 10.6.2 Refer to relevant sub-CoCPs for details on required monitoring arrangements.

## 11 Ecology and landscape management strategy

### 11.1 General

- 11.1.1 Horizon's ecology and landscape management is based on the controls set out in this CoCP and relevant sub-CoCPs.
- 11.1.2 Any site specific mitigation controls to be implemented for ecology and landscape are described in section 11 of the relevant sub-CoCPs.
- 11.1.3 The LHMS, a certified document (Application Reference Number: 8.1.6) secures the creation and management of a range of key landscape elements and wildlife habitats across the Wylfa Newydd Project. During the construction stage and operation stage of the Power Station the LHMS (Application Reference Number: 8.1.6) applies to a range of habitats including but not restricted to:
- Tre'r Gof Site of Special Scientific Interest (SSSI), including botanical monitoring to identify any hydrological and air quality effects;
  - Notable Wildlife Enhancement Site;
  - The Reptile Receptor Site;
  - The Ancient Woodland Receptor Site;
  - Maintenance of artificial red squirrel nest boxes in the Dame Sylvia Crowe wooded mounds; and
  - Habitat management for chough at Wylfa Head.
- 11.1.4 Horizon will ensure that procedures are in place to prevent disturbance and damage to European Designated Sites; prevent offences under protected and controlled species legislation; and control and reduce as far as is practicable disturbance and damage to retained habitats and notable species, in accordance with the control measures set out within this CoCP and sub-CoCPs, and relevant legislation and nature conservation policy and guidance.
- 11.1.5 There are requirements for pre-construction ecology surveys to be carried out to provide up-to-date information on the potential presence of protected species. These survey requirements are set out, where relevant, in the sub-CoCPs. These pre-construction surveys will be carried out to provide up-to-date information on the potential presence of protected species, inform the need for / the detail of protected species licences and/or inform construction decisions such as the micro-siting of ditch crossings. Pre-construction surveys identified as required at a site will be carried out by suitably qualified and experienced ecologists not more than 12 months in advance of construction commencing there. Horizon's construction work will be planned with cognisance to the results and findings of the pre-construction surveys. Specific controls identified as a consequence of the pre-construction survey work, will be carried out by Horizon through the planning and undertaking of the construction activities where appropriate.

### 11.2 Receptor-specific requirements

- 11.2.1 Horizon will employ suitably qualified and experienced ecologists (referred to in this document and sub-CoCPs as ecological clerk of works (ECoW)) to carry out site supervision works during activities that affect sensitive habitats and species to ensure that the procedures and controls in this CoCP and sub-CoCPs are followed. The ECoW will be in place to identify any new ecological constraints on site arising during construction. These will be dealt with following appropriate best practice guidance and, where required due to legal protection and licencing requirements, liaison with NRW.
- 11.2.2 An ECoW is professional ecological support associated with construction (or other works) site supervision, be it vegetation clearance or ensuring the adherence to specific working methodologies.
- 11.2.3 Works will be timed where possible to avoid particularly sensitive periods for ecological receptors. This may require habitat clearance to be undertaken in advance of the programme period for a particular construction activity.
- 11.2.4 Where species are protected by specific legislation requiring a derogation licence to avoid committing an offence under that legislation, approved guidance will be followed and sufficient time allowed to obtain the required licences or consents.
- 11.2.5 Horizon will implement a programme of monitoring to review the status of ecological issues during construction, including the monitoring and maintenance of any measures implemented as part of advanced mitigation works.
- 11.2.6 Horizon will ensure the construction workforce is provided with sufficient training to comply with the controls of this CoCP and the sub-CoCPs relevant to a particular site. As a minimum, this will take the form of appropriate tool-box talks delivered by the ECoW prior to the commencement of works to ensure that all site personnel are aware of ecological constraints and the measures to avoid undue damage to habitats within or outside of the construction site.
- 11.2.7 Horizon will have particular regard to the controls of this CoCP and sub-CoCPs with respect to general site operations, dust and air quality, noise and vibration and surface water and groundwater, respectively, to protect ecologically important habitats and species in the vicinity of construction sites.
- 11.2.8 Horizon will report and keep record of any unforeseen incidents that lead to breaches with this CoCP and sub-CoCPs and actions taken to immediately remedy the non-compliance.
- 11.2.9 Horizon will be responsible for protecting habitats including terrestrial, foreshore and watercourse habitats, by appropriate means. This will include the creation of buffer exclusion zones to be demarcated and protected with site fencing/hoarding to prevent works encroaching into sensitive habitat areas. The relevant sub-CoCPs will identify whether buffer zones are required for specific locations and what the buffer zone will be.
- 11.2.10 Enabling Works (such as vegetation clearance and dry stone wall removal), will be carried out in a directional manner as far as reasonably practicable to

