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5. Construction Programme and Management

5.1 Introduction

- 5.1.1 This chapter of the Preliminary Environmental Information (PEI) Report provides a summary of the proposed approach for the construction phase of the Proposed Development.
- 5.1.2 This includes information on construction programme and timings and methods of working, where available. At this stage a detailed construction programme is not available, as this is normally determined by the Engineering, Procurement and Construction (EPC) contractor who has not yet been appointed. Where construction details cannot be confirmed at this stage, worst case estimates have been made based on experience gained on similar developments and professional judgment.

5.2 Construction Programme Scenarios

- 5.2.1 The Applicant will appoint contractors for the main works phase.
- 5.2.2 As described in Chapter 4: Proposed Development (PEI Report, Volume I), the worst-case construction programme is currently anticipated to be the construction of the Proposed Development in a four-year construction phase commencing shortly after the Development Consent Order (DCO) is granted (expected in Q3 2022). It is envisaged that a single Combined Cycle Gas Turbine (CCGT) unit and associated carbon capture plant will be constructed and commissioned first, with the remaining two units constructed in phases thereafter.
- 5.2.3 The key stages of the construction programme are currently anticipated to be:
- 2022 – Preliminary Works and site establishment;
 - 2023 – PCC Train 1 site works;
 - 2024 – Utility connections;
 - 2024 – CO₂ Gathering Network; and
 - 2024 - 2026 PCC Trains 2 and 3 site works.
- 5.2.4 Under a single train scenario, the key stages will be:
- 2022 – Preliminary Works;
 - 2023 – PCC Train 1 site works;
 - 2024 – Utility connections; and
 - 2024 – CO₂ Gathering Network.



- 5.2.5 The final scenario considered is that the first train is constructed and operational by 2024 but with Trains 2 and 3 constructed sequentially commencing in 2028 and completed by 2030.
- 5.2.6 It is common for much of the groundwork, for example piling and pouring of concrete slabs, to be completed prior to the erection of any above ground structures. The erection of civil and structural components, such as cladding and external civil works usually continue whilst mechanical erection is ongoing. However, the detailed phasing of construction is the responsibility of the appointed EPC contractor and can vary dependent on plant layout and procurement of key equipment.
- 5.2.7 The PCC is located on the site of the former SSI Steelworks which is brownfield land that currently contains some above and below ground structures and redundant services associated with the former steelworks. The removal of those structures, clearance and any necessary remediation of Site will be required before the construction of the main structures of the Proposed Development. In addition to construction, this PEI Report assesses the environmental effects of undertaking these preliminary works required, as these also form part of the Proposed Development.
- 5.2.8 A Construction Environmental Management Plan (CEMP) will be prepared prior to construction. The submission, approval and implementation of this will be secured by the Development Consent Order (DCO). A framework CEMP will be included in Environmental Statement which will accompany the DCO application and will set out the key measures to be employed during the main works phase to control and minimise the impacts on the environment.

5.3 Construction Methods

Construction Equipment

- 5.3.1 For the purposes of the PEI Report and the environmental assessments that will be presented in the Environmental Statement (ES (and in particular for the noise assessment presented in Chapter 11: Noise and Vibration), worst case estimates have been made of the types and numbers of plant and machinery likely to be used on the Site during the construction period, as well as the potential use of piling.

Preliminary Works

- 5.3.2 Before the Applicant takes possession of the site preliminary works will be required which will not form part of the DCO application. However, following preliminary works have been assessed in the PEI Report:
- demolition and site clearance;
 - removal of unsuitable/contaminated materials;
 - removal of some underground structures with voids backfilled and compacted;
 - placement of surface capping layer in selected areas.



