

# H2Teesside Project

Planning Inspectorate Reference: EN070009/APP/5.6

Land within the boroughs of Redcar and Cleveland and Stockton-on-Tees, Teesside and within the borough of Hartlepool, County Durham

Document Reference: 5.6: Statutory Nuisance Statement

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5(2)(f)



Applicant: H2 Teesside Ltd

Date: March 2024

---

## TABLE OF CONTENTS

1.0	EXECUTIVE SUMMARY .....	1
2.0	INTRODUCTION .....	2
2.1	Background .....	2
2.2	Overview of the Proposed Development .....	2
2.3	Proposed Development Description .....	3
2.4	The Proposed Development Site .....	5
2.5	The Purpose and Structure of this Document .....	5
3.0	IDENTIFICATION AND ASSESSMENT OF STATUTORY NUISANCE .....	7
3.1	Legislative Framework .....	7
3.2	Assessment of Significance .....	7
4.0	POTENTIAL NUISANCE IMPACTS .....	9
4.1	Overview .....	9
4.2	EPA 1990 Section 79(1) a) Any Premises in Such a State as to be Prejudicial to Health or a Nuisance .....	9
4.3	EPA 1990 Section 79(1) 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 .....	10
4.4	EPA 1990 Section 79(1) d) Any Dust, Steam, Smell or Other Effluvia Arising on Industrial, Trade or Business Premises and Being Prejudicial to Health or a Nuisance, and e) Any Accumulation or Deposit which is Prejudicial to Health or a Nuisance .....	11
4.5	EPA 1990 Section 79(1) f) Any Animal Kept in Such a Place or Manner as to be Prejudicial to Health or a Nuisance .....	14
4.6	EPA 1990 Section 79(1) fa) Any Insects Emanating from Premises so as to be Prejudicial to Health or a Nuisance .....	14
4.7	EPA 1990 Section 79(1) fb) Artificial Light Emitted from Premises so as to be Prejudicial to Health or a Nuisance .....	14
4.8	EPA 1990 Section 79(1) 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 .....	15
4.9	EPA 1990 Section 79(1) h) Any Other Matter Declared by any Enactment to be a Statutory Nuisance .....	16
5.0	CONCLUSIONS .....	18
6.0	REFERENCES .....	19

---

## PLATES

Plate 2-1: Blue Hydrogen Processes ..... 3

---

## 1.0 EXECUTIVE SUMMARY

- 1.1.1 H2 Teesside Limited (the Applicant), a bp company, is seeking development consent for the construction, operation (including maintenance where relevant) and decommissioning of H2Teesside. H2Teesside is an up to 1.2-Gigawatt Thermal (GWth) Carbon Capture and Storage (CCS) enabled Hydrogen Production Facility and associated connections (the Proposed Development) on land in Teesside in Redcar and Cleveland, Stockton-on-Tees, and Hartlepool on Teesside. The Hydrogen Production Facility (the Production Facility) together with the hydrogen gas (H<sub>2</sub>) pipeline network to deliver low carbon H<sub>2</sub> to offtakers who may potentially use the H<sub>2</sub> in the future, and the CO<sub>2</sub> export, natural gas, electricity, water, oxygen (O<sub>2</sub>) and nitrogen (N<sub>2</sub>) connections required for the facility to operate are herein referred to as the 'Proposed Development'.
- 1.1.2 The proposed Production Facility will produce low carbon H<sub>2</sub> which is compliant with the UK Government's Low Carbon H<sub>2</sub> Standard (Department for Energy Security and Net Zero, 2023) which defines what constitutes 'low carbon H<sub>2</sub>' up to the point of production. The intent of the standard is to ensure new low carbon H<sub>2</sub> production supported by government makes a direct contribution to the UK's greenhouse gas (GHG) emissions reduction targets.
- 1.1.3 This Statutory Nuisance Statement has been prepared to support a Development Consent Order (a DCO) application for the construction, operation, maintenance and decommissioning of Proposed Development.
- 1.1.4 This Statutory Nuisance Statement identifies the matters set out in Section 79(1) of the Environmental Protection Act 1990 (the EPA 1990) in respect of statutory nuisance and considers whether the Proposed Development could cause statutory nuisance. It has been written in order to comply with Regulation 5(2)(f) of the Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009 (the 'APFP Regulations'), which states that any application for a DCO should be accompanied by a statement setting out whether the proposed development could cause a statutory nuisance, pursuant to Section 79(1) of the EPA 1990. If such a nuisance could occur, the statement must set out how the applicant proposes to mitigate or limit the effects.
- 1.1.5 Potential statutory nuisances may include noise, artificial light, odours, insects, smoke, dust arising on premises, fumes, accumulations and keeping of animals. Without appropriate embedded mitigation and controls, various types of potential nuisance could potentially result from the construction, operation, maintenance and decommissioning of the Proposed Development.
- 1.1.6 However, through the embedded mitigation in place and the controls provided for, as presented within the Environmental Statement, and secured in the DCO, it has been demonstrated that the Proposed Development is unlikely to give rise to any statutory nuisance under the EPA 1990. Therefore, it is appropriate to include within the DCO a provision for a defence against claims of statutory nuisance.