encourage movement of mobile ecological receptors towards the Notable Wildlife Enhancement Site and the Reptile Receptor Site, located to the west of the of the Wylfa Newydd Development Area, and discourage their movement towards features such as the A5025 road or residential areas of Cemaes.

### **Bats**

- 11.2.11 All species of bat in the UK are protected by law under the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species Regulations 2010 (both as amended). It is an offence to intentionally (or recklessly) kill, injure, capture or disturb bats or to damage, destroy or prevent access to roost sites (even when bats are not present).
- 11.2.12 Where works have the potential to disturb bats (by means of their commuting, foraging or roosting), appropriate mitigation will be dictated by means of an European Protected Species Mitigation Licence (EPSML) specific to bats if presence is established during pre-construction surveys detailed in relevant sub-CoCPs. Construction works with the potential to disturb bats will be supervised by an ECoW in line with the methodology set out in the EPSML. The ECoW appointed to oversee works potentially affecting bats will be an NRW bat licence holder.

### **Otters**

- 11.2.13 Otters are protected by law under the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species Regulations 2010 (both as amended). It is an offence to intentionally (or recklessly) kill, injure, capture or disturb otters, or to damage, destroy or prevent access to resting or sheltering places (even when otters are not present).
- 11.2.14 Where works have the potential to disturb otters, appropriate mitigation will be dictated by means of an EPSML specific to otters if presence is established during pre-construction surveys detailed in relevant sub-CoCPs. Construction works with the potential to disturb otters will be supervised by an ECoW appointed to oversee works, in line with the methodology set out in the EPSML.

### **Water Vole**

- 11.2.15 Water vole are protected by law under the Wildlife and Countryside Act 1981 (as amended). It is an offence to intentionally (or recklessly) kill, injure, capture or disturb water vole, or to damage, destroy or prevent access to resting or sheltering places (even when water vole are not present).
- 11.2.16 Where works have the potential to disturb water vole, appropriate mitigation will be dictated by means of a Conservation Licence (to derogate effects that might otherwise be illegal under the Wildlife Countryside Act 1981) specific to water vole if presence is established during pre-construction surveys detailed in relevant sub-CoCPs. Construction works with the potential to contravene the legislation relating to water vole will be supervised by an ECoW appointed to oversee works, in line with the methodology set out in the Conservation Licence.

### ***Red squirrel***

- 11.2.17 Red squirrel are protected by law under the Wildlife and Countryside Act 1981 (as amended). It is an offence to intentionally (or recklessly) kill, injure, capture or disturb red squirrel, or to damage, destroy or prevent access to resting or sheltering places (even when red squirrel are not present).
- 11.2.18 Where works have the potential to disturb red squirrel, appropriate mitigation will be dictated by means of a Conservation Licence (to derogate effects that might otherwise be illegal under the Wildlife Countryside Act 1981) specific to red squirrel if presence is established during pre-construction surveys detailed in relevant sub-CoCPs. Construction works with the potential to contravene the legislation relating to red squirrel will be supervised by an ECoW appointed to oversee works, in line with the methodology set out in the Conservation Licence.

### ***Notable mammals***

- 11.2.19 Section 7 of the Environment (Wales) Act 2016 places a duty on Welsh ministers to produce a list of habitats and species that are of principal importance for the purpose of maintaining and enhancing the biodiversity of Wales. To reduce the risk of killing, injuring or isolating animals from suitable habitat, vegetation clearance works will take place in a directional manner, encouraging animals to move into retained and enhanced habitats.
- 11.2.20 All mammals in the UK are protected by the Wild Mammals (Protection) Act 1996. It is an offence to be found to show intent to inflict unnecessary suffering on any UK mammal. Horizon will ensure that tool-box talks are given to clearance teams by an ECoW to make them aware of the presence of these species on site and the habitats which support them. The tool-box talk will be appropriate to the areas to be cleared, informing the clearance teams about the process of directional clearing and appropriate actions to be taken relevant to species encountered.

