

Wylfa Newydd Project Site Preparation and Clearance

Code of Construction Practice



APPLICATION November 2017

Contents

1	Introduction	1
1.1	General	1
1.2	Responsibilities	3
1.3	Environmental Impact Assessment	3
2	Approach to environmental management	4
2.1	Code of Construction Practice	4
2.2	Construction Environmental Management Plan	4
2.3	Environmental management system	4
3	Communications and Community/Stakeholder Liaison Management Strategy	5
3.1	Community and stakeholder liaison	5
3.2	Enquiries and complaints	6
3.3	On-site communications	6
4	General Site Management Strategy	7
4.1	Working hours	7
4.2	Site lighting	7
4.3	Security	7
4.4	Environmental emergency management measures	8
	<i>Preparation for environmental incidents/emergencies</i>	8
	<i>Emergency / incident recording</i>	9
4.5	Fire prevention and control	9
5	Traffic and Transport Management Strategy	10
5.1	General	10
5.2	Construction workforce travel	10
5.3	Large vehicle controls	10
5.4	Works within the highway	10
5.5	Road cleanliness	11
6	Public Access Management Strategy	12
6.1	General	12
7	Dust and Air Quality Management Strategy	13
7.1	General	13
7.2	Dust and air quality management strategy	13
7.3	Dust and air quality thresholds and monitoring	14
7.4	Construction odour management	15
8	Noise and Vibration Management Strategy	16
8.1	General	16
8.2	Noise and vibration management	16
8.3	Noise and vibration thresholds	17
	<i>Section 61 applications</i>	17
8.4	Noise and vibration monitoring	18
9	Waste and Materials Management Strategy (including Soils and Land Contamination)	19

9.1	General.....	19
9.2	Materials management	19
9.3	Site waste management strategy.....	20
	<i>Materials and waste controls</i>	21
	<i>Waste Duty of Care</i>	21
9.4	Land contamination management.....	22
9.5	Soils.....	23
10	Water Management Strategy	24
10.1	General.....	24
10.2	Protection of watercourses	24
10.3	Site drainage.....	25
10.4	Control of pollution.....	25
	<i>Surface water</i>	25
	<i>Groundwater</i>	26
10.5	Flooding.....	26
10.6	Monitoring.....	26
10.7	Watercourse realignment.....	27
11	Ecology and Landscape Management Strategy	28
11.1	General.....	28
11.2	Receptor-specific requirements	29
	<i>Bats</i>	29
	<i>Otters</i>	30
	<i>Water Vole</i>	30
	<i>Red squirrel</i>	31
	<i>Other mammals</i>	31
	<i>Breeding birds</i>	31
	<i>Schedule 1 bird species</i>	32
	<i>Reptiles</i>	32
	<i>Common toad</i>	33
	<i>Great Crested Newt</i>	33
	<i>Fish</i>	33
	<i>Mud snail</i>	34
	<i>Invasive non-native species (of plant)</i>	34
11.3	Record keeping.....	34
12	Landscape and visual	35
13	Cultural Heritage Management Strategy	37
13.1	Archaeological Remains	37
13.2	Historic Buildings	38
13.3	Historic Landscape Types	39
14	References	40

Appendices

Appendix A Template application form for Section 61 consent

List of Tables

Table 8-1 Required contents of Section 61 applications.....	17
Table 14-1 Schedule of references.....	40

List of Figures

Figure 9-1 The Horizon waste hierarchy.....	19
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1 Introduction

1.1 General

- 1.1.1 Horizon Nuclear Power Wylfa Limited (Horizon) is applying to the Secretary of State for a Development Consent Order (DCO) under the Planning Act 2008, to construct, operate and maintain a new nuclear power station on land west of Cemaes on the Isle of Anglesey, known as Wylfa Newydd.
- 1.1.2 Horizon has submitted a planning application under the Town and Country Planning Act 1990 (as amended) for the SPC Works, to the Isle of Anglesey County Council (IACC) as the determining local planning authority. The Site Preparation and Clearance (SPC) Works forms part of the Enabling Works for the Wylfa Newydd Project, and is required to enable an efficient construction period following the grant of the DCO.
- 1.1.3 The preparation and implementation of a Code of Construction Practice (CoCP) is widely considered to be good practice to manage the potential environmental effects of construction activities and demonstrate compliance with prevailing environmental legislation.
- 1.1.4 This CoCP demonstrates that the good practice and additional mitigation described in the Environmental Statement will be delivered to ensure that the predicted effects from the EIA are not exceeded. The COCP also provides wider strategies to address mitigation identified within the other supporting assessments and good practice measures that fall outside the remit of the assessments.
- 1.1.5 The embedded mitigation outlined within the Environmental Statement has been incorporated into the SPC works design and is set out in the submitted planning drawings and Design and Access Statement (DAS).
- 1.1.6 For the purposes of this CoCP the term 'Horizon' refers to Horizon Nuclear Power Wylfa Limited, its appointed representatives and the appointed construction contractors.
- 1.1.7 The term "construction" or "construction activities" in this CoCP covers the SPC Works which comprise a range of works and activities including site establishment works, site clearance works, watercourse realignment and remediation works as summarised below:
- Establishment of Main Site Compound, comprising:
 - provision of fencing and site security facilities, an area for material handling and storage and a secure parking area for plant and machinery.
 - Offices, welfare and mess facilities in temporary buildings, as well as the provision of a fuel store and parking for office-based staff and the site workforce.
 - an overflow parking area (the car park which previously served the former Wylfa Sports and Social Club) will be used as necessary

and a new footpath link formed between it and the Main Site Compound.

- Formalisation of road crossings, comprising:
 - a new vehicular crossing of the Existing Power Station access road for use by construction vehicles accessing the north of the SPC Site from the Main Site Compound.
 - two upgraded vehicular crossings of Cemlyn Road for use by construction vehicles.
- Establishment of a Remediation Processing Compound (RPC), including associated fencing and access tracks, for treatment of contaminated material and invasive non-native species (INNS).
- Establishment of 10 No. Satellite and Material Storage Compounds and associated fencing.
- Erection of SPC Site perimeter fencing.
- Watercourse realignment and associated landscaping.
- Clearance of buildings and other existing above-ground structures.
- Vegetation clearance and protected species relocation.

1.1.8 In the event that the DCO is not granted or the Wylfa Newydd Project does not proceed, a scheme of restoration will be implemented to return the SPC Site to an acceptable condition. Should any restoration works be required they will be subject to a separate CoCP.

1.1.9 The Wylfa Newydd DCO Project application will be accompanied by an overarching Code of Construction Practice (the Wylfa Newydd CoCP), and will be supported by development-specific sub-CoCPs. This Site Preparation and Clearance (SPC) CoCP has been prepared to accompany the planning application for the SPC Works. It forms a separate document to the Wylfa Newydd CoCP.

1.1.10 This CoCP sets out general and topic-specific environmental requirements in accordance with the mitigation described in the Environmental Statement for the SPC Works. It includes requirements that demonstrate the effective planning, management and control to limit the potential adverse environmental effects of the SPC works.

1.1.11 This CoCP is the standalone document that details requirements that shall be followed when undertaking the SPC works.

1.1.12 Measures currently included within, and further additions to, this CoCP are subject to agreement between Horizon and key stakeholders, including the IACC, through the determination of the SPC planning application. The CoCP and its implementation will be secured by a condition in the planning permission to be granted by the IACC.

1.2 Responsibilities

- 1.2.1 Horizon is responsible for all the SPC works, which include overseeing and assuring that the SPC Works are carried out in accordance with this CoCP.
- 1.2.2 The appointed construction contractors will be required to deliver the SPC works in accordance with the terms of all planning conditions, including the condition required to comply with this CoCP. The appointed construction contractor(s) will be required to produce a Construction Environmental Management Plan (CEMP) to comply with the content of this CoCP.