---

## 2.0 INTRODUCTION

### 2.1 Background

2.1.1 This Statutory Nuisance Statement (EN070009/APP/5.6) has been prepared on behalf of H2Teesside Limited. It forms part of the application (the Application) for a Development Consent Order (DCO), that has been submitted to the Secretary of State (the SoS) for the Department of Energy Security and Net Zero (DESNZ), under Section 37 of 'The Planning Act 2008' (PA, 2008) in respect of the H2Teesside Project.

2.1.2 H2 Teesside Limited (the 'Applicant') is owned by bp Plc ('bp'). bp will be the lead developer and operator of the H2Teesside Project.

2.1.3 The Applicant is seeking development consent for the construction, operation maintenance and decommissioning of the H2Teesside Project, including associated development (together the 'Proposed Development') on land within the boroughs of Redcar and Cleveland and Stockton-on-Tees, Teesside and within the borough of Hartlepool, County Durham.

2.1.4 Development consent is required for the Proposed Development as it is the subject of a Direction under Sections 35(1) and 35ZA of the PA 2008. The DCO, if made by the SoS, would be known as 'The H2 Teesside Order' (the 'Order').

2.1.5 The Proposed Development will support the decarbonisation of UK-produced natural gas landed in Teesside for use in industrial applications, this helping to achieve national targets in relation to net zero. It will also be a key contributor to restoring manufacturing jobs in the Tees Valley.

### 2.2 Overview of the Proposed Development

2.2.1 The Proposed Development will use natural gas to produce hydrogen (known as 'blue' hydrogen) with the carbon dioxide (CO<sub>2</sub>) created during the hydrogen production process being captured and compressed for onward transportation and storage, under agreement with the Northern Endurance Partnership (the 'NEP'). NEP will store the CO<sub>2</sub> securely below ground within the Endurance storage site and other nearby CO<sub>2</sub> stores that NEP holds CO<sub>2</sub> storage licences for. These are located approximately 145 kilometres ('km') offshore from Teesside under the North Sea.

2.2.2 The onshore elements of the NEP infrastructure on Teesside are part of the Net Zero Teesside ('NZN') Project and have been the subject of an application for development consent. The Secretary of State for DESNZ granted consent for the NZN development consent application on 16th February 2024.

2.2.3 The Proposed Development and NEP form part of the East Coast Cluster ('ECC'). The ECC has been selected as one of the first two carbon capture and storage (CCS) clusters to be taken forward by the UK Government. The ECC has the potential to remove almost 50% of the UK's total industrial clusters carbon dioxide emissions, protect thousands of jobs and establish the region as a globally competitive climate friendly hub for industry and innovation. The ECC will potentially include a diverse mix of low-carbon projects, including industrial carbon capture, low-carbon

hydrogen production, negative emissions power, and power with carbon capture. In March 2023, the Proposed Development was selected by DESNZ as one of the first three projects to connected to the ECC.

- 2.2.4 The low-carbon hydrogen produced by the Proposed Development will be supplied via a new hydrogen pipeline network to existing businesses on Teesside. By replacing the use of natural gas the Proposed Development will help existing heavy industry on Teesside reduce its carbon dioxide emissions, consistent with the Government's objective to decarbonise the UK economy and achieve its legally binding target of net zero greenhouse gas emissions by 2050.
- 2.2.5 The Proposed Development will be one of the UK's largest blue hydrogen production facilities with a capacity of up to 1.2 gigawatts ('GW') thermal, representing more than 10% of the Government's hydrogen production target of 10 gigawatts by 2030. This equates to the production of approximately 160,000 tonnes of low carbon hydrogen per annum, with up to 2.8 million tonnes of CO<sub>2</sub> being captured and stored each year.
- 2.2.6 The infographic below in Plate 2-1 provides an overview of the 'blue' hydrogen processes.

