

# KEADBY 3 CARBON CAPTURE POWER STATION

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A collaboration between **SSE Thermal** and **Equinor**

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**The Keadby 3 (Carbon Capture Equipped Gas Fired Generating Station) Order**

**Land at and in the vicinity of the Keadby Power Station site, Trentside, Keadby, North Lincolnshire**

**Statement of Common Ground with  
United Kingdom Health Security Agency  
(formerly Public Health England)**

**The Planning Act 2008**

**Applicant: Keadby Generation Limited**

**Date: February 2022**

## DOCUMENT HISTORY

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## GLOSSARY

<b>Abbreviation</b>	<b>Description</b>
AGI	Above ground installation
AIL	Abnormal Indivisible Load
APFP	Applications: Prescribed Forms and Procedure
AQMA	Air Quality Management Areas
CCGT	Combined Cycle Gas Turbine
CCP	Carbon dioxide capture plant
CCUS	Carbon capture, utilisation and storage
DCO	Development Consent Order
EAL	Environmental Assessment Level
EIA	Environmental Impact Assessment
ES	Environmental Statement
HRSG	Heat Recovery Steam Generator
HP	High pressure
MW	megawatts
NEP	Northern Endurance Partnership
NLC	North Lincolnshire Council
NRMM	Non-Road Mobile Machinery
NSIP	Nationally Significant Infrastructure Project
PAH	Polycyclic Aromatic Hydrocarbons
PCC	Proposed Power and Carbon Capture
PINS	Planning Inspectorate
PM	Particulate Matter

<b>Abbreviation</b>	<b>Description</b>
SoCG	Statement of Common Ground
SoS	The Secretary of State
ZCH	Zero Carbon Humber

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## 1.0 INTRODUCTION

### 1.1 Overview

- 1.1.1 This Statement of Common Ground ('SoCG') with the UK Health Security Agency (formerly Public Health England) (**Application Document Ref. 8.13**) has been prepared on behalf of Keadby Generation Limited ('the Applicant') which is a wholly owned subsidiary of SSE plc. It forms part of the application (the 'Application') for a Development Consent Order (a 'DCO'), that has been submitted to the Secretary of State (the 'SoS') for Business, Energy and Industrial Strategy, under Section 37 of 'The Planning Act 2008' (the '2008 Act').
- 1.1.2 The Applicant is seeking development consent for the construction, operation and maintenance of a new low carbon Combined Cycle Gas Turbine (CCGT) Generating Station ('the Proposed Development') on land at, and in the vicinity of, the existing Keadby Power Station, Trentside, Keadby, Scunthorpe DN17 3EF (the 'Proposed Development Site').
- 1.1.3 The Proposed Development is a new electricity generating station of up to 910 megawatts (MW) gross electrical output, equipped with carbon capture and compression plant and fuelled by natural gas, on land to the west of Keadby 1 Power Station and the (under commissioning) Keadby 2 Power Station, including connections for cooling water, electrical, gas and utilities, construction laydown areas and other associated development. It is described in **Chapter 4: The Proposed Development of the Environmental Statement (ES) (ES Volume I - APP-047)**.
- 1.1.4 The Proposed Development falls within the definition of a 'Nationally Significant Infrastructure Project' (NSIP) under Section 14(1)(a) and Sections 15(1) and (2) of the 2008 Act, as it is an onshore generating station in England that would have a generating capacity greater than 50MW electrical output (50MWe). As such, a DCO application is required to authorise the Proposed Development in accordance with Section 31 of the 2008 Act.
- 1.1.5 The DCO, if made by the SoS, would be known as 'The Keadby 3 (Carbon Capture Equipped Gas Fired Generating Station) Order' ('the Order').

### 1.2 The Proposed Development

- 1.2.1 The Proposed Development will work by capturing carbon dioxide emissions from the gas-fired power station and connecting into the Zero Carbon Humber (ZCH) Partnership export pipeline and gathering network for onward transport to the Endurance saline aquifer under the North Sea.
- 1.2.2 The Proposed Development would comprise a low carbon gas fired power station with a gross electrical output capacity of up to 910MWe and associated buildings, structures and plant and other associated development defined in the

Schedule 1 of the draft DCO (**APP-005**) as Work No. 1 – 11 and shown on the Works Plans (**APP-012**).

1.2.3 At this stage, the final technology selection cannot yet be made as it will be determined by various technical and economic considerations and will be influenced by future UK Government policy and regulation. The design of the Proposed Development therefore incorporates a necessary degree of flexibility to allow for the future selection of the preferred technology in the light of prevailing policy, regulatory and market conditions once a DCO is made.