Earthworks

- 5.3.3 Spoil material generated during construction will be stored temporarily within the Proposed Development boundary. Spoil which cannot be re-used will be removed from site. If necessary, suitable measures will be put in place to prevent sediment being washed off-site, and the stockpiles will be monitored/measured for wash away. Further details of the measures which would be implemented will be included in the Framework CEMP which will form part of the ES.
- 5.3.4 Soils will be managed in accordance with the Defra Construction Code of Practice for the Sustainable Use of Soil on Development Sites (Defra, 2009) to minimise impacts on soil structure and quality, and appropriate measures to minimise short-term and long-term impacts on land drainage will be discussed with each landowner (where relevant, principally for the Natural Gas Connection Corridor). These measures will be included in the CEMP.
- 5.3.5 Measures for the management of any contaminated soils will also be set out in the CEMP.
- 5.3.6 Additionally, the CEMP will incorporate measures to prevent an increase in flood risk during the construction works. For example, topsoil and other construction materials will be stored outside of the 1 in 100 year floodplain extent and only moved to the temporary works area immediately prior to use.

Construction Laydown Areas and Welfare Facilities

- 5.3.7 Proposed construction laydown areas, including storage, site offices, welfare facilities and car parking, will be located at various places within the Site boundary. Locations for these are yet to be determined.
- 5.3.8 Clearance, levelling and ground preparation works for these laydown areas may be required to provide a suitable surface material. The surface material will be permeable so as to allow rain water to percolate to ground, with suitably bunded locations identified as storage areas for any hazardous or polluting materials or chemicals to reduce the risk of pollution.

Main Civil and Process Works

- 5.3.9 The contractor will prepare and level the PCC, followed by piling and excavation for main foundations for some of the larger elements of the Proposed Development. For example, the absorber, the stack, the Heat Recovery Steam Generator (HRSG) and, turbine hall and compression facilities. The lighter buildings may be piled or have raft foundations.
- 5.3.10 Once the buildings have been erected the contractor will commence the installation of plant, such as the gas turbine, generator, steam turbine, HRSG, stack, capture plant, compression facilities and utilities. Large plant may be first placed on foundations with steelwork erected around it.
- 5.3.11 Based on the expected ground conditions it is expected that piling may be required as a foundation for the main buildings. A Piling Risk Assessment will be undertaken in accordance with Environment Agency guidance to consider and mitigate the risks of causing new pollutant linkages and/or worsening



existing linkages with respect to risks to controlled waters during construction of the Proposed Development. This will be secured by a requirement in the draft DCO.

- 5.3.12 As set out in Chapter 11: Noise and Vibration and Chapter 12: Terrestrial Ecology and Chapter 15: Ornithology (PEI Report, Volume I), the piling method will also be designed to reduce the risk of disturbance to birds or other noise sensitive human and ecological receptors.

Construction of Natural Gas Connection

- 5.3.13 The possible Natural Gas Connection Corridor from the National Gas Grid (NGG) to the Proposed Development is shown on Figure 3-2B (PEI Report, Volume II).
- 5.3.14 The gas connection will be constructed by the contractor, with works coordinated with National Grid. The construction of the Minimum Offtake Connection (MOC) from the National Grid Above Ground Installation (AGI) will be undertaken by a National Grid approved contractor. The construction of the MOC will require stripping and storing soil/made ground and excavation to approximately 1 m below the depth of the existing gas main along a length of approximately 12 m (6 m either side of the connection point).
- 5.3.15 A concrete pad and supports for the existing gas main either side of the connection point will then be installed together with a new 'tee' piece and construction valve. The existing gas main will then be drilled using specialist pressure drilling equipment (whilst the gas main is in operation), and the construction valve will be closed until the new connection pipeline is completed.
- 5.3.16 The construction of the contractor's compound adjacent to the National Grid AGI will require excavation of a trench up to the interface with the National Grid AGI compound to allow installation of a swan neck to bring the pipework above ground for the Applicant's compound, and installation of valves and pipework, the Pipeline Inline Gauging (PIG) trap, and electrical and telemetry equipment. Following installation of below ground infrastructure, the area will be backfilled, and excess soils will be used in the landscaping of the compound perimeter.
- 5.3.17 The construction of the National Grid and contractor's compounds is expected to take up to nine months, but with the majority of the work being completed in the first three months.
- 5.3.18 The majority of the gas pipeline connecting the NGG AGI to the PCC will be constructed using an open-cut method. A trench will be excavated, and the pipe laid approximately 1.2 m below ground level. This will involve fencing off the works area, stripping and storing topsoil, excavating a trench and storing subsoil, laying and welding pipe sections together at grade level (pipe stringing), laying pipe in the trench, re-instating land drainage, and then backfilling subsoil, reinstating topsoil and re-planting to the original state as required.