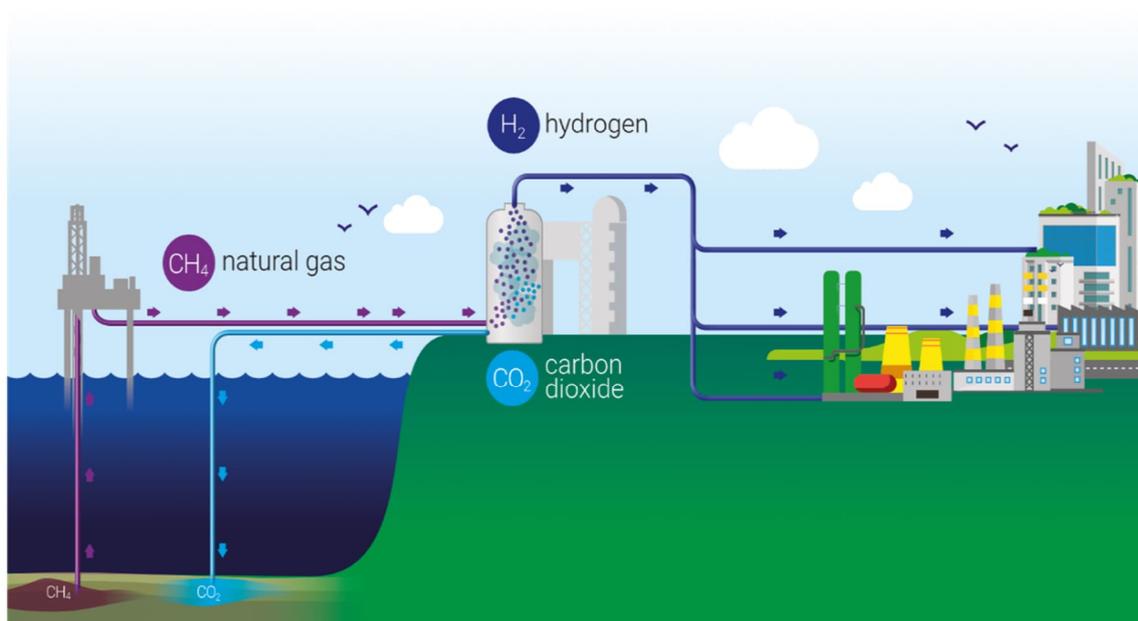


Plate 2-1: Blue Hydrogen Processes

## 2.3 Proposed Development Description

### 2.3.1 The Proposed Development comprises the following main elements:

- Work Number ('No.') 1 – a carbon capture enabled hydrogen production facility of up to 1.2 Gigawatts Thermal ('GWth') lower heating value, including two

hydrogen units each of 600 Megawatts Thermal ('MWth'), including a water and effluent treatment plant; above ground hydrogen storage; administration, control room and stores; gas and power connections; above ground installations; and ancillary works.

- Work No. 2 – a natural gas supply connection for the transport of natural gas to the hydrogen production facility, known as the 'Natural Gas Connection Corridor'.
- Work No. 3 – electrical connection works for the import of electricity from the electricity transmission network to the hydrogen production facility, the 'Electrical Connection Corridor'.
- Work No. 4 – water supply connection works to provide cooling and make-up water to the hydrogen production facility, part of the 'Water Connections Corridor'.
- Work No. 5 – wastewater disposal works in connection with the hydrogen production facility, also part of the 'Water Connections Corridor'.
- Work No. 6 – a hydrogen distribution network, comprising underground and overground pipelines to supply hydrogen to the above ground storage and offtakers across Teesside. The hydrogen pipelines, from here known as the Hydrogen Pipeline Corridor, will run up to tie-in points with the relevant offtakers (likely to be, but not necessarily having to be) at the offtakers' site boundaries. Any works beyond this tie-in point will be progressed separately by the relevant offtaker.
- Work No. 7 – a high pressure carbon dioxide export pipeline for the export of the captured CO<sub>2</sub> to the NEP infrastructure, the 'CO<sub>2</sub> Export Corridor'.
- Work No. 8 – gas connections being works for the transport of oxygen and nitrogen to the hydrogen production facility, known as the 'Other Gases Connection Corridor'.
- Work No. 9 – temporary construction compounds.
- Work No. 10 – access and highways improvements.
- Work No. 11 – replacement land at Cowpen Bewley.

2.3.2 There will also be further development works associated with the above elements of the Proposed Development.

2.3.3 A description of the elements of the Proposed Development and the Works Nos. is set out at Schedule 1 of the draft DCO (EN070009/APP/4.1). The ancillary and further development required in connection with and subsidiary to the above elements of the Proposed Development is also detailed at Schedule 1 of the draft DCO.

2.3.4 A more detailed description of the Proposed Development and how it will operate is provided at Chapter 4 'Proposed Development' in ES Volume I (EN070009/APP/6.2) and the areas within which each of the main elements of the Proposed Development

are to be built are denoted by the coloured and hatched areas on the Works Plans (EN070009/APP/2.4).

## 2.4 The Proposed Development Site

2.4.1 The Proposed Development Site (the 'Site') lies within the administrative boundaries of the boroughs of Redcar and Cleveland south of the River Tees and Stockton-on-Tees north of the Tees on Teesside and within the borough of Hartlepool in County Durham, also north of the Tees.