1.2.4 The Proposed Development will include:

- a carbon capture equipped electricity generating station including a CCGT plant (**Work No. 1A**) with integrated cooling infrastructure (**Work No. 1B**), and carbon dioxide capture plant (CCP) including conditioning and compression equipment, carbon dioxide absorption unit(s) and stack(s) (**Work No. 1C**), natural gas receiving facility (**Work No. 1D**), supporting uses including control room, workshops, stores, raw and demineralised water tanks and permanent laydown area (**Work No. 1E**), and associated utilities, various pipework, water treatment plant, wastewater treatment, firefighting equipment, emergency diesel generator, gatehouse, chemical storage facilities, other minor infrastructure and auxiliaries/ services (all located in the area referred to as the 'Proposed Power and Carbon Capture (PCC) Site' and which together form **Work No. 1**);
- natural gas pipeline from the existing National Grid Gas high pressure (HP) gas pipeline within the Proposed Development Site to supply the Proposed PCC Site including an above ground installation (AGI) for National Grid Gas's apparatus (**Work No. 2A**) and the Applicant's apparatus (**Work No. 2B**) (the 'Gas Connection Corridor');
- electrical connection works to and from the existing National Grid 400kV Substation for the export of electricity (**Work No. 3A**) (the 'Electrical Connection Area to National Grid 400kV Substation');
- electrical connection works to and from the existing Northern Powergrid 132kV Substation for the supply of electricity at up to 132kV to the Proposed PCC Site, and associated plant and equipment (**Work No. 3B**) (the 'Potential Electrical Connection to Northern Powergrid 132kV Substation');
- Water Connection Corridors to provide cooling and make-up water including:
  - underground and/ or overground water supply pipeline(s) and intake structures within the Stainforth and Keadby Canal, including temporary cofferdam (**Work No. 4A**) (the 'Canal Water Abstraction Option');
  - in the event that the canal abstraction option is not available, works to the existing Keadby 1 power station cooling water supply pipelines and intake structures within the River Trent, including temporary cofferdam (**Work No. 4B**) (the 'River Water Abstraction Option');

- works to and use of an existing outfall and associated pipework for the discharge of return cooling water and treated wastewater to the River Trent (**Work No. 5**) (the 'Water Discharge Corridor');
  - towns water connection pipeline from existing water supply within the Keadby Power Station for potable water (**Work No. 6**);
  - above ground carbon dioxide compression and export infrastructure comprising an above ground installation (AGI) for the undertaker's apparatus including deoxygenation, dehydration, staged compression facilities, outlet metering, and electrical connection (**Work No. 7A**) and an above ground installation (AGI) for National Grid Carbon's apparatus (**Work No. 7B**);
  - new permanent access from A18, comprising the maintenance and improvement of an existing private access road from the junction with the A18 including the western private bridge crossing of the Hatfield Waste Drain (**Work No. 8A**) and installation of a layby and gatehouse (**Work No. 8B**), and an emergency vehicle and pedestrian access road comprising the maintenance and improvement of an existing private track running between the Proposed PCC Site and Chapel Lane, Keadby and including new private bridge (**Work No. 8C**);
  - temporary construction and laydown areas including contractor facilities and parking (**Work No. 9A**), and access to these using the existing private roads from the A18 and the existing private bridge crossings, including the replacement of the western existing private bridge crossing known as 'Mabey Bridge' over Hatfield Waste Drain (**Work No. 9B**) and a temporary construction laydown area associated with that bridge replacement (**Work No. 9C**);
  - temporary retention, improvement and subsequent removal of an existing Additional Abnormal Indivisible Load Haulage Route (**Work No. 10A**) and temporary use, maintenance, and placement of mobile crane(s) at the existing Railway Wharf jetty for a Waterborne Transport Offloading Area (**Work No. 10B**);
  - landscaping and biodiversity enhancement measures (**Work No. 11A**) and security fencing and boundary treatments (**Work No. 11B**); and
  - minor associated development.
- 1.2.5 The Proposed Development includes the equipment required for the capture and compression of carbon dioxide emissions from the generating station so that it is capable of being transported off-site. ZCH Partnership will be responsible for the construction, operation and decommissioning of the carbon dioxide gathering network linking onshore power and industrial facilities including the Proposed Development in the Humber Region. The carbon dioxide export pipeline does not, therefore, form part of the Proposed Development and is not included in the Application but will be the subject of

separate consent applications by third parties, such as the Humber Low Carbon Pipeline DCO Project by National Grid Ventures.

- 1.2.6 The Proposed Development is designed to be capable of operating 24 hours per day, 7 days a week, with plant operation dispatchable to meet electricity demand and with programmed offline periods for maintenance. It is anticipated that in the event of CCP maintenance outages, for example, it could be necessary to operate the Proposed Development without carbon capture, with exhaust gases from the CCGT being routed via the Heat Recovery Steam Generator (HRSG) stack.
- 1.2.7 Various types of associated and ancillary development further required in connection with and subsidiary to the above works are detailed in Schedule 1 'Authorised Development' of the draft DCO (**APP-005**). This along with **Chapter 4: The Proposed Development in the ES Volume I (APP-047)** provides further description of the Proposed Development. The areas within which each numbered Work (component) of the Proposed Development are to be built are defined by the coloured and hatched areas on the Works Plans (**APP-012**).