### ***Hedgehog***

- 11.2.21 Habitat with the potential to support hibernating hedgehog will not be removed between November and March without supervision by the ECoW.

### ***Marine mammals***

- 11.2.22 Refer to the Marine Works sub-CoCP for controls pertaining to marine mammals.

### ***Breeding birds***

- 11.2.23 All species of wild bird, their nests and their eggs are protected by law. It is an offence by the Wildlife and Countryside Act 1981 (as amended) to intentionally (recklessly) take, damage or destroy the nests or eggs of any wild bird while the nest is in use or being built.
- 11.2.24 Where possible, habitat with the potential to support bird nests will be removed outside the breeding bird season (typically March to August inclusive). This

will ensure that no birds are nesting on-site at the start of construction within or/near to the identified habitat. If it is not possible to avoid the breeding bird season, then clearance works will be supervised by the implementation of the following measures:

- An ECoW will complete a pre-commencement survey prior to removing any habitat with the potential to support nesting birds, including ground nesting species. The pre-commencement survey will identify the presence of any active nests, and in the event they are identified, establish appropriate methodologies to reduce any potential impacts on these nests during clearance works.
- The ECoW will supervise the clearance of habitats once it has been established that there are no nests present.
- Should active nests be found, either during the pre-commencement survey or during supervision, then the ECoW will set up a work exclusion zone of an appropriate distance to prevent disturbance. The exclusion zone distance will be set based on the judgement of the ECoW and the species concerned, but will typically range between 5-10m.
- Work exclusion zones will be maintained until chicks have fledged or the nest has become inactive, as determined through monitoring visits by the ECoW.

### ***Schedule 1 bird species***

11.2.25 Certain uncommon species of bird are afforded additional protection from disturbance; it is an offence to intentionally or recklessly disturb any such bird while it is building a nest, any such bird at a nest containing eggs or young or the dependent young of such a bird. These species are listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended). The ECoW will propose protection measures specific to any Schedule 1 species present.

11.2.26 In order to mitigate the risk of disturbing any Schedule 1 bird species nest, the following approach will be taken in accordance with the Conservation of Habitats and Species Regulations 2010.

- Habitats with the potential for use by Schedule 1 bird species will be identified and surveyed by the ECoW prior to site clearance.
- In the event that a Schedule 1 bird species is found during the nesting season, NRW will be consulted in order to identify and agree appropriate measures to be undertaken in respect of that species.
- Should a Schedule 1 species be discovered within an area to be disturbed, Horizon will implement the general measures set out above for birds (see paragraph 11.2.24) with the added requirement that any Schedule 1 species or its dependent young must not be disturbed while at or building a nest. Therefore, additional exclusion/protective measures may be required.



- 11.2.27 It is noted that there is no legal provision under the Wildlife and Countryside Act 1981 (as amended) to obtain a licence to facilitate development which would disturb a Schedule 1 species.

