

White Rose Carbon Capture and Storage (CCS) Project

Document Ref: 6.4.8
PINS Ref: EN10048

The White Rose CCS (Generating Station) Order

Land within and adjacent to the Drax Power Station site,
Drax, near Selby, North Yorkshire

ES Volume 3 Section O - Statement under S79 (1) of the EPA 1990

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure)



Applicant: Capture Power Limited
Date: November 2014

Document Owner: Roderick Ellison

Revision History

Revision No.	Date	Reason for Revision	Authorised By
01	26.09.2014	Internal review	KJM
02	23.10.2014	Changes from client review	KJM
03	28.10.2014	Final draft	RE
04	04.11.2014	Issue draft	KJM

Glossary

APFP	Applications: Prescribed Forms and Procedures
CCS	Carbon Capture and Storage
CEMP	Construction Environmental Management Plan
DCO	Development Consent Order
EIA	Environmental Impact Assessment
ES	Environmental Statement
SOS	Secretary of State

CONTENTS

1	<i>EXECUTIVE SUMMARY</i>	1
2	<i>INTRODUCTION</i>	3
2.1	<i>OVERVIEW</i>	3
2.2	<i>THE PROPOSED DEVELOPMENT</i>	3
2.3	<i>STATUTORY NUISANCE REPORT</i>	3
3	<i>IDENTIFICATION AND ASSESSMENT OF STATUTORY NUISANCE</i>	5
3.1	<i>ASSESSMENT OF SIGNIFICANCE</i>	5
4	<i>POTENTIAL BREACHES OF SECTION 79</i>	7
4.1	<i>AIR QUALITY</i>	7
4.2	<i>NOISE</i>	8
4.3	<i>ARTIFICIAL LIGHTING</i>	10
5	<i>CONCLUSION</i>	11

1 EXECUTIVE SUMMARY

This Statement of Engagement has been prepared in accordance with Regulation 5(2) (f) of the *Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009* (the 'APFP Regulations'). These regulations require an applicant for a Development Consent Order (DCO) to provide a statement as to whether the application engages Section 79(1) (Statutory nuisances and inspections therefor) of the *Environmental Protection Act 1990* (the '1990 Act'). It accompanies the application for the White Rose Carbon Capture and Storage (CCS) Order (the Application or Project), which involves the construction, operation and maintenance of a new ultra-supercritical pulverised coal-fired power plant that will be equipped with full capture technology.

This statement explains that, whilst it is not expected that the construction or operation of the Project would engage Section 79(1) of the 1990 Act by causing statutory nuisances, the draft DCO (DCO reference document reference number 2.1) that accompanies the Application contains a provision at Article 8 to provide a defence to proceedings for statutory nuisance, should they be initiated against the applicant (or its successors) as undertakers under the DCO requirements.

As outlined in the 1990 Act, and according to guidance provided by DEFRA, potential statutory nuisances may include one or more of the following:

- noise;
- artificial light;
- odours;
- insects;
- smoke;
- dust;
- premises;
- fumes or gases;
- accumulations or deposits; and
- keeping of animals in such a place or manner as to be prejudicial to health or nuisance.

Without appropriate mitigation and controls, with the exception of 'keeping of animals', all of the above could potentially result from the construction, operation, maintenance and finally decommissioning of the Project. The Environmental Statement (ES) (DCO documents reference 6.1 to 6.4) has assessed the potential significant effects from a number of elements as

specified by Section 79(1) of the 1990 Act and concluded that the Application will not give rise to any significant nuisance effects.

Any potential statutory nuisances would be controlled through the mitigation outlined in the ES and secured through the requirements outlined in Part 2 of Schedule 1 of the Draft DCO. The Project will operate under an Environmental Permit (as stipulated by the *Environmental Permitting (England and Wales) Regulations 2010*), in addition to having to obtain other consents and licences ⁽¹⁾. Compliance with the other regulatory requirements will further control the risk of statutory nuisance arising from the Project.