1.3 Environmental Impact Assessment

- 1.3.1 In preparation for the TCPA application for the SPC Works, an Environmental Impact Assessment (EIA) was carried out and an Environmental Statement prepared in accordance with the *Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017*.
- 1.3.2 Other assessments (such as Welsh Language Impact Assessment, Rapid Health Impact Assessment, a Report to inform Habitats Regulations Assessment and a Water Framework Directive Compliance Assessment) were carried out in support of the planning application for the SPC Works.
- 1.3.3 Working with key local organisations and Welsh Government, Horizon is committed to introducing a range of measures to help ensure there is a lasting positive impact on Welsh language and culture. Horizon's Welsh Language Policy establishes the principles upon which all activities and consultation will take place. This is described in greater detail in the Welsh Language Impact Assessment that accompanies the planning application.

2 Approach to environmental management

2.1 Code of Construction Practice

- 2.1.1 This CoCP has been informed by the documents submitted in support of the SPC Works planning application which has been subject to consultation with key stakeholders including the IACC, Natural Resources Wales (NRW) and the local community.
- 2.1.2 This CoCP demonstrates that the mitigation described in the supporting documents will be delivered to ensure that the predicted effects from the EIA are not exceeded.

2.2 Construction Environmental Management Plan

- 2.2.1 The CEMP is a delivery document that details how the practical execution of the SPC works will be planned, managed and controlled to comply with the requirements of this CoCP, as well as the planning permission, other necessary consents, legislation and relevant good practices.
- 2.2.2 The CEMP will be produced by the appointed construction contractor(s) and shall be reviewed and accepted by Horizon before the commencement of construction activities.
- 2.2.3 The CEMP will be updated as and when required to ensure the methods used reflect the changing needs of the works during construction and, for example, any relevant updates to industry guidance or legislation or as a result of pre-construction surveys. All updates to the CEMP will be subject to acceptance by Horizon.

2.3 Environmental management system

- 2.3.1 Horizon has developed and will construct the Wylfa Newydd Project under environmental management systems accredited to British Standard (BS) EN ISO 14001: Environmental Management Systems [RD1].
- 2.3.2 Horizon's accredited environmental management system demonstrates a mechanism for continual improvement and control of all Horizon's activities.

3 Communications and Community/Stakeholder Liaison Management Strategy

3.1 Community and stakeholder liaison

- 3.1.1 Horizon will establish a Community Liaison Group (CLG) to ensure appropriate information is exchanged and highlighted during construction. CLG meetings will be held locally on a quarterly basis (or as required) and chaired by an independent facilitator.
- 3.1.2 The CLG consists of invited representatives from the immediate local communities, businesses and local interest groups. A Horizon representative will be present, along with representatives of the IACC where appropriate.
- 3.1.3 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.
- 3.1.4 The meetings will include discussions specifically associated with the SPC Works. The objectives of the meetings will be set around:
- developing relationships between Horizon and key stakeholders and the wider community;
 - providing information to, and input from, community members and other key stakeholders; and
 - identifying and commenting on concerns raised by the community during SPC works, with suggested action that could be undertaken to alleviate these concerns.
- 3.1.5 Horizon will display contact details for construction works enquiries on the site boundary. Contact details will also be available on Horizon's website.
- 3.1.6 Horizon will ensure that all its main public facing consultation and engagement materials are produced in both Welsh and English. Horizon can be contacted via its enquiry line, by email and by post in either Welsh or English, and it will respond in the same language. Its website is also produced in both languages.
- 3.1.7 All written notifications will be bilingual in Welsh and English, and accompanied with a contact name, telephone number and address to which enquiries should be directed.

3.2 Enquiries and complaints

- 3.2.1 Horizon has established a dedicated and free telephone line, which will be available for anyone with enquiries or complaints about the SPC Works. It will deal with enquiries or complaints from the public, the IACC or other key stakeholders. Horizon will ensure it takes appropriate action in response, as required.
- 3.2.2 The telephone line is staffed by bilingual personnel and, for the SPC works, will be advertised by appropriate means, throughout the SPC Site. A system of set response times and key performance indicators will be established that will enable the efficiency and effectiveness of the telephone line, both will be monitored and measured.
- 3.2.3 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.
- 3.2.4 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 the locations 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 On-site communications

- 3.3.1 On-site communications, such as site inductions, 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, such as noise generation and access issues, together with constraints detailed in the contracts (e.g. working hours) and other documents, such as this CoCP.
- 3.3.2 Appropriate information (e.g. known environmental constraints or hazards and management controls) will be communicated to all members of the workforce by way of an induction, including sub-contractors, before any person commences work.
- 3.3.3 Toolbox talks or other appropriate means will be employed to disseminate information throughout the SPC Works. These are discussed in more detail below.

4 General Site Management Strategy

4.1 Working hours

4.1.1 Working hours during which Horizon shall undertake the SPC works are:

Monday - Friday: 07:00 - 19:00

Saturday: 08:00 - 13:00

No construction work will be permitted on Sundays or Bank Holidays unless previously agreed with the IACC. Deliveries to the Main Site Compound will be within the hours detailed above with the addition of bank holidays.

4.1.2 The use of machinery outside the above working hours will be limited to emergency works.

4.2 Site lighting

4.2.1 Lighting will only be used during the operational hours for works outside of daylight. If night working does take place, levels of lighting in site compounds would also be reduced as far as practicable while maintaining safe working conditions. This will be achieved using directional, passive infra-red, LED security lighting.

4.2.2 Site lighting management will accord to the following high level requirements:

- Site lighting will primarily be provided to ensure safe working conditions and to maintain security, while having regard to sensitive ecological receptors or occupied residential properties.
- Lighting will be positioned and directed so as not to spill unnecessarily from the SPC Site onto sensitive receptors.
- Lighting will be switched off when not required for safe working conditions and site security.
- Provision of low-level lighting generally limited to the Main Site Compound and use of passive infra-red, LED security lighting at satellite compounds.
- All construction site lighting will, as far as practicable, be designed to ensure that any artificial light emitted from SPC works areas do not prejudice health or create a nuisance, in accordance with section 79(1) of the *Environmental Protection Act 1990*.

4.3 Security

4.3.1 Horizon will apply the following security measures as a minimum:

- Vehicular access to the SPC site will be limited to specified entry/exit points.
- Horizon will conduct regular security patrols of the site boundary on a 24 hour basis.

- Horizon will complete a site-specific assessment of the security and trespass risk and implement appropriate control measures, such as the implementation of infrared cameras to reduce opportunities for crime.
 - The SPC site boundary will be defined by perimeter fencing and constructed such that it minimises opportunities for unauthorised entry. Should the SPC site boundary suffer any damage, it will be made secure as soon as is practicable.
- 4.3.2 Horizon will cooperate with relevant authorities with regard to site security matters.

4.4 Environmental emergency management measures

- 4.4.1 Horizon will conduct environmental emergency management in line with the measures detailed in this CoCP, as well as relevant health, safety and environmental legislation.
- 4.4.2 Environmental emergency management is a part of the holistic integrated emergency preparedness approach for Horizon. All operations and activities within the SPC Site will be undertaken in compliance with emergency preparedness arrangements.
- 4.4.3 Horizon will manage emergency pollution control measures in accordance with *Pollution Prevention Guidelines* (PPGs) previously issued by the Environment Agency¹ (until replaced by corresponding *Guidance for Pollution Prevention* (GPPs)) and NRW's *How to comply with your environmental permit* [RD2]
- 4.4.4 Horizon will provide key construction staff with emergency phone numbers and a means of Horizon notifying local authorities, statutory authorities and local community representatives will be established.

Preparation for environmental incidents/emergencies

- 4.4.5 Horizon will ensure that all personnel with a responsibility under emergency management arrangements, or working with or near pollution hazards, receive appropriate training.
- 4.4.6 Site inductions will include pollution prevention and response information. Horizon will ensure site work teams receive appropriate ongoing information on the potential environmental impacts of their work and how to prevent and respond to potential pollution incidents.
- 4.4.7 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.

¹ 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.

- 4.4.8 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.
- 4.4.9 Horizon will provide and maintain environmental emergency response materials/equipment appropriate to the risk of its activities. Such materials shall be stored at strategic locations on site and on vehicles, be suitably sized according to the risk, and be easily identified.
- 4.4.10 Horizon will hold appropriate environmental emergency response tests to ensure its environmental emergency management procedures are effective.

Emergency / incident recording

- 4.4.11 All emergency/incidents will be recorded and reports prepared, as required, following investigations.