### ***Reptiles and amphibians***

- 11.2.28 The Great Crested Newt is a fully protected species under all elements of Section 9 of the Wildlife and Countryside Act 1981 (as amended), and under Parts 1 and 2 of Regulation 39 of the Conservation of Habitats and Species Regulations 2010.
- 11.2.29 Any required translocation of great crested newt will be completed under a European Protected Species Mitigation Licence (EPSML) obtained by Horizon. This will include all areas within 250m of ponds and follow best practice guidance from English Nature (2001) [RD34].
- 11.2.30 Horizon will be responsible for maintaining appropriate fencing that would prevent these animals from returning to the construction site for the duration of construction activities in that vicinity.
- 11.2.31 All reptiles receive protection under the Wildlife and Countryside Act 1981 (as amended) making it illegal to intentionally injure or kill these animals. The ECoW appointed to oversee works potentially affecting great crested newt will be an NRW Great Crested Newt Licence holder or accredited agent.
- 11.2.32 Habitat with the potential to support hibernating reptiles or hibernating toads will not be removed between November and March without supervision by the ECoW. As hibernation is dependent, in part, on ambient temperature, the ECoW will provide advice on when clearance of habitat with the potential to support hibernating reptiles could occur, as well as advising on which habitats are likely to support hibernating reptiles.
- 11.2.33 Any required translocation of reptiles will take place in accordance with the Herpetofauna Groups of Britain and Ireland guidance [RD35], using artificial refuges.
- 11.2.34 Horizon will be responsible for maintaining appropriate fencing similar to that used to prevent amphibians from returning to the construction area, to also prevent reptiles from moving back into the area, until construction is complete. Where required, a single fence can be used for reptiles and amphibian purposes.
- 11.2.35 Habitat manipulation will be utilised where practicable to displace reptiles from an area subject to clearance into an adjacent undisturbed area in order to protect animals from injury and mortality. This is achieved by cutting and clearance of vegetation in stages towards the direction of retained habitats such as hedgerows, woodland edge, tussocky grassland and scrub.
- 11.2.36 Where possible, pond destruction will be timed to avoid amphibian breeding season. If not possible, the pond will be drained down and cleared under the supervision of an ECoW. Common toads collected would be translocated in accordance with English Nature guidance (2001) [RD34] using artificial refuges to the nearest retained pond.



## ***Fish***

- 11.2.37 Fish receive protection under the Salmon and Freshwater Fisheries Act 1975 and a number of species are listed under the Environment (Wales) Act 2016. Horizon will take all reasonable measures to ensure fish (and riparian mammal) passage is maintained along watercourses during construction works.
- 11.2.38 Horizon will conduct any necessary rescue and translocation of fish due to works within a watercourse, the rescue and translocation of fish, including the acquisition of appropriate licences from NRW. Watercourse works will avoid fish spawning and migratory periods i.e. October-December.
- 11.2.39 Fish rescue will be undertaken by accredited and suitably qualified fisheries scientists.

## ***Invertebrates***

- 11.2.40 Sub-CoCPs contain site-specific controls established for notable invertebrate species found to be present.

## ***Invasive non-native plant species***

- 11.2.41 The Wylfa Newydd Project has the potential to result in the spread of invasive non-native species (INNS) in the terrestrial or marine environment. This could have detrimental effects on native biodiversity and could be contrary to the Wildlife and Countryside Act 1981 (as amended) which lists invasive non-native species which makes it illegal to introduce or cause them to spread or grow in the wild. It could also be contrary to other regulations and international conventions. The works have the potential to both spread INNS that are already established on the site and elsewhere in the UK and result in import of INNS from outside the UK.
- 11.2.42 In order to manage these risks, Horizon will prepare one (or more) Biosecurity Risk Assessment (s) and Method Statement (s) to cover all activities. Each Biosecurity Risk Assessment will consider in general:
- measures that will be undertaken to control and eradicate INNS within the area of works; and
  - measures or actions that aim to prevent INNS being introduced to the site for the duration of the construction phase of the scheme.
- 11.2.43 In the management of existing known presence of INNS, Biosecurity Risk Assessments and Method Statements will detail:
- how areas with the presence of INNS will be demarcated;
  - how any contaminated materials will be appropriately managed throughout the works, including where appropriate eradication from the site;
  - appropriate disposal; and
  - how any transfer or spread will be prevented.

11.2.44 In terms of prevention of new introduction to the site through terrestrial and marine pathways, Biosecurity Risk Assessments and Method Statements will detail:

- risk pathways and risk activities for the transfer and spread of non-native species;
- risk assessment for the transfer and spread of individual non-native species of known concern;
- methods to manage risk of transfer including any actions to be undertaken prior to reaching site; and
- contingency planning and corrective actions.

11.2.45 Horizon will implement a monitoring programme for non-native species. This will include observational surveys on structures that may provide suitable substrate for non-native species. Surveys will record presence/abundance of non-native species with reporting in agreement with NRW. Monitoring survey requirements for specific sites are set out in the sub-CoCPs where relevant. Where new presence of INNS is discovered, Biosecurity Risk Assessments and Method Statements will be reviewed and amended where necessary.

11.2.46 Wherever appropriate, workers will be given an activity specific tool-box talk from an ECoW. This will include photographs of any INNS species known to be present on a site.

