



Wylfa Newydd Project

5.3 Statement of Statutory Nuisances

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Contents

	Executive Summary	1
1	Introduction	2
2	Environmental Protection Act 1990.....	4
3	Assessment of Statutory Nuisance	6
3.1	Introduction	6
3.2	Noise and Vibration	7
	<i>Construction</i>	7
	<i>Operation</i>	10
	<i>Decommissioning</i>	11
3.3	Air Quality	12
	<i>Construction</i>	12
	<i>Operation</i>	15
	<i>Decommissioning</i>	16
3.4	Light.....	18
	<i>Construction</i>	18
	<i>Operation</i>	19
	<i>Decommissioning</i>	20
4	Conclusion	22

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Executive Summary

The Statement considers the nuisances listed in section 79(1) of the Environmental Protection Act 1990 that may be engaged by the Wylfa Newydd DCO Project, and describes measures that are proposed to mitigate and limit the likelihood of nuisances eventuating.

1 Introduction

- 1.1.1 This Statement of Statutory Nuisance forms part of the application for development consent by Horizon Nuclear Power Wylfa Limited (Horizon) to the Planning Inspectorate (PINS) under the Planning Act 2008 to construct and operate the Wylfa Newydd DCO Project, comprising a new nuclear power station and other associated development near Wylfa Head, Anglesey. A brief description of the development can be found in chapter A1 of the Environmental Statement (introduction)(Application Reference number: 6.1.1) which this statement accompanies in the application for development consent. A more detailed description of each of the developments forming Wylfa Newydd DCO Project can be found in chapters D1, E1, F1, G1 and H1 (Application reference numbers: 6.4.1, 6.5.1, 6.6.1, 6.7.1 and 6.8.1) of the Environmental Statement.
- 1.1.2 The requirement for a Statement of Statutory Nuisance is set out in the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (regulation 5(2)(f)), which states:
- “(2) The application must be accompanied by -
- (f) a statement whether the proposals engage one or more of the matters set out in section 79 (1) (statutory nuisances and inspections therefor) of the Environmental Protection Act 1990, and if so how the applicant proposes to mitigate or limit them”.
- 1.1.3 The Statement has been prepared, having regard to the requirements in Overarching National Policy Statement for Energy EN-1, specifically paragraph 4.14.2. The Statement considers the nuisances listed in section 79(1) of the Environmental Protection Act 1990 that may be engaged by the Wylfa Newydd DCO Project, and describes measures that are proposed to mitigate and limit the likelihood of nuisances eventuating.
- 1.1.4 This Statement should be read alongside the other application documents, in particular: the Environmental Statement; the Wylfa Newydd Code of Construction Practice (CoCP) (Application Reference number: 8.6); the associated location-specific sub-CoCPs including the Main Power Station Site sub-CoCP (Application Reference Number: 8.7); the Marine Works sub-CoCP (Application Reference Number: 8.8); the Off-Site Power Station Facilities sub-CoCP (Application Reference Number: 8.9); the Park and Ride (Application Reference Number: 8.10); the Logistics Centre sub-CoCP (Application Reference Number: 8.11); the A5025 Off-line Highway Improvements (Application Reference Number: 8.12); the Wylfa Newydd Code of Operational Practice (CoOP) (Application Reference number: 8.13) and the Design and Access Statements Volumes 1-3 (Application Reference numbers: 8.2.1, 8.2.2 and 8.2.3).
- 1.1.5 This Statement makes reference to these documents as well as others included within the application for a Development Consent Order (DCO), which contain detailed information on the proposals, the Environmental Impact Assessment (EIA) undertaken and the effect of the mitigation measures proposed. The statement concludes that there is low potential for nuisance to

arise from the implementation of the ecological compensation sites at Ty Du, Cae Canol-Dydd and Cors Gwawr due to the low level of works occurring at these sites are to mitigate potential impacts at the Tre'r Gof SSSI within the Wylfa Newydd Development Area. The EIA of these sites can be found in Appendix D1-2 (Ecological Compensation Sites: Assessment of Environmental Effects) (Application Reference Number: 6.4.18) of the Environmental Statement.

- 1.1.6 The matters under section 79(1) which have potential to arise through the realisation of the Wylfa Newydd DCO Project are, in broad overview, nuisance caused by noise and vibration, air pollution and light pollution.

2 Environmental Protection Act 1990

2.1.1 This section sets out the relevant provisions of the Environmental Protection Act 1990 in respect of statutory nuisance.

2.1.2 Section 79(1) states:

“Subject to subsections (1A) to (6A) below, the following matters constitute “statutory nuisances” for the purposes of this Part, that is to say:

(a) any premises in such a state as to be prejudicial to health or a nuisance;

(b) smoke emitted from premises so as to be prejudicial to health or a nuisance;

(c) fumes or gases emitted from premises so as to be prejudicial to health or a nuisance;

(d) any dust, steam, smell or other effluvia arising on industrial, trade or business premises and being prejudicial to health or a nuisance;

(e) any accumulation or deposit which is prejudicial to health or a nuisance;

(f) any animal kept in such a place or manner as to be prejudicial to health or a nuisance;

(fa) any insects emanating from relevant industrial, trade or business premises and being prejudicial to health or a nuisance;

(fb) artificial light emitted from premises so as to be prejudicial to health or a nuisance;

(g) noise emitted from premises so as to be prejudicial to health or a nuisance;

(ga) noise that is prejudicial to health or a nuisance and is emitted from or caused by a vehicle, machinery or equipment in a street or in Scotland, road; and

(h) any other matter declared by enactment to be a statutory nuisance;

and it shall be the duty of every local authority to cause its area to be inspected from time to time to detect any statutory nuisance which ought to be dealt with under section 80 [or sections 80 and 80A below] and, where a complaint of statutory nuisance is made to it by a person living within its area, to take such steps as are reasonably practicable to investigate the complaint.”