2.4.2 The Site extends to a total area of approximately 507 hectares ('ha').

2.4.3 The Hydrogen Production Facility and its ancillary development (also referred to as the 'Main Site'), including its carbon capture and compression facilities, will be located on part of the Foundry Site, which forms part of South Tees Development Corporation (STDC), within the borough of Redcar and Cleveland and which is adjacent to the NEP infrastructure. South Tees Development Corporation (STDC) is a major brownfield industrial site and Freeport, part of which was formerly occupied by the Redcar Steel Works.

2.4.4 The CO<sub>2</sub> captured from the hydrogen production processes will be transported by pipeline to the NEP infrastructure for onward transport and storage within the Endurance storage site. The Main Site extends to 86 ha.

2.4.5 The natural gas, electrical and water connections will be located to the east and south-east of the Main Site within the borough of Redcar and Cleveland. The hydrogen distribution network will extend either side of the River Tees to several potential industrial offtakers, including north of the Tees into the boroughs of Stockton-on-Tees and Hartlepool.

2.4.6 A more detailed description of the Site and its surroundings is provided at Chapter 3 'Description of the Existing Area' in the Environmental Statement ('ES') (Volume 1, EN070009/APP/ 6.2).

## 2.5 The Purpose and Structure of this Document

2.5.1 The purpose of this document is to comply with Regulation 5(2)(f) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (APFP Regulations), which states that any application for development consent should be accompanied by a statement setting out whether the development proposal could cause a statutory nuisance pursuant to Section 79(1) of the EPA 1990. If such a nuisance could occur, the statement must set out how the applicant proposes to mitigate or limit the effects.

2.5.2 Paragraph 4.14.1-4.14.4 of the 'Overarching National Policy Statement for Energy EN-1' (Department for Energy and Climate Change, 2023) states:

*"Section 158 of the Planning Act 2008 confers statutory authority for carrying out development consented to by, or doing anything else authorised by, a development consent order. 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 Environmental Protection Act 1990 (EPA) (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 EPA 1990 to inspect its area and take reasonable steps to investigate complaints of statutory nuisance and to serve an abatement notice where satisfied of 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."*

- 2.5.3 Paragraph 4.14.5 goes on to state that it is very important that at the application stage, the Secretary of State considers sources of nuisance under Section 79(1) of the EPA 1990 and how these may be mitigated or limited, so that appropriate 'requirements' can be included in any DCO that is granted.
- 2.5.4 Whilst, as this document demonstrates, it is not expected that the construction, operation (including maintenance) and decommissioning of the Proposed Development would cause a statutory nuisance, the draft DCO accompanying the Application contains a provision that would provide a defence to proceedings in respect of statutory nuisance (in respect of Section 79(1) of the EPA 1990 (statutory nuisances and inspections therefore, subject to certain criteria.
- 2.5.5 This document first describes the legislative context for the identification of matters which constitute statutory nuisance and the methodology for the assessment of these. This is followed by a summary of the assessment of the statutory nuisances, using information from the ES, including any relevant mitigation measures and residual effects, whether embedded within the design of the Proposed Development or additional mitigation secured through requirements within the DCO.
- 2.5.6 Unless otherwise stated, decommissioning effects are considered to be comparable to or less than those associated with construction of the Proposed Development for all relevant matters, for the reasons set out in the ES. Specific impact assessments undertaken for the proposed development, including those for air quality, noise and vibration, surface water and hydrology and landscape, conclude that relevant best practice mitigation measures would be in place during any decommissioning works, and no additional mitigation has been identified as necessary for the decommissioning phase of the Proposed Development.

---

## 3.0 IDENTIFICATION AND ASSESSMENT OF STATUTORY NUISANCE

### 3.1 Legislative Framework

3.1.1 Section 79(1) of the EPA 1990 identifies the matters which are considered to be 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;*
- 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 any enactment to be statutory nuisance.”*

### 3.2 Assessment of Significance

3.2.1 The Environmental Statement for the Proposed Development addresses the likelihood of significant effects arising and provides sufficient information to identify whether they could constitute a statutory nuisance, as identified in Section 79(1) of the EPA.

3.2.2 ES Volume I Chapter 4: The Proposed Development (EN070009/APP/6.2) and the Framework Construction Environmental Management Plan (CEMP) (EN070009/APP/5.12) describes impact avoidance measures embedded to the proposed design and methods of construction, which address the potential statutory nuisances defined in Section 2.1 of this document.

3.2.3 ES Volume I Chapter 8: Air Quality, Chapter 11: Noise and Vibration, Chapter 15: Traffic and Transport, Chapter 16: Landscape and Visual Amenity, Chapter 21: Human Health and Chapter 22: Materials and Waste (ES Volume I, EN070009/APP/6.2) and their associated appendices (ES Volume III, EN070009/APP/6.4), where relevant, provide detailed assessments of impacts which

---

relate to these potential statutory nuisances and identify mitigation measures where necessary.