4.5 Fire prevention and control

- 4.5.1 The nature of the SPC works is such that they are not considered to be inherently susceptible to fire. However, accommodation and welfare facilities associated with the SPC works will have appropriate management controls to prevent fires as well as procedures to ensure swift action is taken in the event of a fire to protect the public, workers, the environment and plant whilst maintaining construction site security.
- 4.5.2 Horizon will liaise with the North Wales Fire and Rescue Service to discuss and agree provisions for fire prevention and safety in site offices and issues associated with property demolitions, temporary closure of Cemlyn Road and the removal of fire hydrants. Where of relevance the outcomes of any meeting and the approaches to be adopted will be incorporated within the CEMP.
- 4.5.3 Horizon will not allow open fires or the burning of waste.

5 Traffic and Transport Management Strategy

5.1 General

- 5.1.1 All deliveries to the SPC site will be made to the Main Site Compound via existing roads, and all workers will access the SPC Site via the carpark adjacent to the Main Site Compound and the overflow carpark at the former Wylfa Sports and Social Club. No other vehicular access to the SPC Site will be available.
- 5.1.2 Horizon will manage the Main Site Compound and the carparks within the SPC Site to ensure their effective operation with car sharing encouraged and facilitated. All signs within the Main Site Compound will be provided in Welsh and English.

5.2 Construction workforce travel

- 5.2.1 Horizon will introduce reasonable measures to promote and incentivise vehicle sharing, cycling and walking to work. Relevant information will be provided to construction workers prior to attendance at the SPC site and reinforced as part of induction materials.

5.3 Large vehicle controls

- 5.3.1 Highway access routes for Heavy Goods Vehicles (HGVs) to the SPC Site are identified as the A55, A5 and A5025.
- 5.3.2 Horizon will ensure HGV deliveries are made within 07:00 to 19:00 on weekdays (including Bank Holidays) and 08:00 and 13:00 on Saturdays and not at any other times, unless otherwise agreed in writing with the IACC.
- 5.3.3 Prior to the completion of the A5025 Highway Improvements delivered as part of the Wylfa Newydd Project, delivery windows will be identified to best avoid weekday morning and afternoon peak periods, and school arrival and departure times (08:00 to 09:00 and 15:00 to 16:00) where possible.

5.4 Works within the highway

- 5.4.1 The SPC works will require construction vehicles to travel along and, at times, cross the public highway within the SPC Site. The public highway used by construction vehicles will be subject to traffic management where necessary to ensure public safety.
- 5.4.2 Provision will be made for wheeled plant (agricultural tractors and trailers and rubber-tyred excavators) to cross the Existing Power Station access road as well as two other crossing points on Cemlyn Road. A vehicle marshal will supervise the crossing movements to ensure that they are undertaken safely where they interface with normal road traffic and prevent other vehicles from entering or leaving the SPC Site.
- 5.4.3 Where possible, use of the crossings on the Existing Power Station access road will be limited to outside peak hours for those working at the Existing Power Station facility (07.30 – 08.00 and 16.30 – 17.00).

- 5.4.4 There will be 'no turning' splays at the crossing, preventing turning movements. The temporary construction fencing on either side of the road will be aligned with splays to provide improved driver visibility. When not in use for supervised crossings, the gates will be securely locked.
- 5.4.5 Tracked plant will not normally use the crossing, but will be delivered directly from the public highway network to the relevant work area by low-loader, minimising potential damage to the road.

5.5 Road cleanliness

- 5.5.1 Where there is a risk of mud and debris being transferred onto the public highway vehicles exiting the Main Site Compound will pass over the wheel-cleaning facility.
- 5.5.2 Water used or re-used in wheel cleaning facilities will be subject to discharge requirements made by the *Environmental Permitting (England and Wales) Regulations 2016*.
- 5.5.3 Horizon will use a road sweeper, as required, to further ensure that the local road network remains clear of debris.
- 5.5.4 All vehicles containing loose bulk material will be covered whilst in transit.
- 5.5.5 Horizon will be responsible for ensuring that spillages from delivery vehicles accessing or leaving the SPC site are cleaned up.

6 Public Access Management Strategy

6.1 General

- 6.1.1 Access to the SPC Site will be restricted and controlled as required by health and safety requirements. All Public Right of Way (PRoW) will remain open during SPC works, subject to minor detours around temporary exclusion zones associated with demolition activities etc., and marshals will ensure that there is no conflict between the members of the public using PRoW and SPC works. Where appropriate, work will be halted to allow unhindered use of PRoW.
- 6.1.2 Horizon will provide bilingual signage to advise walkers using PRoW of the SPC Works.

7 Dust and Air Quality Management Strategy

7.1 General

7.1.1 Horizon has developed appropriate mitigation measures to reduce, as far as practicable, adverse effects from dust and air quality on the surrounding environment.

7.2 Dust and air quality management strategy

7.2.1 The dust control measures implemented shall 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 limits);
- abatement systems or control measures in place (such as the use of water bowsers); and
- ongoing monitoring and applying corrective actions.

7.2.2 Horizon will implement good practice measures to control dust during construction that are derived from the *Guidance on the assessment of dust from demolition and construction* [RD3].

7.2.3 Horizon shall control dust and air emissions by implementing the following:

- Record any exceptional incidents that cause dust and/or air emissions, either on the SPC site or off the SPC site, and the action taken to resolve the situation.
- Ensuring that all construction activities, including materials stored on the SPC site that have a potential to produce airborne dust are subject to appropriate site management controls necessary to prevent/mitigate the identified risk.
- Produce and implement a Construction Traffic Management Strategy that supports and encourages sustainable travel (public transport, cycling, walking and car sharing).
- Locating stockpiles or dusty activities as far as practicable from sensitive receptors i.e. residential properties, PRow etc.
- Use of water suppression to dampen stockpiles of dusty material and internal site haul roads.
- Use of water sprays during cutting or grinding activities.
- Reducing drop heights during material movement or transfer.
- Erecting solid screens or barriers around dusty activities.
- Development of action plans and contingency plans for adverse weather conditions and rapid response to the breakdown of dust suppression equipment.

- Development complaint receipt, investigation and response protocols.
- Appropriate training of the construction workers to increase awareness of community issues in environmental concerns and dust management and control measures.
- There will be no burning of waste materials.
- No explosive blasting for demolition activities will be undertaken, appropriate manual or mechanical alternatives will be utilised.
- Specific method statement and risk assessments will be produced if the need for the removal of biological materials e.g. vegetation or organic matter, is identified which may increase the risk of dust emissions through its removal.
- All vehicles containing loose bulk material will be covered whilst in transit.
- Where there is a risk of mud and debris being transferred onto the public highway vehicles exiting the Main Site Compound will pass over the wheel-cleaning facility.
- The use of a road sweeper, as required, to further ensure that the local road network remains clear of debris.
- No idling engines, where practicable.
- Use of mains electricity or battery-powered equipment where practicable to avoid the use of petrol or diesel generators.
- Using lower power settings where practical.
- Plant specification to ensure that average emissions across the fleet of relevant non-road mobile machinery would be equivalent to the EU Stage IIIB emission standards (EC Directive 97/68/EC) introduced in January 2011 for the larger engine sizes relevant to the SPC works.
- Monitoring of the SPC site and works to ensure compliance with dust management measures, as outlined within this CoCP.
- Regular performance review of the effectiveness of mitigation, including ongoing reporting to the local community and the IACC.

7.3 Dust and air quality thresholds and monitoring

7.3.1 The approach and scope of the air quality monitoring survey is informed by the IAQM guidance on monitoring near demolition and constructions sites and include the following:

- Continuous automatic monitoring of ambient particulate concentrations and, depending on monitoring technique, may include total suspended particulates, PM10 and PM2.5. Location(s) are likely to be at the SPC Works Site closest to relevant sensitive human population areas which are downwind in prevailing conditions, e.g. Tregele or Cemaes, and other locations close to the site which are not downwind in prevailing conditions, e.g. properties to the east of Cemlyn Bay. The monitoring location(s) and appropriate alert thresholds will be submitted to and

agreed with the IACC. The monitoring would include measurement of weather conditions including wind speed, wind direction and rainfall.