### 1.3 The Proposed Development Site

- 1.3.1 The Proposed Development Site (the 'Order Limits') is located within and near to the existing Keadby Power Station site near Scunthorpe, Lincolnshire and lies within the administrative boundary of North Lincolnshire Council (NLC). The majority of land is within the ownership or control of the Applicant (or SSE associated companies) and is centred on national grid reference 482351, 411796.
- 1.3.2 The existing Keadby Power Station site currently encompasses the operational Keadby 1 and Keadby 2 Power Station (under commissioning) sites, including the Keadby 2 Power Station Carbon Capture and Readiness reserve space.
- 1.3.3 The Proposed Development Site encompasses an area of approximately 69.4 hectares (ha). This includes an area of approximately 18.7ha to the west of Keadby 2 Power Station in which the generating station (CCGT plant, cooling infrastructure and CCP) and gas connection will be developed (the Proposed PCC Site).
- 1.3.4 The Proposed Development Site includes other areas including:
- high pressure gas pipeline to supply the CCGT including a gas compound for National Grid Gas's (NGG) apparatus and a gas compound for the Applicant's apparatus;
  - the National Grid 400kV Substation located directly adjacent to the Proposed PCC Site, through which electricity generated by the Proposed Development will be exported;



- Emergency Vehicle Access Road and Potential Electrical Connection to Northern Powergrid Substation;
  - Water Connection Corridors:
    - Canal Water Abstraction Option which includes land within the existing Keadby Power Station site with an intake adjacent to the Keadby 2 Power Station intake and pumping station and interconnecting pipework;
    - River Water Abstraction Option which includes a corridor that spans Trent Road and encompasses the existing Keadby Power Station pumping station, below ground cooling water pipework, and infrastructure within the River Trent; and
    - a Water Discharge Corridor which includes an existing discharge pipeline and outfall to the River Trent and follows a route of an existing easement for Keadby 1 Power Station;
  - an existing river wharf at Railway Wharf (the Waterborne Transport Offloading Area) and existing temporary haul road into the into the existing Keadby 1 Power Station Site (the ‘Additional Abnormal Indivisible Load (AIL) Route’);
  - a number of temporary Construction Laydown Areas on previously developed land and adjoining agricultural land; and
  - land at the A18 Junction and an existing site access road, including two existing private bridge crossing of the Hatfield Waste Drain lying west of Pilfrey Farm (the western of which is known as Mabey Bridge, to be replaced, and the eastern of which is termed Skew Bridge) and an existing temporary gatehouse, to be replaced in permanent form.
- 1.3.5 In the vicinity of the Proposed Development Site the River Trent is tidal. Therefore, parts of the Proposed Development Site are within the UK marine area. No harbour works are proposed.
- 1.3.6 Further description of the Proposed Development Site and its surroundings is provided in **Chapter 3: The Site and Surrounding Area** in ES Volume I (**APP-046**).

## 1.4 The Development Consent Process

- 1.4.1 As a NSIP project, the Applicant is required to seek a DCO to construct, operate and maintain the generating station, under Section 31 of the 2008 Act. Sections 42 to 48 of the 2008 Act govern the consultation that the promoter must carry out before submitting an application for a DCO and Section 37 of the 2008 Act governs the form, content and accompanying documents that are required as part of a DCO application.
- 1.4.2 An application for development consent for the Proposed Development has been submitted to and accepted for examination by the Planning Inspectorate (PINS) acting on behalf of the Secretary of State. PINS is now examining the

Application and will make a recommendation to the Secretary of State, who will then decide whether to make (grant) the DCO.

## 1.5 The Purpose and Structure of this Document

1.5.1 The purpose of this document is to summarise clearly the agreements reached between the Applicant and UK Health Security Agency (formerly Public Health England) ('the Parties') on matters relevant to the examination of the Application and to assist the Examining Authority. It has been prepared with regard to the guidance in 'Planning Act 2008: examination of application for development consent' (Department for Communities and Local Government, March 2015).

1.5.2 This version of the document summarises the agreements reached between the Parties regarding matters listed below:

- Cumulative impacts from emissions, especially Particulate Matter (PM) (Including PM<sub>10</sub> and PM<sub>2.5</sub>);
- Draft DCO, Requirements and Protective Provisions;
- Dust and land contamination impacts;
- Electro-magnetic fields;
- Impacts of construction, operational and decommissioning phases, including emissions and cumulative impacts, especially in relation amine products and which amine product(s) is/ are likely to be emitted;
- Monitoring and mitigation;
- Transport and traffic, including frequency of AILs and Heavy Goods Vehicle (HGV) movements; and
- Waste arisings.

## 1.6 Status of this version

1.6.1 This is the first draft of this SoCG.

1.6.2 The document is structured as follows:

- Section 2 – summarises the role of UK Health Security Agency (formerly Public Health England);
- Section 3 - sets out details of consultation with Public Health England to date;
- Section 4 - sets out the matters agreed between the parties in respect of the Application; and
- Section 5 – sets out any matters that are yet to be agreed and where discussions are on-going between the parties and summarises next steps.

## **2.0 THE ROLE OF THE UK HEALTH SECURITY AGENCY**

- 2.1.1 The UK Health Security Agency is an executive government agency sponsored by the Department of Health and Social Care that commenced operation on 1 October 2021, taking over the responsibilities of Public Health England whose remit was to protect and improve the nation's health and wellbeing and reduce health inequalities.
- 2.1.2 The UK Health Security Agency is a consultee under the 2008 Act, meaning applicants must consult with the agency in the process of applying for development consent.