(1) Application documents reference 5.4 containing a list of consents and licences required

2 INTRODUCTION

2.1 OVERVIEW

This Statutory Nuisance Statement has been prepared in support of Capture Power Limited's (CPL) application for a Development Consent Order (DCO) that has been made to the Planning Inspectorate (PINS) under Section 37 of the Planning Act 2008 (the PA 2008).

CPL seeks a DCO for the construction, operation and maintenance and decommissioning of a new ultra- supercritical pulverised coal-fired power plant that will be equipped with full carbon capture technology. The Project is intended to prove carbon capture and storage (CCS) technology at commercial scale and demonstrate that it is a competitive form of low-carbon power generation and an important technology in tackling climate change.

The DCO, if granted, would be known as 'The White Rose CCS (Generating Station) Order'.

2.2 THE PROPOSED DEVELOPMENT

The project is on land adjoining the existing Drax Power station near Selby in North Yorkshire, as outlined in Part 1 of Schedule A of the Draft DCO application (document reference 2.1).

The Application also includes ancillary developments associated with the power station as outlined in Part 1 of Schedule A under Section 115 of the 2008 Act.

The DCO will be subject to the requirements regarding the approved plans, landscaping, highway access, construction methodology amongst other matters as set out in Part 2 of Schedule A to the DCO.

2.3 STATUTORY NUISANCE REPORT

Regulation 5(2) (f) of APFP Regulations states that an application for a DCO should be accompanied by a written statement that sets out whether the proposal could cause a statutory nuisance, as defined in the EPA. If such a nuisance could occur, the statement must set out how the applicant proposes to mitigate or limit the effects.

The *Overarching National Policy Statement for energy* EN-1 states that Section 158 of the PA 2008 confers statutory authority for carrying out development or other matters authorised by a DCO. Such authority is conferred only for the purpose of providing a defence in any civil or criminal proceedings for nuisance. This would include a defence for proceedings for nuisance under Part III of the 1990 Act (statutory nuisance) but only to the extent that the nuisance is the inevitable consequence of what has been authorised. The defence does not extinguish the local authority's duties under Part III of the 1990 Act to inspect its area and take reasonable steps to investigate complaints of statutory nuisance and to serve an abatement notice where satisfied to its existence, likely occurrence or recurrence. The defence is not intended to extend to proceedings where the matter is 'prejudicial to health' and not a nuisance.

EN-1 goes on to state that it is very important that at the application stage, the Secretary of State (SoS) considers sources of nuisance under Section 79(1) of the 1990 Act and how these may be mitigated or limited, so that appropriate 'requirements' can be included in any DCO that is granted.

Whilst it is not expected that the construction, operation, maintenance and decommissioning of the Project would cause a statutory nuisance, Article 8 of the draft DCO contains a provision that would provide a defence to proceedings for statutory nuisance should they be initiated against the applicant or any future operators.

This statement first describes the legislative context for the identification of matters which constitute a statutory nuisance and the methodology for the assessment of these. This is followed by a summary of the assessment of statutory nuisances, using information from the ES, including any relevant mitigation measures and residual effects, whether embedded within the design of the Project or secured through requirements within the DCO.

3 IDENTIFICATION AND ASSESSMENT OF STATUTORY NUISANCE

Section 79(1) of the 1990 Act identifies the matters which are considered to be a statutory nuisance as follows:

- 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; and
 - 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.

3.1 ASSESSMENT OF SIGNIFICANCE

The ES provides an assessment of the potential effects on receptors as being not significant, and of minor, moderate or major significance. Any impact of negligible magnitude is deemed not to have a significant effect for the purposes of the EIA.

The only matters addressed by the 1990 Act which have been assessed as having the potential for significant effects for the Project are identified as air quality, noise and artificial lighting. However, it is demonstrated in this

document that the Project would have no significant air quality, noise or artificial lighting nuisance effects following the implementation of the identified mitigation measures that the Project has committed to implementing.

It is expected that for other potential nuisance aspects, the mitigation committed to by the Project will ensure no statutory nuisance effects are likely to occur.

4 POTENTIAL BREACHES OF SECTION 79

4.1 AIR QUALITY

As set out in *Volume II, Section A* of the ES, with the proposed mitigation in place, residual air quality impacts from construction, operation and decommissioning of the Project are predicted not to be significant.