2.1.3 Sections 79(1A) to (6A) contain exceptions to the above statutory nuisances. The exceptions that apply to the Wylfa Newydd DCO Project are listed below:

Section 79(4) provides that subsection (1)(c) above does not apply in relation to premises other than private dwellings.

Section(5B) provides that subsection (1)(fb) does not apply to artificial light emitted from—

- (b) harbour premises;
- (e) a bus station and any associated facilities; and
- (g) a goods vehicle operating centre;

Section(6A) provides that subsection (1)(ga) above does not apply to noise made—

- (a) by traffic; and
- (c) by a political demonstration or a demonstration supporting or opposing a cause or campaign.”

3 Assessment of Statutory Nuisance

3.1 Introduction

3.1.1 In accordance with the EIA undertaken, as described in the Environmental Statement (Volumes C to H), this Statement of Statutory Nuisance considers the following statutory nuisances under the Environmental Protection Act 1990 to be relevant to the construction, operation and decommissioning of the Wylfa Newydd DCO Project:

- Section 79(1)(d) relating to air quality and odour;
- Section 79(1)(fb) relating to artificial lighting; and
- Section 79(1)(g) and (ga) relating to noise (and vibration).

3.1.2 The other nuisances listed in section 79(1) are considered not to be applicable to the Wylfa Newydd DCO Project and are not considered further within this Statement of Statutory Nuisance. They are deemed as such due to either the lack of potential for these nuisances to arise during any stage of the project, the justification of these approaches are outlined in Table 3.1 below, or they have been excluded on the basis of the exceptions provided for at sections 79(1A) to (6A).

Table 3-1 Reasoning for the scoping out of nuisance from this Statement of Statutory Nuisance

Nuisance in section 79 (1)	Reasoning why it is scoped out of assessment
(a) any premises in such a state as to be prejudicial to health or a nuisance;	The site would be managed in accordance with the CoCP to ensure the state of the premises do not fall into disrepair to produce nuisance
(b) smoke emitted from premises so as to be prejudicial to health or a nuisance;	There is not anticipated to be any burning associated with any stage of the lifecycle of the Wylfa Newydd DCO Project.
(e) any accumulation or deposit which is prejudicial to health or a nuisance;	The management procedures in place as part of construction and operation of the Wylfa Newydd DCO Project would ensure no accumulation of materials that could be harmful to human health would occur. The procedures in the CoCP, sub-CoCPs and CoOPs secure these procedures.
(f) any animal kept in such a place or manner as to be prejudicial to health or a nuisance;	Animals are not to be kept on site through the construction or operation of the Power Station and thus would not lead to nuisance.

Nuisance in section 79 (1)	Reasoning why it is scoped out of assessment
(fa) any insects emanating from relevant industrial, trade or business premises and being prejudicial to health or a nuisance;	The site would be managed in accordance with the CoCP and CoOP to ensure the state of premises do not lead to nuisance emanating from insects.

3.1.3 Further to the above, the following statutory nuisances have been excluded from the assessment on the basis that exceptions set out in sections 79(1A) to (6A) apply:

- Fumes or gases emitted from premises so as to be prejudicial to health or a nuisance are excluded under section 79(4) which provides that this statutory nuisance only applies in respect of private dwellings.
- noise nuisance arising from the operation of the A5025 Off-line Highway Improvements as noise from traffic is listed as an exclusion under section 79(6A).
- air quality effects from the operation of the Offline Highway Improvements, as roads are not designated as ‘premises’.

3.1.4 For completeness, the A5025 Off-line Highway Improvements would not be decommissioned in the near future and are likely to remain ‘in-perpetuity’. In light of this, no assessment of the future decommissioning of the off-line highway improvements has been undertaken.

3.2 Noise and Vibration

Construction

3.2.1 A range of activities that would be carried out during the construction of the Wylfa Newydd DCO Project have the potential to cause noise and vibration effects. It should be noted that there is no set noise level above which a nuisance may be deemed to have occurred. A commonly used defence in response to a noise nuisance action is to demonstrate that all reasonable means to reduce or control the effect of the noise has been employed, i.e. “best practicable means”.

3.2.2 Based upon requirements at different phases of the construction of the Wylfa Newydd DCO Project, a range of construction plant and equipment would be utilised across the various construction sites and at varying degrees of proximity to local receptors. A list of the equipment to be used at the Wylfa Newydd Development Area is presented in Appendix D6.1 of the Environmental Statement (Application Reference number: 6.4.23). The construction equipment and plant to be utilised at the Off-site Power Station Facilities and Associated Development sites is listed in chapters E6, F6, G6 and H6 (noise and vibration)(Application Reference numbers: 6.5.6, 6.6.6, 6.7.6, and 6.8.6) of the Environmental Statement. .