---

## 4.0 POTENTIAL NUISANCE IMPACTS

### 4.1 Overview

4.1.1 This section discusses the nuisance impacts set out in the EPA 1990 in relation to the Proposed Development and summarises the embedded and additional mitigation measures that will be applied to prevent these.

### 4.2 EPA 1990 Section 79(1) a) Any Premises in Such a State as to be Prejudicial to Health or a Nuisance

4.2.1 The EPA describes a potential statutory nuisance to be caused by “any premises in such a state as to be prejudicial to health or a nuisance”.

4.2.2 This has been considered in terms of Landscape and Visual Amenity Impact which can result from poor maintenance or housekeeping.

4.2.3 The assessment of effects on Landscape and Visual Amenity is presented in Chapter 16 of (ES Volume I, EN070009/APP/6.2).

4.2.4 The ES concluded that due to the industrial character of the existing landscape, the effects of the Proposed Development will be negligible at a national scale, and minor at most at a regional and local scale. The Proposed Development is likely to give rise to Significant effect on visual amenity during its construction and operation from several viewpoints as a result of proximity to the Proposed Development and limited intervening vegetation. However, due to the proximity to the Proposed Development and scale of the structures, no mitigation is proposed.

4.2.5 These Significant adverse effects are seen at receptors on the England Coastal Path (Viewpoint 7) and at Redcar Seafront (Viewpoint 8) during construction. However, during operation the impact on receptors at Redcar Seafront will reduce to levels that are not considered significant, whilst the impact on receptors along the England Coastal Path will remain due to the proximity and prominence of the structures associated with the Proposed Development.

4.2.6 To minimise the risk of any such statutory nuisance occurring through poor maintenance or housekeeping during construction or operation, management controls will be put in place, such as the establishment of a preventative maintenance plan, waste management procedures and compliance with the requirements of the Framework CEMP (EN070009/APP/5.12), Environmental Management System (EMS) and Environmental Permit for the Proposed Development. Therefore, it is considered unlikely that the aforementioned impacts on the sensitive receptors in the vicinity of the Proposed Development will arise and could be considered to constitute a statutory nuisance.

4.3 EPA 1990 Section 79(1) 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

4.3.1 No smoke is expected to be generated from the Proposed Development during normal operation. Fumes and gases that may be relevant are considered in the following sections.

#### Construction Phase

4.3.2 The Study Area for construction dust and Non-Road Mobile Machinery (NRMM) emissions has been applied, in line with IAQM guidance (2024), extending up to 250 m beyond the Site boundary and 50 m from the construction traffic route (up to 250 m from the Site entrances), for human health receptors; and up to 50 m from the Site boundary and/ or construction traffic route (up to 250 m from the Site entrances) for ecological receptors.

4.3.3 The effects on receptors potentially affected by the exhaust emissions associated with construction phase vehicle movements were concluded to be negligible adverse. Additional mitigation measures are therefore not required.

4.3.4 Open fires are prohibited on site as per the Framework CEMP (EN070009/APP/5.12).

#### Operational Phase

4.3.5 The pollutants considered within the assessment of air emissions in Chapter 8: Air Quality (ES Volume I, EN070009/APP/6.2) are those in line with Environment Agency Guidance. These are:

- Oxides of nitrogen, expressed as nitrogen dioxide (chemical formula NO<sub>2</sub>);
- Nitrogen and acid deposition;
- Carbon monoxide (chemical formula CO);
- Sulphur dioxide (chemical formula SO<sub>2</sub>); and
- Particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>).

4.3.6 The potential impacts and mitigation for nuisance from gases, dust, other effluvia, accumulations and deposits are discussed as part of the air quality impact assessment presented in Chapter 8: Air Quality (ES Volume I, EN070009/APP/6.2).

4.3.7 The Study Area for the operational Proposed Development point source emissions extends up to 15 km from the emission sources to assess the potential impacts on ecological receptors. This is in line with the Environment Agency Risk Assessment Methodology (Defra and Environment Agency, 2016, as updated in 2023). In terms of human health receptors, impacts from the operational Proposed Development become negligible well within 2 km and therefore sensitive receptors for the human health impacts are concentrated within a 2 km Study Area.

4.3.8 The Proposed Development will be designed such that process emissions to air comply with the ELV requirements as agreed in the environmental permit, as per the

emerging techniques for hydrogen production with carbon capture guidance. This will be agreed as part of the Environmental Permit Application with the Environment Agency. The Environment Agency will then regulate the operation of the Proposed Development.