In terms of the potential for dust to generate a nuisance during construction criteria *Section A.5.1.2 (Volume 2 of the ES)* shows that no sensitive human receptors were identified within 350 m of the Project site boundary. Therefore any effects from dust during the construction phase can be considered as not significant.

During normal operation (oxy-mode), emissions of most pollutants have been found to be not significant. However, a not insignificant contribution from arsenic and chromium has been identified.

Dispersion modelling for operation in air-mode concludes effects are not significant for the majority of pollutants except for SO₂ and arsenic where minor adverse effects are predicted. Additionally, for Chromium, a slight adverse effect is predicted. However, it is not anticipated that the plant will operate for extended periods in air-mode so the effects are not deemed likely.

Modelling also shows that effects are either not significant for both oxy-mode and Air-mode operating in conjunction with the auxiliary 50 MWth boiler during start-up.

During operation, it is not considered that there will be any significant unmitigated issues associated with smells and effluent and these matters were not considered relevant or given detailed consideration within the ES.

However, there remains a residual possibility that impacts capable of creating nuisances related to could occur. These might arise:

- as a result of construction of the Project;
- as a result of testing /commissioning activities and maintenance activities;
or
- as a result of extraordinary or emergency emissions to air associated with the operation of the Project.

4.2 NOISE

4.2.1 Construction Stage

As outlined in *Volume 2, Section B* of the ES no significant effects are anticipated as a result of construction activities themselves. Likewise, no significant effect is predicted from construction traffic, particularly since Heavy Goods Vehicles (HGV) will follow an already designated route used by the existing Drax Power Station.

Noise was modelled and assessed against British Standard (BS) 5228 for the construction of the plant. The results show that the levels at sensitive receptors are below the BS 5228 criterion of 65 dB LAeq and therefore no significant effects are expected as a result of construction activities.

Construction traffic was also assessed as not having the potential for significant adverse noise effects.

4.2.2 Operational Phase

For the operational phase noise was modelled and assessed against BS 4142 and World Health Organisation (WHO) criteria.

All receptor locations are provided in Table 3.1 of the Noise and Vibration Technical Report (*Volume 2, Chapter B*) and shown on Figure B.1. Receptor numbers are provided in brackets below for ease of reference.

Construction

The construction noise assessment concluded that noise levels are below the BS 5228 criterion of 65 dB LAeq and therefore no significant effects are expected as a result of construction activities.

Noise levels from sheet piling were predicted to be no higher than 64 dB LAeq at the nearest sensitive receptor (Foreman's Cottage) which is over 275 m from the part of the plant where vibrating equipment is likely to be located. Although the results show that piling is likely to be noisier than other activities and may be audible at receptors it is not likely to give rise to significant noise impacts.

All construction traffic coming from the Project site will travel along New Road; however no noise sensitive receptors are close to the road in this location. The predicted noise levels changes suggests an increase in noise levels of no more than 1 dB(A) on any other road link which is used by

construction traffic. Since this is below the criterion of 3 dB(A) no significant effect is predicted.

Operation – Night time

The predicted noise levels exceed baseline noise levels at times, and BS4142 would suggest that complaints may be likely in these situations at some locations (specifically receptors Foreman’s Cottage (1), Barlow (4) and Drax Abbey Farm (5) based on night-time noise levels.

A situation which is worse than marginal, but not a level where complaints become likely is expected at receptor locations Old Lodge (7) and Landing Lane (8). A further situation which is below a marginal situation is predicted at Wren Hall (2) and Camblesforth (3).

However, the predicted night-time noise levels are only above 45 dB(A) at Foreman’s Cottage (by 2 dB(A)). However, it will be possible to ensure that these noise levels are acceptable within the building. This would involve ensuring that suitable internal noise levels could be achieved to avoid sleep disturbance by using noise insulation and appropriate acoustic ventilation. Predicted noise levels at Drax Abbey farm are equal to 45 dB(A) so meet the upper end of the BS 8233 guidance and are unlikely to require mitigation to achieve suitable internal noise levels. However, both Foreman’s Cottage, and Drax Abbey Farm are owned by Drax so that the Project could ensure that such off-site mitigation could be installed. Predicted noise levels at Barlow are 40 dB(A) and off-site noise mitigation will not be required to meet the BS 8233 guidance levels.