- 3.2.3 The effect of construction noise and vibration at the Wylfa Newydd Development Area has been assessed in the Environmental Statement and is presented in chapter D6 (noise and vibration)(Application Reference number: 6.4.6). The effect of construction noise and vibration at the Off-Site Power Station Facilities site and Associated Development sites are also presented in the Environmental Statement in chapters E6, F6, G6 and H6 (Application Reference numbers: 6.5.6, 6.6.6, 6.7.6, and 6.8.6).
- 3.2.4 The modelling to inform the environmental assessments of potential construction noise and vibration effects at the Wylfa Newydd Development Area, Off-site Power Station Facilities and Associated Developments have taken into account embedded and good practice mitigation measures relevant to noise and vibration when determining the significance of potential effects.. After this, further additional mitigation was considered to address the potential significant effects identified.
- 3.2.5 Unlike the noise assessment, the assessment of vibration does not relate to specific points in time, but is instead based on the closest approach of construction equipment that may emit high levels of vibration to sensitive receptors. The vibration assessment includes the key assumption that all blasting events would be designed by the blasting contractor to meet the blasting vibration limits set out in the Wylfa Newydd CoCP (Application Reference number: 8.6) and Main Power Station Site sub-CoCP (Application Reference number: 8.7).
- 3.2.6 The embedded and good practice mitigation that has been taken into account in the noise and vibration assessments for each of the construction scenarios is detailed in the respective noise and vibration chapters in the Environmental Statement as noted above and is secured through its inclusion within the Wylfa Newydd CoCP (Application Reference number: 8.6), the appropriate sub-CoCPs and the Design and Access Statements volumes 1-3(Application Reference numbers: 8.2.1, 8.2.2 and 8.2.3).
- 3.2.7 The embedded mitigation specific to the construction at the Wylfa Newydd Development Area includes:
- the capping of haul roads with suitable materials and techniques to lower the potential for emitting noise and vibration;
 - the construction of earth mounds in the north-east, south and south-west extents of the Wylfa Newydd Development Area (identified as landscape mounds A, C and E) to provide attenuation of construction noise for receptors.
- 3.2.8 Examples of good practice construction noise and vibration mitigation measures that apply across the developments that make up the Wylfa Newydd DCO Project include:
- the use of heavy construction plant and equipment that complies with the noise limits outlined in the Outdoor Noise Directive 2000/14/EC, which is enacted in the Noise Emission in the Environment by Equipment for use Outdoors Regulations 2001 (United Kingdom Statutory Instrument 2001/1701);

- all plant would be maintained on a regular basis to ensure in good working order and compliance with noise limits;
- reduction and/or throttling of plant equipment and vehicles where practicable; and,
- the fitting of exhaust silencers/suppression equipment to all vehicle and mechanical plant employed for any activity associated with the construction works.

- 3.2.9 Taking into account the embedded and good practice mitigation, the assessment in chapter D6 of the Environmental Statement for the Wylfa Newydd Development Area concludes that major adverse significant effects from construction noise would be felt at 308 residential receptors, 1 commercial receptor and 1 hotel. Further, moderate adverse effects (which are also significant) were predicted at 843 residential receptors, one school, 4 hotels and one place of worship. The chapter also concludes major adverse effects from vibration at residential properties adjacent to the Wylfa Newydd Development Area.
- 3.2.10 Significant noise and vibration effects have also been identified in respect of the Off-Site Power Station Facilities and Associated Developments. These include significant short-term noise effects at 8 residential receptors near the Off-site Power Station Facilities, and 30 receptors along the A5025 Offline Highway Improvements who would experience significant short to medium term construction noise effects. No significant noise and vibration effects were identified from the construction of the Logistics Centre and the Park and Ride.
- 3.2.11 To address the significant adverse effects that were identified, additional mitigation has been considered to reduce the number of significant effects. These additional mitigation measures are set out in detail in the noise and vibration chapters of the Environmental Statement and detailed in the Wylfa Newydd CoCP (Application Reference Number: 8.6) and sub-CoCPs (Application Reference Number: 8.7). Examples of additional mitigation proposed is set out below.
- 3.2.12 Horizon has committed to submit an application to the Isle of Anglesey County Council (IACC) for prior consent under section 61 of the Control of Pollution Act 1974 for all construction works. Each application will contain the particulars for the works to be undertaken, the working methods and the details of the plant proposed to undertake the work alongside the proposed noise and vibration control measures. As part of a section 61 application, Horizon would also undertake a vibration risk assessment which would confirm that safe working distances, or alternative compaction techniques, could be deployed. The aim of any section 61 application would be to ensure that the best practicable means would be employed to control noise and vibration emissions. The addition of this mitigation has had the effect of reducing the significance of vibration effects to moderate adverse at the Wylfa Newydd Development Area and minor adverse at all associated development sites.
- 3.2.13 Further additional mitigation is a Local Noise Mitigation Strategy described in the Wylfa Newydd CoCP (Application Reference Number: 8.6). This voluntary

strategy aims to further reduce the effects of construction noise and vibration on qualifying local residential properties, guest houses, hotels, B&Bs and schools. This strategy includes various mitigation measures to reduce effects from noise at affected receptors including the provision of noise insulation at receptors. It must be noted however that the inclusion of this additional mitigation does not bring down the number of significantly affected receptors in the assessment as it cannot be guaranteed that each affected property would take up the offer of noise insulation. In practice however, it would lead to reductions in noise levels inside properties when the option is taken up.