- 4.3.9 The impacts of all pollutant species released from the operational Proposed Development are predicted to result in negligible adverse effects at all receptors within the Study Area. The impacts on human and ecological receptors can therefore be considered to be not significant at all human health receptors.
- 4.3.10 Emissions from the auxiliary boilers, flare and emergency generator stacks would result in small increases in ground-level concentrations of the modelled pollutants. Taking into account available information on background concentrations within the modelled domain, predicted operational concentrations of the modelled pollutants would be within current environmental standards for the protection of human health. Plant will be effectively maintained and as such smoke is not anticipated to be emitted during combustion.
- 4.3.11 No detailed assessment of operational traffic emissions has been made, as the numbers of additional vehicles associated with the operational phase of the Proposed Development are below the Design Manual for Roads and Bridges (DMRB) and IAQM screening criteria for requiring such assessment.

#### Decommissioning Phase

- 4.3.12 Decommissioning effects are considered to be similar to construction effects outlined above. No additional mitigation has been identified as necessary for the decommissioning phase of the Proposed Development.
- 4.4 EPA 1990 Section 79(1) d) Any Dust, Steam, Smell or Other Effluvia Arising on Industrial, Trade or Business Premises and Being Prejudicial to Health or a Nuisance, and e) Any Accumulation or Deposit which is Prejudicial to Health or a Nuisance

#### Dust, Accumulations and Deposits

- 4.4.1 The scale and nature of the Proposed Development and activities associated with construction and operation have the potential to produce dust. 'Dust' is defined in British Standard 6069-2:1994 (British Standards Institute, 1994) as particulate matter in the size range 1 – 75 µm (microns) in diameter and is primarily composed of mineral materials and soil particles. If emitted at high concentrations this could theoretically be transported to local receptors.
- 4.4.2 Anticipated dust, accumulations and deposits from construction, operations (including maintenance works) and decommissioning activities at the Proposed Development are described below.

#### Construction Phase

- 
- 4.4.3 The magnitude of effects for dust emissions during construction has been determined as negligible to medium risk of unmitigated dust impacts on human health (PM<sub>10</sub>) and a low to medium risk of dust impacts on dust soiling from unmitigated demolition (for the pipeline corridors), earthworks, construction and track out activities.
- 4.4.4 Construction activities are generally well managed in the UK and good industry practice measures are well-established and generally successful. The ES concludes that during construction of the Proposed Development, in the absence of mitigation, there would be potential for:
- negligible to medium impact of dust emissions associated with the construction phase on human health.
- 4.4.5 Emissions of dust and particulates from the construction phase of the Proposed Development will be controlled and reduced to not significant in accordance with industry best practice, through incorporation of appropriate control measures according to the risks posed by the activities undertaken, as determined through this assessment process. The management of dust and particulates and application of adequate mitigation measures will be enforced through the Final CEMP(s). The Framework CEMP (EN070009/APP/5.12) has been submitted as part of the DCO Application. A Final CEMP(s) will be prepared in accordance with the Framework CEMP (EN070009/APP/5.12).
- 4.4.6 Appropriate standard and best practice control measures will be included in the detailed Final CEMP(s), but not be limited to application of the following best practicable means as far as reasonably practicable, which may include:
- avoid mechanical roughening or grinding of concrete surfaces, where appropriate;
  - store sand and aggregates in bunded areas and store cement powder and fine materials in silos, where appropriate;
  - use water suppression and regular cleaning to minimise mud on roads, and control dust during earth moving activities;
  - cover vehicles leaving the construction site that are carrying waste materials or spoil;
  - employ wheel wash systems at site exits;
  - restrict where practicable the use of unmade road accesses;
  - minimising duration of storage of topsoil or spoil during pipeline construction; and
- 4.4.7 Emissions from NRMM associated with the Proposed Development will be temporary and localised and will be controlled via the application of appropriate emissions standards and through best-practice mitigation measures, such as:
- minimise vehicle and plant idling; and
  - where possible, locating static plant away from sensitive boundaries or receptors.
-

- 
- 4.4.8 For that reason, effects associated with construction phase dust and NRMM emissions are highly unlikely to be significant and, therefore, have been scoped out of this assessment.

#### Operational Phase

- 4.4.9 The operation of the Proposed Development in accordance with the Environmental Permit and an Environment Management System (certified to International Standards Organisation (ISO) 14001), the activities of the operation and maintenance teams, the implementation of formal operating procedures and the installation and operation of automated controls, will minimise the potential for statutory nuisance from atmospheric emissions. The design will be such that process emissions to air comply with the ELV requirements as agreed in the environmental permit, as per the emerging techniques for hydrogen production with carbon capture guidance.
- 4.4.10 For the operational assessment, the impact of point source emissions at human health receptors has been determined from isopleth figures of pollutant dispersion and maximum model output at discrete receptor locations.
- 4.4.11 The ES concludes that the impacts of all species released from the Proposed Development are predicted to result in negligible adverse effects at all human health receptors within the study area. The air quality assessment of operational impacts assumes that the ELVs will be met for the operational plant as required under the IED and in accordance with use of BAT under the environmental permitting regime. No significant effects were identified within the assessment.