- To identify and manage the potential effects on amenity, dust deposition monitoring using passive dust deposition gauges will be undertaken at agreed locations at the SPC Works Site, close to sensitive human receptors, including upwind and downwind of prevailing conditions. If possible, the use of supplementary directional monitoring techniques, e.g. sticky pads affixed to the dust gauge, would be used to identify the direction of dust sources. The monitoring locations would be submitted to and agreed with the IACC.
- Dust deposition monitoring using passive dust deposition gauges at agreed locations within or at the boundary of the Tre'r Gof SSSI and Cae Gwyn SSSI other locations would also be considered as necessary during discussions with stakeholders. The scope of the monitoring, including the locations, would be submitted to and agreed with the IACC, NRW and other relevant stakeholders.

7.3.2 Dust and air quality monitoring equipment shall be installed prior to the commencement of the SPC works and continue until all SPC Works are complete.

7.3.3 Visual dust and air quality inspections shall be conducted and records of these inspections shall be kept.

7.3.4 Horizon will ensure that dust suppression and monitoring equipment is always available when required, that it functions as intended, and maintained accordingly.

7.3.5 Horizon will provide details to the IACC of how monitoring data will be interpreted and presented.

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

7.4 Construction odour management

7.4.1 The removal of the contents of the trichloroethane sump shall be pumped straight into a tanker, as far as practicable. All materials will be removed off-site and sent to an appropriate disposal facility, or treated in a treatment system on-site, thus reducing the risk of exposure to the atmosphere and potential release of odour. Material visually/olfactorily impacted by hydrocarbons shall also be removed from site following excavation, reducing the likelihood of odours from this source.

7.4.2 Processes and procedures will be put in place that clearly define methods for dealing with any areas of unexpected contamination in order to manage immediate risks and prevent any contamination, airborne contaminants or odour spreading from the affected area. Implementation of these processes and procedures will reduce any odours associated with the disturbance, storage or removal of potentially odorous contaminated materials associated with organic compounds and chlorinated solvents from unknown areas of contamination, should they occur.

8 Noise and Vibration Management Strategy

8.1 General

8.1.1 Horizon will put in place mitigation to reduce as far as practicable noise and vibration effects on the surrounding environment.

8.2 Noise and vibration management

8.2.1 The SPC Works will be undertaken in accordance with guidance in BS 5228-1:2009+A1:2014 (BSI, 2014) [RD4] and BS 5228-2:2009+A1:2014 (BSI, 2014a) [RD5]:

- Before construction activities are undertaken, the choice of methodology and construction equipment will be reviewed to identify reasonable opportunities to reduce noise.
- Heavy plant and equipment will comply with the noise limits quoted in the relevant European Commission Directive 2000/14/EC which is enacted in *the Noise Emission in the Environment by Outdoors Regulations 2001* United Kingdom Statutory Instrument (SI) 2001/1701. All plant will be maintained in good working order.
- The need for considerate working practices and behaviours will be communicated to the workforce, through (but not restricted to) site inductions, shift briefings and toolbox talks.
- The local community shall be given warning of any activities that are considered likely to give rise to particularly noticeable noise or vibration effects.

8.2.2 For the SPC works the appointed contractor will demonstrate the adoption of Best Practicable Means of noise control to Isle of Anglesey County Council through the Section 61 (of the Control of Pollution Act 1974) application process.

8.2.3 However, any activities with the potential to cause major or moderate significant noise effects at receptors (when assessed using the long term noise criteria), will be completed quickly so that they do not affect any individual receptor for more than 8 weeks in any continuous 12 month period at each property. To achieve this the following work rates will be targeted:

- progression of fencing activities in a linear fashion along the fence line at approximately 100m per day;
- progression of stone removal/site clearance in a linear fashion at approximately 200m per day; and
- limiting of number of stone crushing activities at any single location and restriction to an approximate duration of one week at any single time.

8.3 Noise and vibration thresholds

- 8.3.1 Horizon will ensure that vibratory rollers are not used by its contractors within 62m of occupied residential receptors, unless a risk assessment confirms alternative safe working distances.
- 8.3.2 Horizon will ensure that vibratory rollers are not used within 20m of PRowWs, unless a risk assessment confirms alternative safe working distances.

Section 61 applications

- 8.3.3 Horizon shall submit Section 61 applications for prior consent for noisy works under Section 61 of the Control of Pollution Act 1974, where necessary, in accordance with the procedures outlined in this CoCP. This will cover appropriate periods of works, and any associated variations and dispensations.
- 8.3.4 For each Section 61 application, Horizon will ensure that the IACC is provided with sufficient time to review each application.
- 8.3.5 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 shall 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 shall 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 shall provide a definition of the working hours required.
Plant noise data	Horizon shall provide sound power levels or sound pressure levels at 10m for each proposed item of plant.
Best Practicable Means (BPM) measures	Horizon shall describe steps to reduce noise and vibration as far as practicable during the works.
Predicted noise and vibration levels	Horizon shall undertake predictions of noise and vibration levels in accordance with BS 5228 Parts 1 and 2.
Proposed noise/vibration limits	Horizon shall provide proposed noise/vibration limits applicable to normal operations described in the Section 61.
Proposed short-term higher	Where required, Horizon shall propose limits for predicted short-term higher noise/vibration effects

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

8.3.6 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 shall apply for a dispensation or variation from the IACC before commencing those works.

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 the response to complaints about noise and vibration.

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

8.4.3 Where monitored noise or vibration levels are found to be above the limits set out in the relevant Section 61 agreement, appropriate action will be undertaken to bring the activity to within acceptable limits and to ensure the limits are not breached again.

9 Waste and Materials Management Strategy (including Soils and Land Contamination)

9.1 General

9.1.1 The objectives of Horizon's overall waste and materials strategy are to:

- safely control and account for waste, applying the waste hierarchy;
- protect human health and the environment, now and in the future; and
- ensure undisturbed power production from the reactor, provided health, safety and environmental protection are not compromised.

9.1.2 Horizon's waste hierarchy (figure 9-1) will encourage the management of materials pro-actively in order to minimise the amount that is discarded and to recover the maximum value from the wastes that are produced with disposal as a final option.

Figure 9-1 The Horizon waste hierarchy



9.2 Materials management

9.2.1 Horizon will conduct its materials management for the SPC works following the process set out in *The Definition of Waste: Development Industry Code of Practice* (Contaminated Land: Applications in Real Environments, 2011) [RD6].

9.2.2 Horizon will ensure a CL:AIRE qualified person is employed to review, approve and verify materials management. The CL:AIRE qualified person will remain independent of the SPC works associated with materials.

9.2.3 By managing materials in accordance with *The Definition of Waste: Development Industry Code of Practice*, Horizon will be able to demonstrate

its materials management is appropriate, and that the 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.

9.2.4 When SPC works are complete, Horizon will produce a document that sets out in detail how materials were actually managed during the works and what is stockpiled for further reuse elsewhere within the Wylfa Newydd Project.

9.3 Site waste management strategy

9.3.1 All waste arising from the SPC works will be managed in a responsible manner and apply Horizon's waste hierarchy in line with all relevant waste legislation and regulation during the works.

9.3.2 Horizon will implement its waste management strategy before SPC works begin. Horizon will monitor the waste management facilities being used throughout the SPC works and report on their waste Duty of Care.

9.3.3 Throughout the SPC works, 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;
- written information of wastes transferred from the SPC site;
- consignment of hazardous wastes from the SPC site;
- progress on waste minimisation actions; and
- updated list of sub-contractors working on the SPC works.

9.3.4 Within three months of the completion of the SPC works, Horizon will:

- 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 waste management strategy (pre-construction) and how Horizon actually performed during construction;
- generate an estimate of any cost savings achieved; and
- ensure other elements of the Wylfa Newydd Project are aware of the lessons learnt.