Operation

- 3.2.14 No significant sources of vibration are anticipated from the operation of the Wylfa Newydd DCO Project. However, there would be noise emissions from the operation of the Power Station, Off-site Power Station Facilities and Associated Developments.
- 3.2.15 Noise modelling has been undertaken to understand noise levels during operation of the Power Station at local residential receptors. The embedded and good practice mitigation considered in the assessments for each of the scenarios is noted in section 6.4 of chapter D6 of the Environmental Statement. This mitigation is then secured through their inclusion within the CoOP and Volume 1 of the Design and Access Statement.
- 3.2.16 Embedded mitigation to reduce noise from the operation of the power station includes the design being optimised as far as practicable to locate the largest noise sources away from sensitive receptors, and for the transformer specification to keep overall noise contribution levels at the nearest residential receptors to 25dB LAeq T.
- 3.2.17 Examples of the good practice mitigation incorporated in the CoOP to reduce noise emissions from the site include:
- the regular inspection and maintenance of noise emitting equipment;
 - ensuring the closing of doors and windows of enclosed areas;
 - avoidance of undertaking noisy activities at night;
 - selection of noise emitting equipment where practicable; and,
 - ensuring equipment is operated by trained and experienced staff.
- 3.2.18 Operational noise from the Power Station will also be subject to limited 'spot check' monitoring by NRW near selected sources to ensure Horizon remains within the limits set by its Environmental Permit.
- 3.2.19 With the embedded and good practice mitigation taken into account within the assessment, the assessment of operational noise in chapter D6 concludes no significant effects are predicted from the operation of the Power Station.
- 3.2.20 There are not anticipated to be any significant noise impacts arising from the operation of the Off-site Power Station Facilities according to the individual assessment undertaken in chapter E6 of the Environmental Statement.

- 3.2.21 Embedded mitigation incorporated into the assessment include the strategic siting of sources on site with building orientation screening noise sources from noise-sensitive receptors and that the testing of the emergency mobile generators stored in the MEEG/AECC building will take place at the maintenance facilities located at the Power Station Site. Further, the good practice mitigation measures discussed above and outlined in the Wylfa Newydd CoOP will also apply to the operation of the Off-site Power Station Facilities. The good practice mitigation is also supplemented by the commitment that the combined noise rating level from all fixed plant will be no greater than background level (LA90) +5dB at nearest residential receptors. This will help to ensure nuisance is not caused by the operation of the Off-site Power Station Facilities.
- 3.2.22 There are not anticipated to be any significant noise impacts arising from the operation of the Associated Developments according to the individual assessments undertaken in the Environmental Statement (chapters F6 and H6) which could cause nuisance to local receptors.
- 3.2.23 Examples of embedded mitigation for the operation of the Associated Development sites include the situating of the bus transfer building and waiting area at the Park and Ride in the centre of the site to increase the distance between noise sources on the site and receptors, whilst the design of the Logistics Centre allows for a flow of traffic to prevent reversing of vehicles wherever practicable to prevent any nuisance arising from reversing alarms.
- 3.2.24 Good practice measures implemented during the operation of the Park and Ride and Logistics Centre include management procedures such as reduced idling of buses, buses not being allowed to wait on the public highway, and the prevention of the use of horns on site unless in the case of emergency. These measures are secured by the Dalar Hir Park and Ride sub-CoCP (Application Reference number: 8.10) and Parc Cybi Logistics Centre sub-CoCP (Application Reference number: 8.11) respectively.
- 3.2.25 Due to the predicted noise levels during the operational phases of the Power Station, Off-site Power Station Facilities and the Associated Developments reported in the Environmental Statement and the management procedures and mitigation measures outlined in the Wylfa Newydd CoOP (Application Reference number: 8.13) and relevant sub-CoCPs (Application Reference number: 8.9, 8.10 and 8.11), there is unlikely to be any statutory nuisance related to noise.

Decommissioning

- 3.2.26 The scale of decommissioning works at the Wylfa Newydd Development Area would be smaller than those for construction and due to the layout of the landform at the site post construction; which would include the noise abatement bunds from construction; noise would be reduced at many sensitive noise receptors. Further, it is anticipated that good practice measures employed during construction would be replicated during the decommissioning works. As such, the decommissioning of the Power Station is unlikely to increase the number of significant adverse effects at noise receptors established by the construction noise assessment. However, there

is still potential for significant effects from short-term and long-term decommissioning noise arising from Wylfa Newydd Development Area.

- 3.2.27 As the decommissioning works of the Power Station would incorporate very few works near the perimeter of the Wylfa Newydd Development Area, the high-level assessment of vibration during decommissioning of the Power Station within chapter D6 concludes that no significant effects from vibration are likely to arise from decommissioning. The assessment also concludes that the decommissioning of the Site Campus would also not lead to significant effects from vibration.
- 3.2.28 The environmental assessment of the noise and vibration effects associated with the decommissioning of the Off-site Power Station Facilities predicts noise levels will not be worse than those levels calculated for the construction noise assessment. Consistent with construction, the assessment concludes that there will potentially be significant effects from noise during the decommissioning of the site. As discussed above, conducting the works in compliance with a section 61 consent is considered to reduce the risk of noise nuisance action.
- 3.2.29 The assessment of decommissioning noise for the Park and Ride and Logistics Centre concludes that noise sources are unlikely to be any worse than those used during construction. Since the effects from the construction noise assessments at these sites resulted in no significant effects, the assessment concludes no significant effects are expected during the decommissioning of these two sites.