### 3.0 SUMMARY OF CONSULTATION

3.1.1 Consultation and technical engagement has been ongoing with Public Health England (prior to it becoming part of the UK Health Security Agency) since the scoping stage for the Proposed Development (June 2020). Consultation comments received from Public Health England for the Proposed Development are presented in Table 3.1 below.

**Table 3.1: Consultation Summary**

Date	Details
June 2020 (consultation on Environmental Impact Assessment (EIA) Scoping)	<p>Public Health England was consulted by the Applicant and formally by PINS in respect of a request made by the Applicant for an EIA Scoping Opinion for the Proposed Development.</p> <p>No response was provided from Public Health England.</p>
January 2021 (formal Stage 2 Consultation/response)	<p>Public Health England provided advice on construction impacts including cumulative impacts, impact and risk assessment, Air Quality Standards, amine product emissions and modelling, the proximity of residential properties to the water connection, discharge corridors, abnormal indivisible load route and permanent emergency access via Chapel Road and the assessment of potential impacts on these, asbestos risk and water assessments.</p> <p>Public Health England sought clarity regarding works across different phases, receptor locations, the carbon capture process and equipment, process emissions, stack height, confirmation that potential Polycyclic Aromatic Hydrocarbons (PAH) emissions have been adequately scoped out if required and assessment years.</p> <p>Public Health England recommended providing clearer and more accurate identification, reference and justification</p>

	<p>for selection of the human health receptors in the assessments.</p> <p>It was stated that emissions of particulate matter from all potential sources do not appear to have been assessed and clarification is needed in light of the potential for unabated emissions from the CCGT plant.</p>
March 2021 (additional technical engagement following Stage II Consultation)	Public Health England was consulted in March 2021 following Stage II Consultation. No comments were noted.
August 2021	The Applicant wrote to Public Health England to offer assistance in signposting relevant parts of the DCO Application and additional environmental information on waste submitted following the Application (OD-003). Public Health England confirmed that they were in the process of assessing the documentation would contact the Applicant if they felt a discussion would be beneficial.
Public Health England Relevant Representation dated 02 September 2021 (RR-013)	<p>Public Health England submitted a relevant representation to PINS in September 2021. In summary, the following comments were made:</p> <ul style="list-style-type: none"> <li>• Comments related to amine products which will be emitted by the Proposed Development and the request for further information on the specific amine products to be emitted through the environmental permitting process once a licensor is selected and additional modelling is undertaken.</li> <li>• The request for monitoring at human health receptors up to 250m from the Proposed Development to assess the effectiveness of mitigation</li> </ul>

	<p>measures in relation to ground gas risks given the presence/ number of historical landfills on-site and adjacent to it.</p> <ul style="list-style-type: none"> <li>• Additional detail recommended related to cumulative impacts from emissions of PM<sub>10</sub> and PM<sub>2.5</sub> from non-road mobile machinery (NRMM) and use of any generators on baseline emissions and the impact on the nearest air quality management area (AQMA).</li> <li>• Clarification sought on dust impacts described in Chapter 8: Air Quality (<b>APP-051</b>) and Appendix 8A (<b>APP-069</b>) and a recommendation to update mitigation, if required and within the dust monitoring strategy, include receptors to the north of the AIL route and south of the water connection corridor, including impacts of decommissioning of the AIL route.</li> <li>• Clarification on receptors within 200m of affected roads and query why Roe Farm and Vazon Bridge were not included as receptors.</li> <li>• A number of clarifications, justifications and mitigation measure recommendations for land contamination.</li> </ul>
December 2021	Draft SoCG provided by AECOM and the Parties agreed to submit a SoCG at Deadline 2.
January 2022	Comments on draft SOCG provided by UK Health Security Agency (refer to Appendix 1).

## 4.0 MATTERS AGREED

4.1.1 The below Table 4.1 contains a list of ‘matters agreed’ along with a concise commentary of what the item refers to and how it came to be agreed between the two parties.

**Table 4.2: List of Matters Agreed between the Applicant and Public Health England**

Matter Agreed	Commentary
Consultation	<p>A summary of pre-application consultation is contained in the Consultation Report (<b>APP-030</b>) and Appendix 16A: Population and Health Signposting (<b>APP-096</b>) in ES Volume II. It is agreed that the consultation summary in Section 3 of this SoCG provides an accurate record of consultation with Public Health England on application matters to date.</p>
<p>Air Quality and cumulative impacts from emissions (PM<sub>10</sub> and PM<sub>2.5</sub>) during construction. Consideration of amine products likely to be emitted during operation.</p>	<p>The assessment of effects of the Proposed Development in terms of air quality is set out in Chapter 8: Air Quality (<b>APP-051</b>) of ES Volume I and appendices 8A, 8B and 8C (<b>APP-069</b> to <b>APP-071</b>) of ES Volume II.</p> <p>The Applicant notes that additional detail was requested in relation to cumulative impacts from emissions of PM<sub>10</sub> and PM<sub>2.5</sub> from non-road mobile machinery (NRMM) and use of any generators on baseline emissions and the impact on the nearest AQMA. The approach to the assessment of cumulative impacts due to emissions of NRMM during construction is detailed in section 8.3 of Chapter 8 and follows relevant guidance produced by the Institute of Air Quality Management (IAQM, 2014) and the principles of Design Manual for Roads and Bridges (DMRB) NRMM assessment. It is considered that based on distance, there is no plausible pathway for such emissions to affect the nearest AQMA, as it is located approximately 6.2km to the east of the Proposed Development Site in Scunthorpe.</p> <p>The cumulative emissions that may arise over the course of the construction of the Proposed Development have been assessed and are considered negligible. Emissions from construction generators would be regulated through an environmental permit from the Environment Agency, to meet the requirements either of the Medium Combustion Plant Directive or the Industrial Emissions Directive,</p>