Materials and waste controls

9.3.5 Controls will include, but not be limited to the following:

- Ensuring that any materials generated by the SPC works are sorted into separate material groups and stockpiled e.g. topsoil and subsoil.
- Ensuring that any waste generated by the SPC works are managed in accordance with both this site waste management strategy and the Risk Assessment and Remediation Strategy (RARS).
- Non-hazardous waste will be stored in labelled bins or skips in a designated area and enclosed, if it is external, to prevent rainwater accumulating and degrading the waste, or waste being redistributed by the wind.
- Hazardous waste will be appropriately identified, managed and stored in designated area(s) in appropriately labelled, enclosed skips or receptacles in accordance with legislative requirements.
- Where unexpected contamination is encountered, Horizon will stop works immediately and take samples of the soil or materials to determine if it is hazardous. Where it is determined to be hazardous, it shall be managed accordingly, as outlined above.
- Stands of invasive non-native species (of plant) suspected to be present in areas outside of those already known shall be reported as soon as is practicable so that the appropriate actions can be applied from the Biosecurity Risk Assessment and Method Statement.
- In the event that waste is suspected of being radioactive, it shall 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

9.3.6 Horizon will use the European Waste Catalogue (EWC) to categorise waste, and classify waste as hazardous, non-hazardous or inert according to their physical, chemical and biological properties.

9.3.7 Horizon works will comply with all Duty of Care requirements under section 34 of the Environmental Protection Act 1990, and will utilise legal and compliant waste management services. Horizon will carry out Duty of Care audits on its waste management services to ensure ongoing legal compliance.

9.4 Land contamination management

- 9.4.1 An implementation of the Land Contamination Risk Assessment and Remediation Strategy (RARS) will be used to characterise the risks from land contamination and identify the appropriate remediation activities.
- 9.4.2 Horizon will assess and manage land contamination in accordance with guidance within the Model Procedures for the Management of Land Contamination (Defra and Environment Agency, 2004) [RD7].
- 9.4.3 Horizon has identified Areas of Potential Contamination in the SPC works RARS as well as the types of contamination that may be encountered and what steps to take to manage those materials or wastes in accordance with the RARS. These steps will include undertaking appropriate assessment and where necessary, remediation, to deal with any risks from land contamination that are identified.
- 9.4.4 In order to address any areas of unexpected contamination encountered during the SPC works, processes and procedures will be established that clearly set out the method for dealing with any material affected by contamination encountered during construction works and which materials will be retained for reuse, or where contaminants are segregated for further treatment or disposal offsite.
- 9.4.5 A Contamination watching brief will be maintained by suitably qualified personnel during excavation works so that any areas of unexpected contamination would be identified as soon as practicable.
- 9.4.6 Horizon will prepare a Biosecurity Risk Assessment and Method Statement setting out how areas with the presence of Schedule 9 plant species will be demarcated, and how the contaminated materials will be appropriately managed throughout the works.
- 9.4.7 Horizon will provide a Remediation Processing Compound (RPC) for the SPC works where remediation and segregation activities will occur.
- 9.4.8 Known and unexpected contamination shall be managed safely to minimise potential environmental impacts including the following:
- Where unexpected contamination is encountered, Horizon will stop works immediately and take samples of the soil or materials to determine if it is hazardous. Where it is determined to be hazardous, it shall be managed accordingly;
 - isolating the affected area or segregating the affected material (if already excavated), with appropriate management of any asbestos containing materials on the management of any potential Asbestos Containing Materials (ACM);
 - undertaking sampling and assessment of the affected area/material;
 - recording of assessment findings and subsequent management of the material within an appropriate report; and
 - liaison with regulators, if necessary.

- 9.4.9 The known asbestos containing material on the SPC site will be remediated where necessary under the scope of SPC works so that it can be reused on the Wylfa Newydd Project (with a suitability of use and a certainty of use).

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 SPC works associated with remediation so that soil quality is retained as far as practicable.
- 9.5.2 Where practicable Horizon will follow guidance within *Construction Code of Practice for the Sustainable Use of Soils on Construction Sites* (Department for Environment, Food and Rural Affairs, 2009) [RD8] and *Good Practice Guide for Handling Soils* (Ministry of Agriculture, Fisheries and Food, 2000) [RD9], and *The Definition of Waste: Development Industry Code of Practice* (Contaminated Land: Applications in Real Environments, 2011) [RD10]; with regards to soil management.
- 9.5.3 In addition, Horizon will give consideration to the following:
- *BS 3882:2015 Specification for topsoil* (British Standards Institution, 2015) [RD11];
 - *BS 8601:2013 Specification for subsoil and requirements for use* (British Standards Institution, 2013) [RD12];
 - *The Waste (England and Wales) Regulations 2011*; and
 - *The Environmental Permitting (England and Wales) Regulations 2016*.

10 Water Management Strategy

10.1 General

10.1.1 Horizon will comply with relevant legislation when implementing working methods to protect surface water and groundwater from pollution and other impacts, including changes to flow, flood storage volume, water levels and water quality.

10.2 Protection of watercourses

10.2.1 A 15m buffer zone will be set from both banks of the Afon Cafnan, Nant Caerdegog Isaf and Nant Plas Cemlyn, as well as Tre'r Gof SSSI and Cae Gwyn SSSI drains. Where practicable, no storage areas, vegetation clearance or construction will take place within this buffer zone.

10.2.2 Where works are required within this buffer zone, including but not limited to clearance adjacent to watercourses, Horizon will carry out a risk assessment. If pollution risks are identified appropriate action will be taken to mitigate them e.g. hand removal of walls, fences and hedges. Where fencing is placed in areas subject to inundation it would need to be regularly inspected and any accumulated debris removed when safe to prevent interference with water movement.

10.2.3 Drainage from the refuelling and maintenance area of the Main Site Compound will be routed through an oil / water interceptor to a swale (soakaway).

10.2.4 The drainage system will be maintained throughout the SPC works such that it remains efficient.

10.2.5 Measures will be taken to prevent the deposition of silt or other material arising from work operations in existing watercourses. 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. In addition, relevant Environment Agency and NRW guidance including the following PPGs and GPPs will be followed, including:

- *Understanding your environmental responsibilities – good environmental practices: PPG 1 [RD13];*
- *Works and maintenance in or near water: GPP 5 [RD14];*
- *Working at construction and demolition sites: PPG 6 [RD15];*
- *Vehicle washing and cleaning: GPP 13 [RD16];*
- *Pollution incident response planning: PPG 21 [RD17]; and*
- *Safe storage – drums and intermediate bulk containers: PPG 26 [RD18].*

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 Wherever practicable, permeable surfacing will be used for access tracks and compounds in order to avoid any increase in flood risk. Oil interceptors will be provided to areas of impermeable surfacing, as appropriate, in line with the standards and requirements contained in this CoCP.
- 10.3.3 Site drainage details will be submitted to and agreed with the IACC.

10.4 Control of pollution

Surface water

- 10.4.1 Horizon shall ensure that protection measures to control the risk of pollution to surface water are adopted, including the following:
- All relevant requirements of the *Environmental Permitting (England and Wales) Regulations 2016* will be complied with.
 - All fuel storage will be within engineered containment facilities or suitably bunded tanks.
 - Any containers of contaminating substances on-site shall 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, along with areas for transfer of contaminating substances e.g. fuel, will be protected by temporary impermeable bunds or plant nappies, with a capacity of 110% of the maximum stored volume, and have appropriate spill kits.
- 10.4.2 Any permanent oil storage tanks and temporary storage of over 200 litres of oil in drums and mobile bowsers, as well as ancillary pipe work, valves, filters, sight gauges and equipment require secondary containment, e.g. bunding or drip trays used in accordance with *Water Resources (Control of Pollution) (Oil Storage) (Wales) Regulations 2016*. The secondary containment must be sufficient to contain at least 110% of the maximum contents of an oil tank, mobile fuel bowser or intermediate (fuel) bulk container.
- No fuel, oil or chemical substances will be stored within 15m of a watercourse or Tre'r Gof SSSI and Cae Gwyn SSSI.
 - Only construction equipment and vehicles free of oil or fuel leaks will be permitted on-site. Drip trays or plant nappies will be placed below static mechanical plant.
 - All refuelling, oiling and greasing will take place above drip trays, plant nappies or on impermeable surfaces 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 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 NRW's GPP 13 [RD16].
- The NRW's GPP 5 [RD14] will be followed when carrying out works or maintenance on or near water. Where practicable, only biodegradable hydraulic oils will be used in equipment working in or over watercourses.

Groundwater

10.4.3 Horizon shall 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*. These measures will be submitted to and agreed with the IACC.