3.3 Air Quality

Construction

- 3.3.1 A range of activities that would be carried out in the construction of the Wylfa Newydd DCO Project have the potential to cause effects on air quality. The principal concerns for air quality through the construction of the Wylfa Newydd DCO Project relate to dust, nitrogen dioxide, fine particulate matter (i.e. PM_{2.5} and PM₁₀) and odour. This in part relates to the low baseline conditions for other pollutants such as carbon monoxide and sulphur dioxide within the study areas for the Environmental Impact Assessments. The baseline conditions for the assessment on the Wylfa Newydd Development Area are provided within Appendix B5.01 (Baseline Data Synopsis Report – air quality)(Application Reference number: 6.2.18) of the Environmental Statement.

Emissions from plant, machinery and marine vessels

- 3.3.2 There is a wide range of plant and equipment to be utilised during the construction of the Wylfa Newydd DCO Project, with a list of such equipment to be used on the Wylfa Newydd Development Area for the means of the assessment being defined in Appendix D5.02 (Main Site Construction Phase Air Dispersion EIA - Final Modelling Report)(Application Reference number: 6.2.19) of the Environmental Statement.

- 3.3.3 The assessments of the emissions from the construction of the Off-Site Power Station Facilities and Associated Developments is reported in chapters E5, F5, G5 and H5 (noise and vibration)(Application Reference numbers: 6.5.5, 6.6.5, 6.7.5, and 6.8.6) of the Environmental Statement. These chapters also outline the predicted plant lists for these sites.
- 3.3.4 The embedded and good practice mitigation was also considered in the assessments of emissions is noted in section 5.4 of the Environmental Statement chapters noted above. This includes reference to strategies within the Wylfa Newydd CoCP(Application Reference number: 8.6) and sub-CoCPs (Application Reference number: 8.9, 8.10 and 8.11) to ensure good practice mitigation is secured, and highlights embedded mitigation that is secured through the Design and Access Statements volumes 1-3 (Application Reference numbers: 8.2.1, 8.2.2 and 8.2.3). These measures were incorporated into the assessments in the chapters above.
- 3.3.5 Embedded mitigation is generally site specific. In respect of the Wylfa Newydd Development Area, site power to support construction is scheduled to be available nine months after granting of the DCO and is a predecessor for the establishment of site compounds and accommodation. The installation of the site power would reduce the need to use diesel generators to power the site compounds, Site Campus and the main concrete batching plant.
- 3.3.6 The project-wide good practice measures which are secured through the Wylfa Newydd CoCP (Application Reference number: 8.6) and sub-CoCPs include:
- compliance with the EU Stage IIIB emission standards for non-road mobile machinery (EC Directive 97/68/EC);
 - avoiding the use of diesel or petrol-powered generators and use of main electricity or battery powered equipment where practicable;
 - careful maintenance of plant and machinery in accordance with the manufacturer's instructions to reduce the risk of elevated emissions due to poor engines or emissions;
 - reduction of idling of both vehicles and plant on-site; and,
 - to manage and reduce the movement of construction traffic around site where practicable.
- 3.3.7 To address the significant effects identified following the consideration of embedded and good practice mitigation, additional mitigation measures were considered in the environmental assessment. The additional mitigation measures considered can be found in Section 5.6 of the relevant ES chapters. Only emissions at the Wylfa Newydd Development Area require these measures according to the assessments in chapter 5 of volumes D-H (Application Reference numbers: 6.4.5, 6.5.5, 6.6.5, 6.7.5, and 6.8.6).
- 3.3.8 To prevent significant effects across the Wylfa Newydd DCO Project, a comprehensive air quality management, monitoring and reporting scheme would be developed in consultation with IACC and NRW including agreement of thresholds and additional achievement criteria to ensure compliance with

the appropriate environmental standards. In order to achieve these environmental standards, further mitigation measures would include:

- A fleet mix that will include newer NRMM complying with the EU Stage IV NRMM emissions standards (i.e. plant generally manufactured after 2014), which emit 80% less NO_x than Stage IIIB plant.
- Active and on-going management of the plant and machinery operating in close proximity to the key exceedance areas.
- Use of continuous NO_x and NO₂ monitoring to track compliance against the AQOs and mitigation objectives, including appropriate feedback mechanisms to ensure the emissions management scheme can be adapted to respond to measured exceedances or elevated concentrations.

Emissions of odours

3.3.9 During construction at the Wylfa Newydd Development Area, there is also potential for nuisance caused by odour but no sources are present for the Associated Developments. The sources of this potential odour include the remediation of the contaminated land, the operation of package sewerage treatment plants and the operation of the existing sewage treatment plant adjacent to the Site Campus near Wylfa Head. This is assessed in the Air Quality chapter for the Wylfa Newydd Development Area of the Environmental Statement (chapter D6) (Application Reference numbers: 6.4.5) and the methods by which it would be managed and the effects mitigated are contained within the Wylfa Newydd CoCP (Application Reference number: 8.6) and Main Power Station Site CoCP (Application Reference number: 8.7). As is standard practice in the construction industry, measures would be put in place to control odour at source and to prevent or reduce its release to receptors. Embedded mitigation to manage odour emissions is the provision of a predominately enclosed system for package sewerage treatment plant during Main Construction.

3.3.10 Good practice mitigation includes:

- regular odour walkovers to assess the effectiveness of the odour control system;
- development of odour complaint protocols; and
- use of odour neutralising spray if odours are generated.

3.3.11 With the implementation of the control procedures outlined above, no odour is anticipated to be released from the Wylfa Newydd Development Area during construction and thus no nuisance is expected.