<b>Matter Agreed</b>	<b>Commentary</b>
	<p>depending on the aggregated output capacity of the generators used.</p> <p>Emissions of particulate matter that may have arisen during construction of Keadby 2 are already considered in the baseline assessment presented in the Chapter, which uses the available background ambient air monitoring data. The operational Keadby 2 Power Station is fuelled by natural gas so particulate emissions will be negligible. Construction dust emissions from Keadby 2 Power Station will have ceased well before the start of construction of the Proposed Development since Keadby 2 Power Station is already in commissioning.</p> <p>In relation to the clarification sought on dust impacts, the Applicant confirms that Section 8.6.2 of Chapter 8: Air Quality should read <i>'The assessment has considered risks from demolition/ site clearance works, earthworks, construction and trackout (of mud to the road) and, based on the potential scale of activities and the sensitivity of the receptor area, (as defined in Appendix 8A: Air Quality - Construction Phase (ES Volume II – Application Document Ref. 6.3)) unmitigated dust impacts are considered to be 'low risk' for human health receptors, and medium risk for ecological receptors. Therefore, mitigation measures appropriate to the scale of perceived risk would be applied as part of the CEMP.'</i></p> <p>Based on the above, it is considered that there is no requirement to update mitigation measures in either Chapter 8, or Appendix 8A, as these are based on the level of risk which has already been stated as 'high risk'.</p> <p>The Applicant notes that the UK Health Security Agency has made further comments in relation to the choice of receptors for modelling of traffic including HGV movements during construction. It is noted that there is no requirement to consider all receptors within 200m of affected roads. Receptors such as TR5-9 are adjacent to modelled roads, and therefore the impacts at these receptors will be higher than at receptors such as Roe Farm and Vazon Bridge which are not adjacent to any modelled roads. For this reason, although not reported, the impacts due to construction traffic will be less at Roe Farm and Vazon</p>



<b>Matter Agreed</b>	<b>Commentary</b>
	<p>Bridge than at other reported receptors which are closer to the modelled roads and at which no significant air quality effects have been identified.</p> <p>It is agreed that the air quality assessment submitted as part of the DCO application appropriately assess the air quality impacts of the Proposed Development using representative worst-case assumptions during construction, operation and decommissioning.</p> <p>Emissions of amine products would be managed through an Environmental Permit issued by the Environment Agency. It has been agreed between the Applicant and the Environment Agency that the environmental permit variation for the Proposed Development has been submitted following the two-stage permitting approach, given that the final selection of licensor had not been made at the time of this application; this stage being an application for a Permit-in Principle. The permit variation application was submitted to the Environment Agency in July 2021 and included an appraisal of BAT and assessment of air impacts based on the current design understanding. The assessment of air impacts included an appraisal of amine emissions and formation of amine degradation products, following protocols agreed with the Environment Agency and using conservative assumptions. It has been agreed with the Environment Agency that a subsequent permit update may be required following completion of the detailed design to address any specific design measures to be applied and provide further detail on air quality impacts, including updated modelling, where appropriate. It is agreed that the UK Health Security Agency will be consulted at the relevant time by the Environment Agency on the detail of the environmental permit application in accordance with prevalent consultation guidance on environmental permits</p> <p>Based on the above clarifications, it is agreed by both Parties that the issues raised by the UK Health Security Agency in their Relevant Representation have been appropriately addressed.</p>

<b>Matter Agreed</b>	<b>Commentary</b>
Electro-magnetic fields	<p>Risks associated with electromagnetic fields (EMF) have been considered in Appendix 16A: Population and Health Signposting (<b>APP-096</b>) of ES Volume II.</p> <p>It is agreed that an adequate consideration of the risks posed by EMF to all relevant receptors has been considered during construction, operation and decommissioning phases of the Proposed Development.</p>
Monitoring and mitigation	<p>Mitigation and monitoring measures proposed during the construction of the Proposed Development are provided in the Framework Construction Environmental Management Plan (CEMP) (<b>APP-160</b>). It is agreed that the mitigation and monitoring measures outlined within the Framework CEMP include the necessary principal controls to adequately manage risks to human health.</p> <p>The CEMP is controlled by Requirement 17 of the Draft DCO (<b>APP-005</b>) which must be prepared in accordance with the Framework CEMP (<b>APP-160</b>).</p> <p>During the plant operation, emissions to air from the stack including amines would be monitored in accordance with the Environmental Permit issued by the Environment Agency.</p> <p>The UK Health Security Agency has advised that the dust monitoring and recording strategy should include properties north of the abnormal load route and south of the water connection corridor. The scheme to control any emissions to air and for environmental monitoring will form part of the final CEMP, secured by Requirement 17(2b) and (2f). The Applicant confirms it will be happy to add representative receptors from these groups to the Framework CEMP, which the final CEMP must take account of.</p> <p>The UK Health Security Agency has requested that consideration be given to impacts of any decommissioning of the abnormal load route. The Applicant confirms that Appendix C of the Framework CEMP (<b>APP-160</b>) comprises Haul Road Ecology Protection Measures relevant to the restoration of the Additional Abnormal Indivisible Load (AIL); and Appendix D comprises the Haul Road Construction Environmental Management Plan; which</p>