Operation – Day time

During the day lower impacts are predicted with all receptors being below the marginal situation, which is not expected to result in significant impacts, except at Foreman’s Cottage (1) and Drax Abbey Farm (5) where the situation is marginal as defined in BS 4142.

Operational traffic will be at much lower levels than construction phase traffic and will lead to no significant effects.

However, there remains a residual possibly that impacts capable of creating a nuisance within the scope of sub-paragraphs (g) and (ga) could occur. These might arise as a result of operation of the Project. The detailed mitigation below (to be implemented at the affected properties) will address this risk.

Detailed Mitigation

Further mitigation is likely to be required, either by further attenuation at source, or by considering noise insulation of affected properties. The latter would normally only be considered by planners when further mitigation at source through plant design has been considered. However, the equipment suppliers have already confirmed that a high level of mitigation has been applied to the key items of equipment. The noise modelling results also showed that provision of noise screening between the source and receptor was unlikely to provide significant benefits due to the height of noise sources on the new plant. Other factors such as wind direction are also likely to reduce noise levels on average so the noise impacts may be lower at times, but this has not been taken into account during the conduct of this assessment to ensure a worst case scenario is modelled.

4.3 *ARTIFICIAL LIGHTING*

As set out in *Volume II, Section H (Landscape and Visual Amenity)* of the ES there is potential for artificial lighting to have a nuisance effect during construction and decommissioning, particularly during the winter months. It is predicted that these effects will not be significant with the exception of View 14 'Views west from Pear Tree Avenue, Long Drax' which will have a minor effect.

All site lighting, during all phases of the Project, will be directed downwards and inwards to reduce light pollution off-site. The design of the lighting will provide the minimum safe level required for security and operational purposes. Lighting design will be undertaken for both construction and operation by a professional design engineer, in compliance with guidance issued by the Institution of Lighting Engineers (*Guidance Notes for the Reduction Obtrusive Light 2005*) and the publication by Department for Communities and Local Government (DCLG) *Lighting in the Countryside: Towards Good Practice*.

Requirements included in Schedule 2 to the draft Order (DCO document reference 2.1) secure the approval and implementation of lighting schemes for the construction and operational stages. Site lighting for all stages of development has been assessed as not having a significant adverse effect on local amenity or other receptors.

CONCLUSION

This Statement identifies the matters set out in Section 79(1) of the Environmental Protection Act 1990 in respect of statutory nuisance and considers whether the Project could cause a statutory nuisance.

The only matters addressed by the EPA which have been assessed in the Environmental Impact Assessment (EIA) as having the potential for significant effects are air quality, noise and artificial lighting. However, it has been demonstrated in *Section 4* of this document that the Project would have no significant air quality or artificial lighting nuisance effects following the implementation of the identified embedded mitigation measures.

Potential exists for potentially significant noise effects within the definition of BS 4142 at two receptors during the night-time period to cause nuisance and potential 'at source' mitigation may be required.

The operation of the Project will be regulated by the Environment Agency (EA) through an Environmental Permit.

The draft DCO that accompanies the application contains a provision in Article 8 that would provide a defence to proceedings for statutory nuisance should they be initiated against the applicant or its successors as undertakers under the terms of the DCO.

However, it should be noted that, in any event, the provisions of Article 8 of the draft DCO do not provide an absolute defence. To benefit from the defence it is necessary to have in place and to successfully operate the appropriate mitigation and management systems as described in this Statement, in the draft DCO, and in the ES, which have been submitted as part of the Application.

Mitigation measures for the Project have been secured by the appropriate DCO requirements. As a result, it is not expected that the construction, operation or decommissioning of the Project would engage Section 79(1) and give rise to any statutory nuisance under the 1990 Act, following the implementation of appropriate mitigation.