Emissions of dust

3.3.12 The assessment of dust is also incorporated in the air quality chapters in the Environmental Statement chapters outlined above for the Wylfa Newydd Development Area, Off-site Power Station Facilities and Associated Developments. The assessments have taken into account both the size and

locations of the specific developments and the nature of the construction activities. As is standard practice in the construction industry, measures would be put in place to control dust emissions at source and to prevent or reduce the release of dust beyond the boundaries of the Wylfa Newydd Development Area, Off-site Power Station Facilities and Associated Development sites.

3.3.13 Embedded mitigation to prevent the emissions of construction related dust across the Wylfa Newydd DCO Project include:

- Haul roads would be capped, with suitable materials and techniques, which would have a lower potential for emitting dust than unsurfaced haul roads as set out in the air quality strategy within the Main Power Station Site sub-Code of Construction Practice (CoCP);
- The concrete batching plant would include embedded mitigation to prevent or reduce emissions of dust as part of the design. These include enclosing the various parts of the plant, with silos and cement powder delivery systems fitted with suitable dust mitigation systems as set out in the Design and Access Statement volume 2 (Application Reference Number: 8.2.2).

3.3.14 This good practice mitigation is secured through its inclusion in the Wylfa Newydd CoCP (Application Reference number: 8.6) and includes measures such as:

- reducing drop heights covering stockpiles and the use of equipment with dust suppression fitted where practicable;
- ensuring adequate water supply to aid with abatement; and,
- the use of enclosed chutes, conveyers and skips where practicable.

3.3.15 The COCP states the methods by which dust would be controlled at source to minimise adverse effects from dust. The Wylfa Newydd COCP (Application Reference number: 8.6) also provides a framework by which the level of mitigation is adapted to respond proactively to the changing risk of dust emissions throughout the construction phase of the project. When these control procedures are put in place, the assessment concludes there is no anticipated significant effects from dust through the construction of the Wylfa Newydd DCO Project.

3.3.16 After mitigation, no nuisance related to air quality is anticipated to occur during the construction of the Wylfa Newydd DCO Project.

Operation

Emissions from plant, machinery and marine vessels

3.3.17 Predictive modelling has been undertaken for the Wylfa Newydd Development Area to determine worst case concentrations of pollutants that may occur in locations adjacent to the Wylfa Newydd Development Area such as residential receptors and PRow users. The modelling is based on predicted worst case emissions as part of the routine operation of the Power Station, and are of a short-term/ temporary nature due to the source of the emissions being from

routine testing of generators and safety systems for short periods of time. The modelling results indicate that the pollutant concentrations expected from the operational Power Station would not exceed the relevant Air Quality Objectives used in the assessment within chapter D5 of the Environmental Statement (Application Reference Number: 6.4.5).

- 3.3.18 The standby generator at the Off-site Power Station Facilities has the potential to cause nuisance through emissions. However, as the generator is only expected to typically operate for 16 hours a year (i.e. less than the permitted 18 exceedances of the one-hour mean AQO for NO₂), a qualitative assessment has been undertaken based on the consideration of the size of the generator, frequency of operation, relative location to nearby sensitive receptors, effectiveness of dispersion and prevailing weather conditions.
- 3.3.19 Embedded mitigation in the above assessments is that all operational plant will operate on ultra-low sulphur diesel where this does not compromise safety and operational requirements. This mitigation is secured within the CoOP (Application Reference Number: 8.13).
- 3.3.20 Good practice mitigation that applies across the suite of assessments of operational effects of the Wylfa Newydd DCO Project include undertaking of routine maintenance and the commitment to operate all plant and generators in line with manufacturer's operating procedures. Environmental permits for the activities of the Power Station will regulate emissions and ensure Horizon's compliance.
- 3.3.21 The air quality assessment of the operational phase of the Park and Ride and Logistics Centre is presented in chapters F5 (Application Reference number: 6.6.5) and H5 (Application Reference numbers: 6.8.5) of the Environmental Statement. This concludes no nuisance is to arise from the operation of the sites. This is in part due to the embedded mitigation for the sites, which includes the siting of the facilities away from residential receptors.

Emissions of odours

- 3.3.22 There is no odour emissions predicted from the operation of the Power Station, the Off-site Power Station Facilities and Associated Developments and thus no assessment on odour has been undertaken.

Emissions of dust

- 3.3.23 No significant dust is anticipated from the Power Station, the Off-Site Power Station Facilities and Associated Developments when operational and thus no assessment of dust during operation has been undertaken.

Decommissioning

Emissions from plant, machinery and marine vessels

- 3.3.24 The decommissioning of the Power Station would also involve a considerably lower number of plant and machinery on the Wylfa Newydd Development Area than the main construction and also at a lower intensity. Due to the need for earthworks near receptors on the periphery of the Wylfa Newydd Development

Area been unlikely, and the fact emissions standards are likely to become more stringent in the following years, the Environmental Statement predicts no significant effects are expected from emissions of pollutants from plant and machinery during the decommissioning of the Power Station. On the basis of this, it can be expected that no nuisance is expected to arise from vehicle emissions such as NO₂, PM₁₀ and PM_{2.5} during the decommissioning of the Power Station.