Matter Agreed	Commentary
	includes consideration of restoration of the AIL. The final CEMP, secured by Requirement of the draft DCO (APP-005) must be prepared in accordance with the Framework CEMP ( <b>APP-160</b> ).
Traffic and Transport	The Parties are agreed that the Traffic and Transport Chapter ( <b>APP-053</b> ) and Transport Assessment ( <b>APP-074</b> ) in ES Volumes I and II provide a satisfactory assessment of the Proposed Development effects in relation to traffic and transport, including frequency of AIL and HGV movements.
Waste Arisings	It is agreed that the additional submission prepared by the Applicant in response to the Section 51 advice i.e. 'Waste Technical Note' (OD-003) adequately describes the types and expected quantities of waste, the treatment and disposal options available and assesses the environmental effects of waste arisings from the Proposed Development on regional and national waste management infrastructure.
Land Contamination	<p>The Application includes a Phase I Desk Based Assessment in Appendix 13A of ES Volume II (<b>APP-087</b>) and additional supporting appendices 13B (<b>APP-088</b>) and 13C (<b>APP-089</b>). Taken together, it is agreed that the Applicant's approach to assessing land contamination is aligned with the Environment Agency's Land Contamination: Risk Management (LCRM) guidance and uses a tiered, risk-based approach drawn together by <b>Chapter 13</b> of ES Volume I (<b>APP-056</b>).</p> <p>The UK Health Security Agency notes that construction significance has been assigned 'neutral' whereas temporary effects are described as minor adverse in Table 13.14 of Chapter 13 (<b>APP-087</b>). The Applicant confirms that it has applied a <i>risk based approach in accordance with LCRM guidance (2021)</i> which uses the principal, (as explained in paragraph 13.6.13 of Chapter 13) where there is no predicted change between the main baseline risk and the main construction risk, the construction effect significance is assessed as a neutral effect. The majority of effects in Table 13.14 are classified as neutral to minor adverse, with three as neutral. Where minor adverse is defined this is due to an increase in contamination risk of 1 risk level between baseline and construction CSM in the</p>

Matter Agreed	Commentary
	<p>risk matrix. For example, land that has a low contamination risk in the baseline becomes a moderate/ low risk' in construction (refer to Table 13.6). In each case the effect is classified as not significant.</p> <p>It is noted that monitoring at human health receptors up to 250m from the Proposed Development to assess the effectiveness of mitigation measures in relation to ground gas risks is considered appropriate by the UK Health Security Agency given the presence/ number of historical landfills on-site and adjacent to it. The Applicant has assessed the risk of ground gases which may be generated within the Proposed Development Site in Table 16: Preliminary Risk Assessment (Linkage L11: Ground gas) due to the extent of Made Ground expected as a result of the former landfills and assigned a risk rating of moderate/ low (common for brownfield sites) (<b>APP-087</b>). The Applicant is committed to further assessing contaminative risks of ground gases through intrusive ground investigation and risk assessment at the detailed design stage. Should this further stage of evaluation, which is secured by Requirement 15 (Contaminated Land and Groundwater), determine that there is potential for ground gas to migrate off-site and affect nearby properties, remedial measures would be taken to prevent gas escape to nearby properties and render the land fit for its intended purpose. The scheme secured by Requirement would set out long-term measures with respect to any contaminants, including ground gases, remaining on the site. It is agreed that the wording of Requirement 15(3) is appropriate, without further changes in relation to ground gas risk for off-site receptors.</p> <p>It is agreed between the Parties that the ES provides a satisfactory assessment of the potential pollution risks during construction and operation of the Proposed Development and that the impact avoidance and mitigation measures identified and specified by control measures within Requirement 15 (Contaminated land and groundwater) of the draft DCO (<b>APP-005</b>) are appropriate.</p>
Draft DCO, requirements	It is agreed that no changes are sought by the UK Health Security Agency to the draft DCO ( <b>APP-005</b> ), including requirements and protective provisions.

<b>Matter Agreed</b>	<b>Commentary</b>
and protective provisions	

## 5.0 MATTERS NOT AGREED AND NEXT STEPS

5.1.1 This SoCG sets out the agreements that have been reached between the Parties to date in respect of the matters relating to the Proposed Development requested by the ExA outlined in Section 1.7 of this SoCG.