### ***Protection of existing trees, scrub and hedgerows***

11.2.47 Protection of existing trees, scrub and hedgerows to be retained will be in accordance with the recommendations in BS 5837: 2012 [RD36].

11.2.48 Works within tree root protection areas will be avoided wherever practicable. If works within the root protection area of trees to be retained are deemed essential, works will be carried out using the techniques provided in BS 5837:2012 and the duration of those works will be restricted as far as possible.

## **11.3 Landscaping requirements**

11.3.1 The relevant Design and Access Statements (refer to the Design and Access Statements, Volume 1, Application Reference Number: 8.2.1; Volume 2, Application Reference Number: 8.2.2; Volume 3, Application Reference Number 8.2.3) and for the Wylfa Newydd Development Area, the Landscape and Habitat Management Strategy (Application Reference Number: 8.16) sets out the design principles that will provide guidance on landscaping measures to be implemented, for reasons such as mitigating adverse visual impacts, effects on habitats and species and/or effects on landscape character.

## **11.4 Landscape reinstatement**

11.4.1 Horizon will undertake reinstatement of land used temporarily for construction to a condition similar to that which existed prior to construction.

## **11.5 Record keeping**

- 11.5.1 Horizon will maintain proper record keeping procedures in relation to all ecological constraints and respective licences.
- 11.5.2 Horizon will provide all species data collected to Cofnod [North Wales Environmental Information Service].
- 11.5.3 Recorded data will be kept securely and backed up as necessary for the purposes of audit.

## 12 Cultural heritage management strategy

### 12.1 General

- 12.1.1 Horizon's cultural heritage management is based on the controls set out in this CoCP and relevant sub-CoCPs.
- 12.1.2 Site specific mitigation controls to be implemented for cultural heritage are described in section 12 of the relevant sub-CoCPs.
- 12.1.3 Mitigation for effects on cultural heritage is presented below under the sub-topics of archaeological remains, historic buildings, and the historic landscape.
- 12.1.4 As part of the general measures in 4.4.1, Horizon will ensure that the internal layout of the temporary Construction Compounds is designed to reduce noise intrusion into the setting of heritage assets and will include consideration of fencing materials and stockpile and portacabin positioning.

### 12.2 Archaeological remains

- 12.2.1 If significant archaeological remains are discovered and it is determined by Horizon's archaeological consultant, in liaison with the Gwynedd Archaeological Planning Service (GAPS) Senior planning archaeologist (the curator), that the planned construction works may affect those remains, Horizon will cease works in that area. The potential remains will then be assessed and appropriate mitigation measures developed in consultation between Horizon and GAPS. Appropriate mitigation may comprise measure such as:
  - palaeoenvironmental assessment followed by palaeoenvironmental analysis if required;
  - archaeological excavations;
  - strip, map and sample; and
  - targeted watching briefs.
- 12.2.2 Archaeological recording will be undertaken in accordance with relevant guidance provided by the Chartered Institute for Archaeologists and Written Schemes of Investigation agreed with GAPS. All archaeological recording will include a programme of assessment, reporting, analysis, publication and dissemination commensurate with the value of the terrestrial archaeological remains removed, submission of reports to the Historic Environment Record and National Monument Record of Wales, and the preparation of an ordered archive which will be submitted to an appropriate repository. Works will continue in the vicinity of the remains upon implementation of the approved mitigation

### 12.3 Historic buildings

- 12.3.1 In order to mitigate effects on historic buildings within the Order Limits, one or both of the following will be undertaken, to be determined on a case by case basis:

- photographic surveys to provide a permanent visual record of the current conditions of historic buildings and/or their settings; and
- historic building recording (at a suitable level) to provide a permanent documentary (written, drawn and photographic) record of historic buildings in their current form and setting.

12.3.2 Photographic survey and historic building survey will be undertaken in accordance with relevant good practice guidance and Written Schemes of Investigation agreed with GAPS. The level of archaeological building recording and reporting will be commensurate with the value of the historic buildings affected, and will include submission of reports to the Historic Environment Record and National Monument Record of Wales and the preparation of an ordered archive which will be submitted to an appropriate repository.