- 3.3.25 The decommissioning of the Off-site Power Station facilities is unlikely to arise to nuisance from vehicle emissions due to the lesser requirement for earthworks and lesser number of plant and vehicle movements at the site compared to construction. With similar good practice mitigation in place for decommissioning activities as used during the construction phase of the project, it is not expected that the decommissioning of the Off-site Power Station Facilities would lead to nuisance from vehicle or plant emissions.
- 3.3.26 The Environmental Statement chapters F5 (Application Reference number: 6.6.5) and H5 (Application Reference numbers: 6.8.5) concludes that the decommissioning activities for these sites would lead to less emissions from vehicles such as NO₂, PM₁₀ PM_{2.5} than during the construction phase and thus would not lead to significant effects. This assumption has been used in the assessment as there would be no requirement to remove all construction materials used at the site as part of decommissioning, whilst earthworks activity would be substantially less compared to construction at the sites. It is assumed in the high-level assessment of decommissioning that emissions reduction and management techniques similar to those outlined in the Wylfa Newydd CoCP (Application Reference number: 8.6) for construction would be implemented. With the incorporation of this mitigation and the reduced nature of works compared to construction, the lack of significant effects from vehicle emission means no statutory nuisance from vehicle emissions is predicted from the decommissioning of these Associated Development Sites.

Emissions of odours

- 3.3.27 As no odours are expected to arise from the decommissioning of the sites making up the Wylfa Newydd DCO Project, no assessment of Odour has been undertaken in the Environmental Statement.

Emissions of dust

- 3.3.28 For the decommissioning of the Power Station, it is predicted that the potential for generating dust emissions is to be lower than the construction phase as decommissioning would focus on the buildings/structures of the site. The amount of earthworks is likely to be considerably less than for the construction phase. Taking into account that similar good practice mitigation measures to those proposed during construction would be implemented, it is concluded that there would be no significant effect from dust emissions from the Wylfa Newydd Development Area. On the basis of this, it can be expected that no nuisance is expected to arise from dust emissions from the Wylfa Newydd Development Area during decommissioning of the Power Station.

- 3.3.29 The decommissioning of the Off-site Power Station facilities is unlikely to arise to nuisance from dust emissions due to the lesser requirement for earthworks at the site compared to construction which predicts no significant effects. With similar good practice mitigation in place for decommissioning activities as used during the construction phase of the project, it is not expected that the decommissioning of the Off-site Power Station Facilities would lead to nuisance from dust emissions.
- 3.3.30 The Environmental Statement chapters F5 (Application Reference number: 6.6.5) and H5 (Application Reference numbers: 6.8.5) concludes that the decommissioning activities would lead to less dust emissions than those from construction and thus would not lead to significant effects. This assumption has been used in the assessment as earthworks activity would be substantially reduced compared to construction at the sites. It is assumed in the high-level assessment of decommissioning that dust reduction and management techniques similar to those outlined in the Wylfa Newydd CoCP (Application Reference number: 8.6) for construction would be implemented. With the incorporation of this mitigation and the reduced nature of works compared to construction, the lack of significant effects from dust means no statutory nuisance from dust is predicted from the decommissioning of these Associated Development Sites.

3.4 Light

Construction

- 3.4.1 Lighting is necessary during the construction of the Wylfa Newydd DCO Project. The lighting proposed for the construction at the Wylfa Newydd Development Area is not yet at the detailed design stage. With this in mind, the Environmental Lighting Impact Assessment within Appendix D10.10 of the Environmental Statement (Application Reference Number: 6.4.67) is based on preliminary details of the lighting requirements with a number of assumptions to understand the effect on sensitive receptors (such as residential receptors). More detail on the assumptions of this assessment can be found in section 10-10.5 of the Environmental Lighting Impact Assessment. These assumptions include assumptions over lighting levels, degree of tilt, hours of working and amount of upward lighting in different construction zones.
- 3.4.2 The assessment of lighting from construction at the Off-Site Power Station Facilities and Associated Development sites is included within chapters E10, F10, G10 and H10 of the Environmental Statement (landscape and visual)(Application Reference Numbers: 6.5.10, 6.6.10, 6.7.10, 6.8.10).
- 3.4.3 Project wide good practice and embedded mitigation included within the assessments above is secured by the Wylfa Newydd CoCP (Application Reference number: 8.6) and includes:
- Maintaining a uniform lighting solution to reduce dark and light spots.
 - Limiting of new lighting at distant receptors.
 - The use of shields and baffles to limit light spill where necessary.

- Use of Central Management Systems to control lighting where practicable.
 - Lighting will be switched off when not required to ensure safe working conditions and site security.
 - Construction site lighting will be designed as far as practicable to ensure that any artificial light emitted from a site does not prejudice health or create nuisance, as required by the Environment Protection Act 1990.
- 3.4.4 Further mitigation which will help to mitigate effects from construction lighting at the Off-site Power Station Facilities and Associated Developments is that no night working will be undertaken on the construction of these sites and that lighting columns for the site compounds for the A5025 Off-line Highway Improvements would be no greater than 5 metres to reduce light spill.
- 3.4.5 Because of this mitigation, there is not predicted to be any nuisance to arise from construction lighting at the Off-site Power Station Facilities and Associated Development sites. However, the lighting grids presented in Appendix D10-10.5 (Application Reference Number: 6.4.67) of the Environmental Statement do show that some areas of Treglele and Cemaes may experience some significant light levels during the construction of the Wylfa Newydd DCO Project.
- 3.4.6 In the circumstances that light nuisance does occur at any of the sites within the construction of the Wylfa Newydd DCO Project, there is further additional mitigation to reduce the effects received by residential receptors outlined in D10-10.7 (Application Reference Number: 6.4.67) which is secured by the Wylfa Newydd CoCP (Application Reference Number: 8.6). These include:
- The use of the Central Management System for the lighting to reduce the lighting in that area if practicable;
 - Use of additional back shields where required; and,
 - Horizon's commitment to provide blackout blinds or alternative mitigation if the steps above can't mitigate the issue.
- 3.4.7 As the uptake of black-out blinds as a final mitigation measure may not be taken up by the person receiving the nuisance, the assessment in D10.10 concludes residual effects on the communities of Cemaes and Treglele as moderate adverse. Therefore, the assessment concludes that the residual effects during construction at Treglele and Cemaes after additional mitigation will be moderate adverse, but no nuisance will be realised if the above mitigation measures are taken up.