5.1.2 Further clarification has been sought by Public Health England regarding the following matters:

- Public Health England outlined that further air assessment may be beneficial in order provide further clarity on the process contribution to the overall EAL (Environmental Assessment Level) once the final licensor has been selected. The Applicant wishes to agree via this Statement of Common Ground that a conservative assessment based on the current design understanding has been undertaken as part of the DCO application and current environmental permit variation application submitted to the Environment Agency in July 2021. A reappraisal of such operational effects would be undertaken post consent once the licensor is selected, and detailed design is completed. A subsequent permit update may be required following completion of the detailed design to be specific to the design measures to be applied and provide further detail on plant commissioning and start-up and air and water discharges as appropriate.

5.1.3 The Parties agree that there are no other matters outstanding.

## 6.0 REFERENCES

HM Government (2020a) *Energy White Paper, Powering our Net Zero Future.*

SSE (2020) *A Greenprint for Building a Cleaner More Resilient Economy.*

SSE plc (2020b) *Our Strategy.*

## **7.0 APPENDIX 1 – UK HEALTH SECURITY AGENCY COMMENTS ON DRAFT STATEMENT OF COMMON GROUND**





Appendix 1. Statement of Common Ground, Position of Parties

Ref.	Relevant Rep. Matter	SSE Thermal's Position	UKHSA's Position	Further Action Required
1	<p>It is noted that further modelling has been undertaken with respects to operational amine emissions. However, as the final licensor still hasn't been selected, it remains unknown which amine products specifically will be emitted. Once more is known, it would be beneficial to potentially re-model in order to get a more realistic impression of what the process contribution to the overall EAL is likely to be. It is noted that further work is planned with respect to this as well details regarding emissions from start-up and shut down, which will be appraised through the Environmental Permitting processes, at which stage PHE will be consulted.</p>	<p>Emissions of amine products would be managed through an Environmental Permit issued by the Environment Agency. It has been agreed between the Applicant and the Environment Agency that the environmental permit variation for the Proposed Development has been submitted following the two-stage permitting approach, given that the final selection of licensor had not been made at the time of this application; this stage being an application for a Permit-in Principle. The permit variation application was submitted to the Environment Agency in July 2021 and included an appraisal of BAT and assessment of air impacts based on the current design understanding. The assessment of air impacts included an appraisal of amine emissions and formation of amine degradation products, following protocols agreed with the Environment Agency and using conservative assumptions.</p>	<p>No further comments at this time.</p>	

		<p>It has been agreed with the Environment Agency that a subsequent permit update may be required following completion of the detailed design to address any specific design measures to be applied and provide further detail on air quality impacts, including updated modelling, where appropriate. It is agreed that the UK Health Security Agency will be consulted at the relevant time by the Environment Agency on the detail of the environmental permit application in accordance with prevalent consultation guidance on environmental permits.</p> <p>During the plant operation, emissions to air from the stack including amines would be monitored in accordance with the Environmental Permit issued by the Environment Agency.</p>		
2	<p>Limited details are available regarding the monitoring to be undertaken to assess emissions from the site and the effectiveness of mitigation measures. In view of the number of landfills within the site boundary and adjacent, we would recommend that public health assessments include human health receptors up to 250m from these including potential ground gas risks.</p>	<p>It is noted that monitoring at human health receptors up to 250m from the Proposed Development to assess the effectiveness of mitigation measures in relation to ground gas risks is considered appropriate by the UK Health Security Agency given the presence/ number of historical landfills on-site and adjacent to it. The Applicant has assessed the risk of ground gases which may be generated within the Proposed Development Site in Table 16: Preliminary Risk Assessment (Linkage L11: Ground gas) due to the extent of Made Ground expected as a result of the former landfills and assigned a risk rating of moderate/ low (common for brownfield sites) (<b>APP-087</b>). The Applicant is committed to further assessing contaminative risks of ground gases through intrusive ground investigation and risk assessment at the</p>	<p>UKHSA's recommendation related to ensuring appropriate public health risk assessments were undertaken as opposed to detailing monitoring requirements. No further comments in view of the information provided.</p>	<p>Please defer to the Local Authority.</p>

		<p>detailed design stage. Should this further stage of evaluation, which is secured by Requirement 15 (Contaminated Land and Groundwater), determine that there is potential for ground gas to migrate off-site and affect nearby properties, remedial measures would be taken to prevent gas escape to nearby properties and render the land fit for its intended purpose. The scheme secured by Requirement would set out long-term measures with respect to any contaminants, including ground gases, remaining on the site.</p>		
3	<p>With reference to Appendix 13 C, further clarifications, justifications and where necessary, mitigation measures, are recommended as to:</p> <ul style="list-style-type: none"> <li>• The consideration of human health receptor being limited to 50m only; particularly when looking at potential public health impacts from ground gas.</li> <li>• Construction significance has been assigned 'neutral' whereas temporary effects are described as minor adverse in Table 13.14 (Chapter 13).</li> </ul>	<p>See above.</p> <p>The UK Health Security Agency notes that construction significance has been assigned 'neutral' whereas temporary effects are described as minor adverse in Table 13.14 of Chapter 13 (<b>APP-087</b>). The Applicant confirms that it has applied a <i>risk based approach in accordance with</i> LCRM guidance (2021) which uses the principle, (as explained in paragraph 13.6.13 of Chapter 13) where there is no predicted change between the main baseline risk and the main construction risk, the construction effect significance is assessed as a neutral effect. The majority of effects in Table 13.14 are classified as neutral to minor adverse, with three as neutral. Where minor adverse is defined this is due to an increase in contamination risk of 1 risk level between baseline and construction CSM in the risk matrix. For example, land that has a low contamination risk in the baseline becomes a moderate/ low risk' in construction (refer to</p>	No further comments.	