#### Decommissioning Phase

- 4.4.12 Decommissioning effects are considered to be similar to construction effects outlined above.

#### Visible plume

- 4.4.13 It is envisaged that there will not be any visible plumes during the construction, operation or decommissioning phases. There will therefore be no significant visual effects relating to the presence of plumes during the operation of the Proposed Development (ES Volume I, Chapter 16: Landscape and Visual Amenity, EN070009/APP/6.2).

#### Smells

- 4.4.14 It is envisaged that there will not be any odour emissions during the construction, operation and decommissioning phases.
- 4.4.15 Several potential odour release sources have been identified; predominantly around storage and handling of some of the process residues, chemicals and reagents which are required to mitigate operational emissions are also a potential source of odour if experienced at high concentrations.
- 4.4.16 Odour could potentially be generated through the receipt and handling of ammonia/urea and amines at the Proposed Development. The presence of an odour may cause
-

annoyance and depends on a number of factors that vary between individuals. Odour events may only last a few seconds but could cause annoyance if they frequently recur or are perceived to be particularly offensive.

- 4.4.17 However, appropriate storage and handling procedures will be implemented at the Proposed Development and the Environmental Permit will control odour from the site. It is further considered that the largely industrial setting of the Proposed Development will also mitigate against impact on the nearby receptors in the event of any localised, short-term odour.
- 4.4.18 An Odour Management Plan is therefore not considered to be required. Odour levels around the plant will be regularly monitored by site management to assess the effectiveness of the installed odour control measures.
- 4.5 EPA 1990 Section 79(1) f) Any Animal Kept in Such a Place or Manner as to be Prejudicial to Health or a Nuisance
- 4.5.1 No animals will be kept at the Site.
- 4.6 EPA 1990 Section 79(1) fa) Any Insects Emanating from Premises so as to be Prejudicial to Health or a Nuisance
- 4.6.1 Due to the operational nature of the Proposed Development, it is not considered to be a suitable habitat for vermin based on experience of other similar developments.
- 4.6.2 Litter on site has the potential to attract vermin or be blown into neighbouring properties. Regular inspections of the Site, boundary fence, gates and access road in the immediate vicinity of the facility entrance will be carried out. Staff will be encouraged to correctly dispose of litter as part of the site rules and site induction.
- 4.6.3 Pests and vermin are therefore not expected to create a statutory nuisance.
- 4.6.4 Due to the nature of the process, no insects are expected to emanate from the Proposed Development or be attracted to it.
- 4.7 EPA 1990 Section 79(1) fb) Artificial Light Emitted from Premises so as to be Prejudicial to Health or a Nuisance
- 4.7.1 An Indicative Lighting Strategy (construction) and Indicative Lighting Strategy (operation) has been prepared (EN070009/APP/5.8). The Indicative Lighting Strategy (construction) will be updated to be submitted alongside the Final CEMP(s) for approval by Redcar and Cleveland Borough Council. At operation, prior to the commissioning of the Proposed Development, a detailed lighting scheme will be submitted to Redcar and Cleveland Borough Council for approval, covering construction and operational effects, to be in substantial accordance with the submitted indicative strategy. The external lighting scheme will be designed in accordance with relevant standards, such as the Guidance Notes for the Reduction of Obtrusive Light published by the Institute of Lighting Professionals (2020) and/ or Chartered Institution Building Services Engineers (CIBSE) requirements – as appropriate.

- 
- 4.7.2 The external lighting scheme will be designed to provide safe working conditions in all areas of the Site whilst reducing light pollution and the visual impact on the local environment. This is likely to be achieved by the use of lighting impact avoidance measures such as using lights that turn off or dim as necessary without compromising safety and security; using highly directional and carefully placed lights to avoid unnecessary light spill outside of the Site boundary.
- 4.7.3 The lighting required during the construction and operation stages of the Proposed Development will be designed to reduce unnecessary light spill outside of the Site boundary.
- 4.7.4 Construction temporary site lighting is proposed to enable safe working on the construction site in hours of darkness. Construction temporary lighting will be arranged so that glare is minimised outside the construction site.
- 4.7.5 Artificial light is therefore not expected to cause a statutory nuisance.
- 4.8 EPA 1990 Section 79(1) 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
- 4.8.1 Through noise prediction modelling undertaken, the Chapter 11: Noise and Vibration (ES Volume I, EN070009/APP/6.2) concludes there would be minor adverse or negligible adverse effects relating to the following activities of the Proposed Development:
- daytime construction noise effects;
  - potential vibration levels from piling during construction;
  - construction traffic noise;
  - daytime and night-time noise during operation;
  - operational traffic noise; and
  - decommissioning.
- 4.8.2 As no significant noise effects are predicted to occur at residential receptors, no additional mitigation is required and no statutory nuisance is considered likely to arise.
- 4.8.3 However, best practice methods will be applied during construction, operation (including maintenance) and decommissioning to minimise noise.
- Construction Phase
- 4.8.4 During construction, the construction contractor will follow Best Practicable Means to reduce noise and vibration impacts. Best Practicable Means include the following (where practicable):
- all construction plant and equipment will comply with national and EU noise emission limits;
-