Operation

- 3.4.8 There is also lighting associated with the operation of the Power Station, the Off-site Power Station Facilities and the Associated Developments. The assessment of the operation of the Wylfa Newydd Power Station is contained within Appendix D10-10 (Application Reference Number: 8.4.67) as referenced above. The assumptions used to make this assessment are included within section 10-10.5 of this appendix. The lighting in the

assessment is what is predicted is required to operate the plant 24 hours a day and incorporates the necessary security requirements. The assessment incorporates the good practice mitigation that lighting design will give consideration of relevant industry standards as detailed and secured in the Wylfa Newydd CoOP (Application Reference Number: 8.13). The CoOP also includes the additional mitigation that lighting will be designed to prevent light spill and nuisance during operation of the power station.

- 3.4.9 The assessment of lighting during the operation of the Off-site Power Station Facilities and Associated Developments is in chapter 10 of volumes E-H (Application Reference Numbers: 6.5.10, 6.6.10, 6.7.10, 6.8.10) of the Environmental Statement as for the construction phase above. The good practice mitigation for these sites include the design of lighting to not exceed minimum requirements of accepted standards, and for all lighting on the A5025 Off-line Highway Improvements to be designed to reduce light spill as far as practicable without negatively effecting road safety.
- 3.4.10 None of the assessments noted above predict significant effects from lighting of the operational phase after additional mitigation of design to prevent nuisance during operation is taken into account in the assessment.

Decommissioning

- 3.4.11 The assessment within Appendix D10-10 (Application Reference Number: 6.4.67).assumes that the lighting associated with the decommissioning of the Power Station is unlikely to be as extensive as that during construction. It assumes that earthworks outside of the Power Station Site would not be undertaken and that there would be no associated lighting. It is assumed however that lighting would be provided in conjunction with the use of tower cranes, the perimeter security fence and the dismantling of Power Station Buildings. To reduce light spill, it is likely similar light spill reduction techniques as to those used in construction would be used, and that the works would retain the earth bunds put in during construction to reduce the light spill into residential areas.
- 3.4.12 The high level assessment of the impact of lighting during the decommissioning of the Off-site Power Station Facilities is contained with in chapter 10 of Volume E (Application Reference Number: 6.5.10). It assumes that hardstanding, earthworks and landscaping put in place during construction would remain, and that decommissioning work would primarily involve the removal of the buildings and underground tanks from the site. The amount of lighting during decommissioning is expected to be minimal, and would be managed in a similar way to which lighting would be managed during construction as outlined in the sub-CoCP for the Off-site Power Station Facilities (Application Reference Number: 8.9).
- 3.4.13 Whilst the works at the Park and Ride are likely to involve the removal of new hedges, buildings, hardstanding, road infrastructure and the rebuilding of stone walls and take a similar timescale to the construction works at the site, they are not likely to include much task lighting works at hours which are likely to cause nuisance. Because of the good practice mitigation for task lighting which is likely to follow the mitigation for lighting during construction outlined

in the sub-COCP for the Park and Ride (Application Reference Number: 8.10), there is not expected to be any light nuisance arising from the decommissioning of the Park and Ride at Dalar Hir.

- 3.4.14 The decommissioning of the logistics centre would involve less lighting than the construction of the site, and as this was assessed as to have no significant effect from lighting and no potential to cause nuisance, this also applies to decommissioning.

4 Conclusion

- 4.1.6 This statement considers whether the Wylfa Newydd DCO Project engages any of the matters in section 79(1) of the Environmental Protection Act 1990. It considers the findings of the EIA in the Environmental Statement in respect of impacts that could give rise to potential statutory nuisance resulting from the construction, operation and decommissioning of the Wylfa Newydd Project.
- 4.1.7 On account of this, and taking into account the embedded and good practice mitigation considered as part of the assessments and the additional mitigation proposed, it is concluded that noise and lighting nuisance may arise during the construction phase of the development due to significant effects being noted in the assessment after the additional mitigation measures have been added. However, both assessments include potential methodology for reducing these effects, but because these options (noise insulation and black-out blinds respectively) may not be taken up by receptors, the significance of effect cannot be reduced. Noise nuisance is unlikely to become a major concern due to Horizon's commitment to submit section 61 applications under the Control of Pollution Act 1974 to the IACC which would ensure 'Best Practicable Means' to control noise and vibration are implemented and thus minimise nuisance as well as creating an additional defence.
- 4.1.8 The environmental assessments do however conclude that no statutory nuisance related to Air Quality or any other nuisances listed in section 79(1) (which were scoped out of this assessment) are anticipated from the construction, operation and decommissioning of the Wylfa Newydd DCO Project after additional mitigation as recorded in the Wylfa Newydd CoCP (Application Reference Number: 8.6) is incorporated.