## **12.4 The historic landscape**

12.4.1 Measures will be undertaken to mitigate effects on the historic landscape within the Order Limits. Such measures will include one or all of the following:

- historic landscape surveys (at a suitable level) will be undertaken to mitigate the effects on historic landscape through creating a permanent documentary (written, drawn and photographic) record of their current form and setting.
- topographic and landscape survey and recording, at a suitable level; and
- photographic surveys (at a suitable level) to provide a permanent visual record of the landscape.

12.4.2 The surveys will be undertaken in accordance with relevant good practice guidance and Written Schemes of Investigation agreed with GAPS. The level of reporting will be commensurate with the value of the historic landscape affected, and will include submission of reports to the Historic Environment Record and National Monument Record of Wales, and the preparation of an ordered archive which will be submitted to an appropriate repository.

## 13 References

**Table 14-1 Schedule of references**

ID	Reference
RD1	Institute of Environmental Management and Assessment. 2016. <i>Delivering Quality Development</i> .
RD2	British Standards Institution. 2015. BS EN ISO 14001:2015 Environmental management systems. Requirements with guidance for use. London: British Standards Institution.
RD3	British Standards Institution. 2014. BS EN 12464-2:2014 <i>Light and lighting. Lighting of work places. Outdoor work places</i> . London: British Standards Institution.
RD4	Institute of Lighting Professionals. 2011. <i>Guidance Notes for the Reduction of Obtrusive Light</i> GN01:2011. Rugby, ILP.
RD5	Natural Resources Wales. 2014. <i>How to comply with your environmental permit</i> . Version 8. Cardiff: Natural Resources Wales.
RD6	Institute of Air Quality Management. 2014. <i>Guidance on the assessment of dust from demolition and construction</i> . London: Institution of Environmental Sciences.
RD7	Vallack, H.W. and Shillito, D.E. 1998. Suggested guidelines for deposited ambient dust. <i>Atmospheric Environment</i> . 32(16), pp. 2737–2744.
RD8	British Standards Institution. 2014. BS 5228-1:2009+A1:2014 <i>Code of practice for noise and vibration control on construction and open sites. Noise</i> . London: British Standards Institution.
RD9	British Standards Institution. 2014. BS 5228-2:2009+A1:2014 <i>Code of practice for noise and vibration control on construction and open sites. Vibration</i> . London: British Standards Institution.
RD10	Contaminated Land: Applications in Real Environments. 2011. <i>The Definition of Waste: Development Industry Code of Practice</i> . Version 2. London: CL:AIRE
RD11	Environment Agency and Department for Environment, Food and Rural Affairs. 2004. <i>Contaminated Land Report 11: Model Procedures for the Management of Land Contamination</i> . Bristol: Environment Agency.
RD12	Department for Environment, Food and Rural Affairs. 2011. <i>Construction code of practice for the sustainable use of soils on construction sites</i> . London: Department for Environment, Food and Rural Affairs.
RD13	Ministry of Agriculture, Fisheries and Food. 2000. <i>Good Practice Guide for Handling Soils</i> (version 04/00). Cambridge: Farming and Rural Conservation Agency.