10.5 Flooding

10.5.1 Horizon shall ensure that flood risk is managed safely throughout the SPC Works in compliance with the Flood Consequence Assessment in the Environmental Statement.

10.5.2 Horizon's flood risk management will be based upon a risk-based precautionary approach, using the source-pathway-receptor concept, drawing information from NRW's online flood warning advice [RD19], or other such reputable service as appropriate.

10.6 Monitoring

10.6.1 Horizon will carry out monitoring of the groundwater and surface water during the SPC works to ensure that the SPC works will not have a negative effect on these receptors when compared to baseline data. The monitoring will comprise:

- surface water sampling and downloading of data from existing flumes (to measure stream flow rates) and sondes (to measure surface water quality);
- surface water and groundwater monitoring from in and around Tre'r Gof SSSI, including collection of surface water inflow and outflow data and water level measurements in Tre'r Gof SSSI;
- water samples from equivalent baseline locations will be collected for chemical analysis; and
- groundwater monitoring for groundwater levels and groundwater quality where appropriate.

10.7 Watercourse realignment

10.7.1 The watercourse realignment, on the Nant Caerdegog Isaf, will be constructed using the following techniques to control sediment release in order to reduce the potential for silt-laden runoff to impact the water environment:

- leaving a minimum 2m “plug” of uncut channel at either end of the new channel until all other watercourse realignment work (excluding landscaping) is completed and the realigned length is ready to be connected to the existing watercourse;
- completing all works along the bank of the new channel prior to connecting to the existing channel;
- completing any revegetation as early as possible to reduce the potential for sediment from bare areas moving into the completed channel;
- compacting the stream bed sufficiently so that there is no substantial loose sediment to be entrained; and
- removing the 2m plug from the downstream end prior to the upstream end.

10.7.2 The watercourse realignment has been designed to provide habitats of greater value than the existing section by improving sinuosity and enhanced riparian planting. The watercourse realignment works shall be programmed so that new habitat is allowed to mature to a level that habitat fragmentation is prevented.

11 Ecology and Landscape Management Strategy

11.1 General

- 11.1.1 Horizon will ensure that procedures are in place to prevent disturbance and damage to 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 relevant legislation and nature conservation policy and guidance.
- 11.1.2 Where appropriate pre-construction ecology surveys will be undertaken i.e. for otter, water vole, red squirrel and breeding birds.
- 11.1.3 SPC works will be timed to avoid particularly sensitive periods for ecological receptors, where practicable.
- 11.1.4 SPC clearance works i.e. clearance of vegetation and above ground structures, will be carried out in a directional manner to encourage movement of notable wildlife towards the two receptor sites located to the west of the SPC Site, and discourage their movement towards features such as the A5025 road or residential areas of Cemaes. This will be undertaken in addition to the manual translocation of protected species that are identified below.
- 11.1.5 An off-site area (the 'Notable Wildlife Enhancement Area'), approximately 15ha in size, has been secured by Horizon for the next 15 years to the west of the Wylfa Newydd Development Area. The Notable Wildlife Enhancement Area is designed principally to provide a strong corridor (in terms of cover and foraging opportunity) through which displaced animals can move from the Wylfa Newydd Development Area and into adjacent habitats and the wider landscape. The area's design is to enhance cover providing refuge and foraging opportunities for a wide range of ecological receptors, not just the notable mammal species which will be displaced from site.
- 11.1.6 The Notable Wildlife Enhancement Area will be managed to allow a taller sward and some scrub to develop in order to provide the enhanced cover.
- 11.1.7 Horizon shall employ suitably qualified and experienced ecologists, referred to as an Ecological Clerk of Works (ECoW) to carry out site supervision works during activities that affect sensitive habitats and species to ensure that the requirements of this CoCP are followed. The ECoW will also identify any new ecological constraints, on the SPC, site arising during construction.
- 11.1.8 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.
- 11.1.9 Horizon will implement a programme of monitoring throughout the SPC works to review the status of ecological issues during construction, including the monitoring and maintenance of any measures implemented as part of advanced mitigation works.

- 11.1.10 Appropriate tool-box talks (in combination with other tool-box talks outlined within this CoCP) shall be delivered by the ECoW prior to the commencement of works to ensure that the construction workforce is aware of ecological constraints and the measures to avoid undue damage to habitats and protected species within or outside of the SPC site.
- 11.1.11 Horizon shall establish buffer zones of 10m around bat barns, 15m along watercourses (Nant Cemlyn, Nant Cemaes, Afon Cafnan and Nant Caerdegog Isaf) and 15m along the ditches flowing into the Cae Gwyn SSSI and into the Tre'r Gof SSSI, separating the SPC works from the designated habitats.
- 11.1.12 No heavy plant or machinery will be used within these buffer zones. For the watercourse realignment works on the Nant Caerdegog Isaf a risk assessment method statement approach will be undertaken with relevant approval and consents for works from NRW.
- 11.1.13 The structure of the Notable Wildlife Enhancement Area (including planting and creation of artificial hibernacula) will be created prior to the start of site clearance works.

11.2 Receptor-specific requirements

Bats

- 11.2.1 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*. It is an offence to intentionally or recklessly kill, injure, take, trap or disturb bats or to damage, destroy or prevent access to roost sites (even when bats are not present).
- 11.2.2 Where works have the potential to cause an offence, appropriate mitigation will be dictated by means of a European Protected Species Mitigation Licence (EPSML). All SPC works with the potential to disturb bats will be supervised by Horizon's ECoW in line with the methodology which will be defined within the EPSML. The ECoW for works potentially affecting bats will be an NRW bat licence holder.

Mitigation to prevent disturbance effects

- 11.2.3 There is potential for lighting to affect commuting and foraging routes. This shall be mitigated by the avoidance of night working, with levels of lighting in site compounds limited, as far as practicable, while maintaining safe working conditions through the use of passive infra-red, LED security lighting and positioning/screening of light sources strategically so as to minimise light spill outside the compound.
- 11.2.4 There is also the potential for retained bat roosts to be affected by noise and vibration. These effects shall be controlled by appropriate measures contained within the Management of Noise and Vibration Strategy.
- 11.2.5 Monitoring will be undertaken, as necessary, throughout the SPC works to determine if there are any significant changes to baseline bat populations in accordance with best practice guidance [RD20].

Mitigation to protect bats from mortality and injury during building demolition

- 11.2.6 Buildings will be demolished in accordance with the bat licence method statement contained within the Environmental Statement.
- 11.2.7 Horizon will ensure a 10m buffer zone around bat barns and wildlife tower, and seek to ensure a similar zone around bat boxes. There will be no heavy plant or machinery used within 10m of a bat barn or wildlife tower.

Otters

- 11.2.8 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).
- 11.2.9 The establishment of 15m buffer zones either side of watercourses will minimise the likelihood of effects on otter. However, for works in the vicinity of watercourses, pre-construction surveys will be undertaken to determine if there is any potential for an offence to occur.
- 11.2.10 Where pre-construction surveys identify that works have the potential to disturb otters, appropriate mitigation will be dictated by means of an EPSML specific to otters. All SPC works with the potential to disturb otters will be supervised by Horizon's ECoW in line with the methodology set out in the EPSML.

Water Vole

- 11.2.11 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).
- 11.2.12 The establishment of 15m buffers either side of watercourses will minimise the likelihood of effects on water vole. However, for works in the vicinity of watercourses, pre-construction surveys will be undertaken to determine if there is any potential for an offence to occur.
- 11.2.13 Where the pre-construction surveys identify that 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). All construction works with the potential to contravene the legislation relating to water vole will be supervised by Horizon's ECoW in line with the methodology set out in the Conservation Licence.
- 11.2.14 If water vole are found to be present, to avoid adverse effects on water vole as a result of the watercourse realignment, Horizon will ensure that a water vole trapping and translocation exercise is carried out in accordance with legislation as per the methodology described in the draft Conservation Licence.