- 5.3.19 The corridor width required for open cut pipeline construction is generally around 35 m. This is the minimum working width that is required to facilitate ease of construction. This width allows topsoil and spoil to be excavated and stored adjacent to the point of generation, stringing and welding of sections of pipe, access along the route and laying of the pipe within the trench prior to backfilling.
- 5.3.20 Overall construction of the gas connection pipeline is likely to take around nine months.
- 5.3.21 The preferred option for crossing the River Tees is using trenchless technologies, either horizontal directional drilling (HDD) or an auger bored tunnel. A specific area will need to be developed for the trenchless technologies across the River Tees, additional land will also be temporarily required either side of the river to allow for movement of additional plant.
- 5.3.22 The River Tees crossing is likely to take approximately three months to construct. A temporary works compound will be required at the drilling launch site and a temporary works compound will be required at the drilling exit site.
- 5.3.23 Trenchless technologies may also be needed for other crossing points (e.g. other watercourses, transport infrastructure) and this land for this and the Tees crossing has been allowed for within the Site boundary and has been incorporated into the Natural Gas Connection Corridor shown on Figure 3-2B in PEI Report, Volume II.

Construction of Water Connections

- 5.3.24 Several options are currently being considered for the water connections for the Proposed Development. The abstraction of river water from the River Tees using the former Steelworks abstraction (the Water Abstraction Corridor) and discharge using the former Steelworks outfall (the Water Discharge Corridor). This is likely to require upgrading/refurbishing the existing infrastructure. As an alternative to, or to complement the use of the existing abstraction infrastructure, fresh water would be provided by Northumbrian Water Ltd via the existing watering meter house along the Freshwater Connection Corridor.
- 5.3.25 The corridors within which the water connections could run are shown on Figure 3-2D in PEI Report, Volume II.

Abstraction Point

- 5.3.26 The existing intake - may be suitable for re-use with a minimal level of “construction” input or modification. Should the intake be suitable for re-use, it is likely that maintenance activities would be very minor and limited to inspection and minor, primarily hand-based, refurbishment tasks. Should a straightforward refurbishment be possible, potential activities would consist of:
- the installation of screening to achieve minimal ecological impacts, including reducing the risk of fish entrapment and to comply with the Eels (England and Wales) Regulations 2009;
 - removal of any contaminated residues/dust; and



- application of paint, sealant, grout and/or other substances to ensure the intake is fit for purpose and safe to operate.
- 5.3.27 Should the intake require more extensive refurbishment and/or replacement, several other construction activities may be required. Potential activities could include:
- the installation of a cofferdam(s) within the River Tees to provide a safe, dry and stable working area;
 - a preparatory dredge to facilitate access to the intake and/or to install new intake infrastructure;
 - construction or alteration works to install new intake infrastructure;
 - installation of screening system(s);
 - the removal of a coffer dam(s); and
 - the presence of vessels such as work boat(s) and/or barge(s) to support the refurbishment process.
- 5.3.28 Additional works may also be required at the abstraction point (if used) to fulfil the obligations of the Eels (England and Wales) Regulations 2009, which may require the installation of an eel screen.
- 5.3.29 A temporary cofferdam may need to be installed at the abstraction point, to enable construction works to take place safely. If required, it is anticipated that the cofferdam will be required for two separate three month periods, with an intervening gap of approximately six months. The first three-month period will comprise inspections, measurements and cleaning of the existing structure to inform the detailed design of works required to upgrade or reconstruct the existing infrastructure.
- 5.3.30 Measures to minimise environmental impacts at the abstraction point could include:
- the two-stage cofferdam installation at the abstraction point. This would reduce the duration of the cofferdam being present in the water, and consequently, reduce potential ecological, flood risk and hydrodynamic/erosion/scour impacts.
 - avoidance of cofferdam installation or removal between 1st March and 30th November to avoid the main migratory period for salmonids, European eel and lamprey; and
 - pre-construction sediment contamination testing and use of silt curtains (to minimise impacts on water quality).
- 5.3.31 Other potential impacts associated with the construction works in the River Tees that have been considered include river navigation, a Navigation Risk Assessment (NRA) is included as Appendix 16D (PEI Report, Volume II). The NRA has concluded that navigation will not be impeded, and appropriate warning signs will be installed for navigational safety.