ID	Reference
RD14	British Standards Institution. 2015. <i>BS 3882:2015 Specification for topsoil</i> . London: British Standards Institution.
RD15	British Standards Institution. 2013. <i>BS 8601:2013 Specification for subsoil and requirements for use</i> . London: British Standards Institution.
RD16	Venables, R.K. 2000. PUB C512 <i>Environmental handbook for building and civil engineering projects. Part 1: design and specification</i> . London: CIRIA
RD17	Venables, R.K. 2000. PUB C528 <i>Environmental handbook for building and civil engineering projects. Part 2: Construction</i> . London: CIRIA
RD18	Venables, R.K. 2000. PUB C529 <i>Environmental handbook for building and civil engineering projects. Part 3: Demolition and site clearance</i> . London: CIRIA
RD19	Masters-Williams, H. Heap, A., Kitts, H., Greenshaw, L., Davis, S., Fisher, P., Hendrie, M., Owens, D. 2001. <i>CIRIA C532 Control of water pollution from construction sites. Guidance for consultants and contractors</i> . London: CIRIA
RD20	Charles, P. Edwards, P. 2015. <i>Environmental good practice on site guide (fourth edition) (C741)</i> . London: CIRIA
RD21	McIntyre, N., Thorne, C. 2013. <i>Land use management effects on flood flows and sediment – guidance on prediction (C719D)</i> . London: CIRIA.
RD22	Woods-Ballard, B., Wallingford, H.R., Kellagher, R., Martin, P., Jefferies, C. 2015. <i>The SuDS Manual (C753)</i> . London: CIRIA.
RD23	Lancaster, J. W. Preene, M., Marshall C. T. 2004. <i>Development and flood risk – guidance for the construction industry (C624)</i> London: CIRIA.
RD24	Balkham, M., Fosbeary, C., Kitchen, A. and Rickard, C. 2010. <i>Culvert Design and Operating Guide (C689)</i> London: CIRIA.
RD25	Northern Ireland Environment Agency, Scottish Environment Protection Agency and Natural Resources Wales. 2017. <i>Guidance for Pollution Prevention: Works and maintenance in or near water: GPP 5</i> . Cardiff. Natural Resources Wales.
RD26	Environment Agency, Scottish Environment Protection Agency and Northern Ireland Environment Agency. 2013. <i>PPG1: Understanding Your Environmental Responsibilities – Good Environmental Practices</i> . Bristol: Environment Agency.
RD27	Northern Ireland Environment Agency, Scottish Environment Protection Agency and Natural Resources Wales. 2018. <i>GPP 2: Above ground oil storage tanks</i> . Cardiff: Natural Resources Wales.



ID	Reference
RD28	Environment Agency, Scottish Environment Protection Agency and Northern Ireland Environment Agency. 2012. <i>Working at construction and demolition sites: PPG 6</i> . 2 <sup>nd</sup> Edition. Bristol: Environment Agency.
RD29	Northern Ireland Environment Agency, Scottish Environment Protection Agency and Natural Resources Wales. 2017. <i>GPP 13: Vehicle washing and cleaning</i> . Cardiff: Natural Resources Wales.
RD30	Northern Ireland Environment Agency, Scottish Environment Protection Agency and Natural Resources Wales. 2018. <i>GPP 20: Dewatering of underground ducts and chambers</i> . Cardiff: Natural Resources Wales.
RD31	Northern Ireland Environment Agency, Scottish Environment Protection Agency and Natural Resources Wales. 2017. <i>GPP 21: Pollution Incident Response Plans</i> . Cardiff: Natural Resources Wales.
RD32	Environment Agency, Scottish Environment Protection Agency and Northern Ireland Environment Agency. 2011. <i>Safe storage – Drums and intermediate bulk containers: PPG 26</i> . Bristol: Environment Agency.
RD33	Natural Resources Wales. 2017. <i>Check flood warnings</i> . [Online] [Accessed: 27 July 2017] Available from: <a href="https://naturalresources.wales/flooding/check-flood-warnings/?lang=en">https://naturalresources.wales/flooding/check-flood-warnings/?lang=en</a> .
RD34	English Nature. 2001. <i>Great crested newt mitigation guidelines</i> . Peterborough: English Nature.
RD35	Herpetofauna Groups of Britain and Ireland. 1998. <i>Evaluating Local mitigation/translocation Programmes: Maintaining Best Practice and lawful standards</i> . HGBI advisory notes for Amphibian and Reptile Groups. HGBI, c/o Froglife, Halesworth. Unpubl.
RD36	British Standards Institution. 2012. BS 5837:2012 <i>Trees in relation to design, demolition and construction. Recommendations</i> . London: British Standards Institution.



## Appendix A Template application form for Section 61 consent

### CONTROL OF POLLUTION ACT 1974

#### EXAMPLE APPLICATION FORM FOR SECTION 61 CONSENT

To be developed further (with explanatory notes) in consultation with the relevant authorities.

Name and address of contractor	
Telephone number: Fax number:	
Address/location of proposed works:	
Particulars of works to be carried out:	
Site plan	
Methods to be used in each stage of development:	
Hours of work:	
Number, type and make of plant and machinery (including heavy vehicles) stating sound power levels	
Proposed steps to manage noise and vibration	
Predicted noise levels	
Approximate duration of works	
Other information	
List of plans and documents attached	

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