Red squirrel

- 11.2.15 Red squirrel are protected by law under the *Wildlife and Countryside Act 1981*. It is an offence to intentionally or recklessly kill, injure, take, trap or disturb red squirrel, or to damage, destroy or prevent access to resting or sheltering places (even when red squirrel are not present).
- 11.2.16 Pre-construction surveys for red squirrel will be undertaken to identify the presence of active dreys in trees being felled. Felling works will be undertaken under the supervision of an ECoW where necessary. Should there be a risk of contravening the relevant legislation protecting red squirrel, then all works will cease in that area. Works will then only proceed under the conditions of a Conservation Licence (to derogate effects that might otherwise be illegal under the Wildlife Countryside Act 1981).
- 11.2.17 Additional mitigation measures will comprise the provision of artificial nest boxes (dreys) within Dame Sylvia Crowe's mound (maximum of 10 boxes) plus food provision (on a monthly basis). The erection of artificial dreys and feeding stations will be stocked for the duration of the SPC works.

Other mammals

- 11.2.18 All mammals in the UK are protected by the Wild Mammals (Protection) Act 1996. It is an offence to inflict unnecessary suffering on any UK mammal. Horizon will ensure that tool-box talks shall be 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 shall 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.

Breeding birds

- 11.2.19 All species of wild bird, their nests and their eggs are protected by law under the *Wildlife and Countryside Act 1981*. It is an offence to intentionally or recklessly take, damage or destroy the nests or eggs of any wild bird while the nest is in use or being built.
- 11.2.20 Where possible, habitat with the potential to support bird nests will be removed outside the breeding bird season (typically March to August inclusive). If it is not possible to avoid the breeding bird season then the following measures will be implemented:
- An ECoW shall complete a pre-construction survey prior to removing any habitat with the potential to support nesting birds, including ground nesting species.
 - The ECoW shall 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-construction survey or during supervision, then the ECoW shall set up a work exclusion zone of an appropriate distance to prevent disturbance. The exclusion zone

distance shall be set based on the judgement of the ECoW and the species concerned, but will typically range between 5-10m.

- Work exclusion zones shall be maintained until chicks have fledged or the nest has become inactive, as determined through monitoring visits by the ECoW.

Schedule 1 bird species

11.2.21 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* and referred to as 'Schedule 1' species. The ECoW will propose protection measures specific to any Schedule 1 species present.

11.2.22 In order to mitigate the risk of disturbing any Schedule 1 bird species nest (in particular chough and barn owl in relation to SPC works), the following approach will be taken:

- 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 shall implement the general measures set out above for birds 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 or protective measures may be required as dictated by the specific circumstances.

11.2.23 In addition, four barn owl nest boxes will be installed prior to the onset of activities affecting known/possible roosts at Tyddyn-Gele, The Firs, Caerdegog Isaf and Cafnan Farm. Monitoring/reporting of each new box shall be undertaken annually throughout the SPC works.

Reptiles

11.2.24 All reptiles receive protection under the *Wildlife and Countryside Act 1981*, making it illegal to intentionally injure, kill or take these animals.

11.2.25 Appropriate mitigation measures for adder and common lizard will include trapping and translocation of individuals, phased and directional habitat manipulation to encourage the species to move from the SPC site towards suitable retained habitat, sensitive dismantling of suitable refuge features (e.g. dry stone walls and cloddiau) and supervision of works by an ECoW. Translocation of reptiles will take place in accordance with Natural England guidance (2011) using artificial refuges. Animals caught will be released in a bespoke receptor area managed to provide optimum reptile habitat.

- 11.2.26 Habitat with the potential to support hibernating reptiles (or great crested newt) will not be cleared between November and February. Advice on the risk of animals using specific structures for hibernation would be provided by the ECoW.
- 11.2.27 Horizon will be responsible for implementing and maintaining appropriate fencing to prevent reptiles from moving back into the SPC Site, until the SPC works are complete. Where required, one fence can be used for reptiles and great crested newt purposes (see below).

Common toad

- 11.2.28 Where possible, pond destruction will be timed to avoid the common toad breeding season (typically March to July). If not possible, the pond will be drained and cleared under the supervision of an ECoW. Habitat with the potential to support hibernating toads, reptiles or hedgehog would not be removed between November and March. Common toads collected will be translocated in accordance with Natural England guidance (2011) using artificial refuges to the nearest retained pond.

Great Crested Newt

- 11.2.29 The great crested newt is a fully protected species under all elements of Section 9 of the *Wildlife and Countryside Act 1981* and under Parts 1 and 2 of Regulation 39 of the *Conservation of Habitats and Species Regulations 2010*.
- 11.2.30 A great crested newt trapping and translocation exercise will be carried out in accordance with the methodology described in the draft EPSML. In accordance with the draft EPSML, monitoring of the population will take place for two years (breeding seasons). Should population declines be identified then post-development contingencies will be implemented as described in the draft EPSML (in consultation with NRW).
- 11.2.31 Horizon will be responsible for implementing and maintaining appropriate fencing that will prevent great crested newt from returning to the SPC site for the duration of SPC works.
- 11.2.32 The ECoW for works potentially affecting great crested newt will be an NRW great crested newt licence holder or an agent accredited under the great crested newt EPSML for the SPC works.

Fish

- 11.2.33 Horizon will take all reasonable measures to ensure fish (and riparian mammal) passage is maintained during the watercourse realignment. This will include appropriate phasing of realignment works to avoid fish spawning and migratory periods (October – March).
- 11.2.34 Horizon will ensure the rescue of fish where necessary from the original channel during the watercourse realignment and from sections of riverine habitat loss. Fish rescue will require a licence from NRW and authorisation under the Salmon and Freshwater Fisheries Act 1975. No fish will be moved between waterbodies.

11.2.35 Fish rescue will be undertaken by accredited and suitably qualified fisheries scientists.

Mud snail

11.2.36 The *Omphiscola glabra* (mud snail) will be moved from where it is recorded in Tregle Pond to the enhanced wetland area within the Notable Wildlife Enhancement Site.

Invasive non-native species (of plant)

11.2.37 Schedule 9 of the *Wildlife and Countryside Act 1981* lists invasive non-native species (of plant) and makes it an offence to cause these species to spread or grow in the wild.

11.2.38 Horizon will prepare a Biosecurity Risk Assessment and Method Statement setting out how areas with the presence of Schedule 9 plant species will be demarcated, and how the contaminated materials will be appropriately managed throughout the SPC works. This will include details of appropriate disposal, and how the transfer of viable propagules of invasive non-native species (of plant) by people or vehicles will be prevented.

11.2.39 Prior to the construction workforce undertaking works on site, a tool-box talk from an ECoW (in combination with other tool box talks as outlined within this CoCP) who has experience in identifying invasive non-native species (of plant) shall be provided. This shall include photographs of the invasive non-native plant species known to be present on a site.

11.2.40 Stands of invasive non-native plant species suspected to be present in areas outside of those already known shall be reported as soon as is practicable so that the appropriate actions can be applied from the biosecurity risk assessment.

11.2.41 All stands of invasive non-native plant species and soil with the potential to contain viable propagules will be removed by mechanical means using plant equipment.

11.3 Record keeping

11.3.1 Horizon will maintain record keeping in relation to all ecological constraints and respective licences. In addition, Horizon shall provide all species data collected to Cofnod – North Wales Environmental Information Service. All recorded data will be kept securely and backed up as necessary for the purposes of audit.

12 Landscape and visual

- 12.1.1 Horizon will ensure the protection of trees, scrub and hedgerows to be retained, where practicable, in accordance with the recommendations in BS 5837:2012 Trees in Relation to Design, Demolition and Construction [RD21]. Root Protection Areas will also be installed around areas of ancient woodland within the SPC Site. These will be delineated by fencing installed by the principal contractor.
- 12.1.2 Root Protection Areas to hedgerows, trees and areas of scrub to be felled as part of SPC works, are to be protected where practicable. This is to maintain the option for effective re-growth from existing root stock in the eventuality that the Wylfa Newydd Project did not for any reason proceed following SPC works.
- 12.1.3 Horizon will ensure that felling of woodland, in the vicinity of the RPC, is timed to provide screening whilst the RPC is in use, as far as practicable.
- 12.1.4 Where practicable, Horizon will ensure the enhancement of the existing dry stone wall/ cloddiau/ hedgerow boundaries retained on the Wylfa Newydd Development Area outside the SPC perimeter construction fence, for example, where appropriate by infill hedgerow planting and management to improve structure and species diversity, introduction of hedgerow trees and repairing stone walls and cloddiau to improve their current condition where required.
- 12.1.5 Horizon will ensure that any planting will comprise locally indigenous species, as far as is practicable, and be protected from grazing animals by means of stock-proof post and wire fencing.
- 12.1.6 Horizon will select a visually recessive portable cabin colour for temporary office accommodation and storage units within the site compound areas to reduce the prominence of temporary buildings and storage units in views from the surrounding landscape and the consequent effects on landscape character.
- 12.1.7 To help ensure a degree of authenticity and historical continuity in the proposed landscape restoration scheme an ongoing survey programme of stone wall and cloddiau construction (vernacular detailing) and hedgerow/ tree species for all field boundaries to be removed will be undertaken, as necessary, throughout the SPC works.
- 12.1.8 Stone from dismantled stone walls and cloddiau will be stockpiled for future reuse in the building of stone walls and cloddiau in the final Power Station landscape restoration scheme.
- 12.1.9 Horizon will ensure that the height of material stockpiles does not exceed 3m.
- 12.1.10 Where soils would be stored for longer than six months, stockpiles, such as remediated soil storage mounds, would be seeded with an appropriate low maintenance seed mix.