- proper use of plant with respect to minimising noise emissions – all vehicles and mechanical plant will be fitted with effective exhaust silencers and maintained in good efficient working order;
- selection of inherently quiet plant where appropriate – for example and where practicable major compressors will be ‘sound reduced’ models fitted with properly lined and sealed acoustic covers which will be kept closed whenever the machines are in use, and all ancillary pneumatic percussive tools will be fitted with mufflers or silencers of the type recommended by the manufacturers;
- machines in intermittent use will be shut down in the intervening periods between work or throttled down to a minimum;
- materials should be handled with care and be placed, not dropped. Materials should be delivered during standard working hours where possible; and
- all ancillary plant such as generators, compressors and pumps will be positioned so as to cause minimum noise disturbance, i.e. furthest from receptors or behind close boarded noise barriers; if necessary, acoustic enclosures will be provided and/or acoustic shielding.

#### Operational Phase

- 4.8.5 During operation an Environmental Permit will stipulate that operational noise is controlled using best available techniques, as detailed within the Environmental Permit application.
- 4.8.6 An Environment Management System (EMS) will be put in place which will conform to International Standards Organisation (ISO) 14001.
- 4.8.7 The design of the Proposed Development considered noise reduction measures, including:
- the selection of quiet plant to reduce noise emissions; and
  - if necessary, provision of cladding, louvres/baffles, silencers and air inlets to reduce tonal noise from the Proposed Development during its operation.
- 4.8.8 Noise emissions from the Proposed Development are therefore not anticipated to represent a statutory nuisance.

#### Decommissioning Phase

- 4.8.9 Decommissioning effects are considered to be similar to construction effects outlined above, unless specified otherwise.
- 4.9 EPA 1990 Section 79(1) h) Any Other Matter Declared by any Enactment to be a Statutory Nuisance

#### Traffic and Abnormal Loads

- 4.9.1 Traffic and the effect of abnormal loads during construction, operation (including maintenance) and decommissioning of the Proposed Development have been

---

assessed and is reported in Chapter 15: Traffic and Transport (ES Volume I, EN070009/APP/6.2).

- 4.9.2 A Framework Construction Traffic Management Plan (CTMP) has been developed for the Proposed Development to detail how traffic will be managed (see ES Volume III, Appendix 15B, EN070009/APP/6.4).
- 4.9.3 No significant adverse effects on other road users have been identified.

## 5.0 CONCLUSIONS

- 5.1.1 This Statement has identified the matters set out in Section 79(1) of the EPA 1990 in respect of statutory nuisance and considers whether the Proposed Development could cause a statutory nuisance.
- 5.1.2 Potential nuisance aspects have been considered in Section 4 of this Statement and through embedded mitigation no statutory nuisance effects are considered likely to occur.
- 5.1.3 The operation of the Proposed Development would be regulated by the Environment Agency through an Environmental Permit and would undergo regular monitoring and reporting. Embedded mitigation and appropriate controls will be secured by appropriate DCO requirements. As a result, it is not expected that the construction, operation, maintenance or decommissioning of the Proposed Development would engage Section 79(1) and give rise to any statutory nuisance under the EPA 1990.

---

## 6.0 REFERENCES

- British Standards Institute (BSI) (1994). BS 6069-2:1994 - *Characterisation of air quality. Glossary.*
- Department for Energy and Climate Change (DECC) (2023). *Overarching National Policy Statement for Energy EN-1.*
- Department for Energy Security and Net Zero (DESNZ) (2023). *Overarching National Policy Statement for Energy EN-1.*
- Department for Environment, Food & Rural Affairs and Environment Agency (Defra). (2016, as updated in 2023) *Risk assessments for your environmental permit.*
- Department for Energy Security and Net Zero (DESNZ). (2023) *UK Low Carbon Hydrogen Standard.*
- Environmental Protection Act (EPA) (1990). *UK Public General Acts.*
- Institute of Air Quality Management (IAQM) (2024). *Guidance on the assessment of dust from demolition and construction. Version 1.1.*
- Institution of Lighting Professionals (2020). *Guidance Note 01 for the Reduction of Obtrusive Light.*
- The Planning Act (2008). *UK Public General Acts.*