		Table 13.6). In each case the effect is classified as not significant.		
4	<p>The assessment of cumulative impacts is welcomed. However, additional detail is recommended regarding cumulative impacts from emissions of particulate matter, including both PM10 and PM2.5 from NRMM and the use of any generators on baseline assessments and the potential impact on the AQMA. These should include other air pollution sources, for example Keadby 2</p>	<p>The approach to the assessment of cumulative impacts due to emissions of NRMM during construction is detailed in section 8.3 of Chapter 8 and follows relevant guidance produced by the Institute of Air Quality Management (IAQM, 2014) and the principles of Design Manual for Roads and Bridges (DMRB) NRMM assessment. It is considered that based on distance, there is no plausible pathway for such emissions to affect the nearest AQMA, as it is located approximately 6.2km to the east of the Proposed Development Site in Scunthorpe. The cumulative emissions that may arise over the course of the construction of the Proposed Development have been assessed and are considered negligible. Emissions from construction generators would be regulated through an environmental permit from the Environment Agency, to meet the requirements either of the Medium Combustion Plant Directive or the Industrial Emissions Directive, depending on the aggregated output capacity of the generators used.</p> <p>Emissions of particulate matter that may have arisen during construction of Keadby 2 are already considered in the baseline assessment presented in the Chapter, which uses the available background ambient air monitoring data. The operational Keadby 2 Power Station is fuelled by natural gas so particulate emissions will be negligible.</p>	No further comments.	

		Construction dust emissions from Keadby 2 Power Station will have ceased well before the start of construction of the Proposed Development since Keadby 2 Power Station is already in commissioning.		
5	Section 8.6.2 of Chapter 8 Air Quality describes unmitigated dust impacts as medium to high risk for human health receptors, whereas Section 3.2.12 of Appendix 8A describes a low risk. This should be clarified, and mitigation measures updated accordingly. We agree with the recommendations in the CEMP to develop a dust monitoring and recording strategy in agreement with North Lincolnshire County Council. We would recommend that this include properties north of the AIL route and south of the water connection corridor and also take into account impacts of any decommissioning of the AIL.	<p>In relation to the clarification sought on dust impacts, the Applicant confirms that Section 8.6.2 of Chapter 8: Air Quality should read <i>'The assessment has considered risks from demolition/ site clearance works, earthworks, construction and trackout (of mud to the road) and, based on the potential scale of activities and the sensitivity of the receptor area, (as defined in Appendix 8A: Air Quality - Construction Phase (ES Volume II – Application Document Ref. 6.3)) unmitigated dust impacts are considered to be 'low risk' for human health receptors, and medium risk for ecological receptors. Therefore, mitigation measures appropriate to the scale of perceived risk would be applied as part of the CEMP.'</i></p> <p>Based on the above, it is considered that there is no requirement to update mitigation measures in either Chapter 8, or Appendix 8A, as these are based on the level of risk which has already been stated as 'high risk'.</p> <p>The UK Health Security Agency has advised that the dust monitoring and recording strategy should include properties north of the abnormal load route and south of the water connection corridor. The scheme to control any emissions to air and for environmental monitoring will form part of the final CEMP, secured by Requirement 17(2b) and (2f). The Applicant confirms it will be</p>	No further comments.	Please defer to the Local Authority.

		<p>happy to add representative receptors from these groups to the Framework CEMP, which the final CEMP must take account of.</p> <p>The UK Health Security Agency has requested that consideration be given to impacts of any decommissioning of the abnormal load route. The Applicant confirms that Appendix C of the Framework CEMP (<b>APP-160</b>) comprises Haul Road Ecology Protection Measures relevant to the restoration of the Additional Abnormal Indivisible Load (AIL); and Appendix D comprises the Haul Road Construction Environmental Management Plan; which includes consideration of restoration of the AIL. The final CEMP, secured by Requirement of the draft DCO (APP-005) must be prepared in accordance with the Framework CEMP (<b>APP-160</b>).</p>		
6	<p>In view of the screening criteria (within 200m of affected roads), it would be helpful to clarify why properties Roe Farm and Vazon Bridge have not been included as receptors as these are within 100m to the south of the main road used to access the site. Further details regarding short- and long-term impacts at these receptors is recommended.</p>	<p>The Applicant notes that the UK Health Security Agency has made further comments in relation to the choice of receptors for modelling of traffic including HGV movements during construction. It is noted that there is no requirement to consider all receptors within 200m of affected roads. Receptors such as TR5-9 are adjacent to modelled roads, and therefore the impacts at these receptors will be higher than at receptors such as Roe Farm and Vazon Bridge which are not adjacent to any modelled roads. For this reason, although not reported, the impacts due to construction traffic will be less at Roe Farm and Vazon Bridge than at other reported receptors which are closer to the modelled roads and</p>	<p>No further comments.</p>	

		at which no significant air quality effects have been identified.		
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