12.1.11 Horizon will implement a landscape management strategy that will include the following:

- A programme for the management of retained trees and hedgerows and the control of unwanted plant species including invasive species. This will be submitted to and agreed in writing with the IACC.
- A programme for the inspection and continual maintenance of planted areas for the duration of the aftercare period.

13 Cultural Heritage Management Strategy

13.1 Archaeological Remains

13.1.1 The following archaeological recording will be undertaken in advance of and/or during the SPC works to mitigate effects on archaeological remains:

- Photographic Surveys of Simdda-Wen, Garden, Tregele (Asset 139), The Firs, Garden, Tregele (Asset 195), Well (Asset 273), Boundary Wall, Tai Hirion (Asset 727), Field Boundary, Tai Hirion (Asset 730).
- Archaeological earthwork survey and photographic survey of Trackway from Tyddyn Gele (Asset 269).
- Targeted watching briefs on Ty'n y Maes, Cemaes Bay (Asset 74), Earthworks, Chain Home Guard, Cemaes Bay (Asset 126), Cafnan field system (part of) (Asset 162), Tan yr Allt, Tregele (Asset 169), Pennant, Tregele (Asset 177), Bronydd, Tregele (Asset 183), Pen y Groes, Former Site of, Tregele (Asset 189), Chequers and Bryn Fferen, Tregele (Asset 191), Mound (Asset 201), Rhwng-ddau-fynydd Burnt Mound and Ring Ditch (Asset 207), Penrallt Farmhouse (site of) (Asset 265), Pair of ditches, Pennant (Asset 521), Parallel Ditches, north of Caerdegog-Isaf (Asset 563), Posthole, north of Caerdegog-Isaf (Asset 564).

13.1.2 Archaeological recording will be undertaken in accordance with relevant guidance provided by the Chartered Institute for Archaeologists and Written Schemes of Investigation agreed with Gwynedd Archaeological Planning Service (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.

13.1.3 If significant archaeological remains are discovered and SPC works will affect those remains, Horizon will stop works and liaise with GAPS to enable appropriate mitigation measures to be developed. Works will continue upon implementation of any mitigation measures approved by GAPS.

13.2 Historic Buildings

13.2.1 The following measures will be undertaken in advance of SPC works to mitigate effects on historic buildings:

- Level 1 Historic Building Recording (as defined by Understanding Historic Buildings: A Guide to Good Recording Practice, Historic England 2016) of:
 - Wylfa House, Former Site of, and Wylfa Garden, Remains of, Cemaes Bay (Asset 73).
 - Simdde Wen (site of) (Wylfa Sports and Social Club) (Asset 147).
- Level 2 Historic Building Recording (as defined by Understanding Historic Buildings: A Guide to Good Recording Practice, Historic England 2016) of:
 - Tregele (Asset 225).
- Level 3 Historic Building Recording (defined by Understanding Historic Buildings: A Guide to Good Recording Practice, Historic England 2016) of:
 - Limekiln, Porth-y-pistyll (Asset 106).
 - Cattle Grid Lodge, Simdda-Wen (Asset 170).
 - Tyddyn Gele, Garage and Outbuildings (Asset 263).
 - Stone Field Barn South of Tregele (Asset 317).
 - Barn, North-east of Neuadd (Asset 823).

13.2.2 Photographic surveys will be undertaken to mitigate effects on the following historic buildings:

- Chain Home Guard Installation (Asset 65).
- Receiving Tower, Chain Home Guard, Cemaes Bay (Asset 84).
- Council Depot, Tregele (Asset 206).
- Groesfechan (Asset 341).

13.2.3 Historic building recording and photographic 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 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.

13.3 Historic Landscape Types

13.3.1 The following will be undertaken in advance of SPC works to mitigate effects on Historic Landscape Types:

- Level 2 Historic Landscape Survey and photographic survey (as defined by Understanding the Archaeology of Landscapes, a guide to good recording practice, English Heritage 2007) of:
 - Dame Sylvia Crowe's landscaping area (HLT 3).
 - Cemlyn Coastal Strip (HLT 9).
 - Fieldscape, north-west Mon (HLT10).

13.3.2 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.

14 References

Table 14-1 Schedule of references

ID	Reference
RD1	British Standards Institution. 2015. BS EN ISO 14001:2015 Environmental management systems – Requirements for use. London: British Standards Institution.
RD2	Natural Resources Wales. 2014. <i>How to comply with your environmental permit</i> . Version 8. Cardiff: Natural Resources Wales.
RD3	Holman <i>et al.</i> 2014. <i>IAQM Guidance on the assessment of dust from demolition and construction</i> . London: Institute of Air Quality Management. www.iaqm.co.uk/text/guidance/construction-dust-2014.pdf .
RD4	British Standards Institution. 2014. BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Part 1: Noise. London: British Standards Institution.
RD5	British Standards Institution. 2014. BS 5228-2:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration. London: British Standards Institution.
RD6	Contaminated Land: Applications in Real Environments (CL:AIRE). 2011. The Definition of Waste: Development Industry Code of Practice. Version 2. London: CL:AIRE
RD7	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.
RD8	Department for Environment, Food and Rural Affairs. 2009. <i>Construction Code of Practice for the Sustainable Use of Soils on Construction Sites</i> . London: Department for Environment, Food and Rural Affairs.
RD9	Ministry of Agriculture, Fisheries and Food. 2000. <i>Good Practice Guide for Handling Soils</i> (version 04/00). Cambridge: Farming and Rural Conservation Agency.
RD10	The Definition of Waste: Development Industry Code of Practice (Contaminated Land: Applications in Real Environments, 2011)
RD11	British Standards Institution. 2015. <i>BS 3882:2015 Specification for topsoil</i> . London: British Standards Institution.
RD12	British Standards Institution. 2013. <i>BS 8601:2013 Specification for subsoil and requirements for use</i> . London: British Standards Institution.
RD13	Environment Agency, Scottish Environment Protection Agency and Northern Ireland Environment Agency. 2013. <i>PPG1: Understanding</i>

ID	Reference
	<i>Your Environmental Responsibilities – Good Environmental Practices</i> . Bristol: Environment Agency.
RD14	Environment Agency's Works and maintenance in or near or water: GPP 5.
RD15	Environment Agency, Scottish Environment Protection Agency and Northern Ireland Environment Agency. 2012. <i>Working at construction and demolition sites: PPG 6</i> . 2 nd Edition. Bristol: Environment Agency.
RD16	Vehicle washing and cleaning: GPP 13
RD17	Environment Agency, Scottish Environment Protection Agency and Northern Ireland Environment Agency. 2009. <i>Incident Response Planning: PPG 21</i> . Bristol: Environment Agency.
RD18	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.
RD19	Natural Resources Wales. 2017. <i>Check flood warnings</i> . [Online] [Accessed: DD Month YYYY] Available from: https://naturalresources.wales/flooding/check-flood-warnings/?lang=en .
RD20	Mitchell-Jones, A.J. 2004. <i>Bat Mitigation Guidelines</i> . Peterborough: English Nature.
RD21	British Standards Institution. 2012. <i>BS 5837:2012 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	

CONTACT US:

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

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