Treated Water Outfall

- 5.3.32 Although still operational for small discharges, the condition of the existing outfall from the former steelworks for long term use for this project is unconfirmed. If it is possible to re-use the existing tunnel, any maintenance activities are likely to be very minor and limited to those described for the outfall refurbishment (i.e. inspection and hand-based maintenance).
- 5.3.33 Owing to the relatively low discharge volumes and to assist the dissipation of any plume a diffuser will be retrofitted. However, this is pending design development and consultation with statutory consultees such as the Environment Agency and the MMO.
- 5.3.34 Should the treated effluent outfall require the emplacement of an outfall head, several construction activities would be required; potential activities could include:
- a preparatory dredge to create a pocket for the emplacement of an outfall head;
 - final assembly, float and positioning of a replacement head;
 - a flood and sink exercise or similar works to position the outfall head within the dredge pocket;
 - either piling or pin drilling to secure the outfall head;
 - backfill of the dredged pocket around the outfall head;
 - the positioning of rock armouring/scour protection around the outfall head;
 - final assembly, pipeline jointing, connections, fabrication and ancillary commissioning works to install a safe and fit for purpose discharge pipeline; and
 - the presence of vessels such as work boat(s) and/or barge(s) to support the refurbishment process.
- 5.3.35 In the unlikely event that the outfall requires replacement, there are two potential options for replacing the infrastructure: using a land-based trenchless technologies rig to drill beneath Coatham Dunes and Coatham Sands followed by use of trenchless technologies from the foreshore or open-cut trenching if unexploded ordnance may be present.

Freshwater Connection

- 5.3.36 If required, a potable water supply will be provided by a new connection to the existing Northumbrian Water Ltd. connection. However, the condition of this infrastructure is currently unknown. If a new towns water pipeline is required it would be constructed using open-cut methods over a period of approximately three months.

Construction of CO₂ Export Pipeline

- 5.3.37 Construction of the CO₂ Export Pipeline from the Compressor Station across Coatham Dunes and Coatham Sands to Mean Low Water Springs (MLWS) (including into the Teesmouth and Cleveland Coast SPA/Ramsar and the Teesmouth and Cleveland Coast SSSI) will most likely be using HDD



techniques. The use of open-cut techniques through the dunes and sands is being assessed in order to allow the selection of the most appropriate technique that will have the least residual effects on the national and international designations.

- 5.3.38 The corridor within which the CO₂ Export Pipeline will run as shown on Figure 3-2A (PEI Report, Volume II).
- 5.3.39 The crossings of Coatham Dunes and Coatham Sands required for the CO₂ Export Pipeline will be achieved using trenchless technologies if the risk from unexploded ordnance (UXO) is acceptable. A temporary works compound will be required at the drilling launch site and at the drilling exit site.
- 5.3.40 If an open-cut method is used to cross the dunes, a trench will be excavated and the pipe laid approximately 1.2 m below ground level. This will involve fencing off the works area, stripping and storing overburden, excavating a trench and storing subsoil, laying and welding pipe sections together at grade level (pipe stringing), laying pipe in the trench, re-instating drainage, and then backfilling subsoil, reinstating overburden and (where necessary) re-planting to the original state as required.
- 5.3.41 The corridor width for open-cut pipeline construction is likely to be circa 35 m. This is the minimum working width that is required to facilitate ease of construction. This width allows overburden and spoil to be excavated and stored adjacent to the point of generation, stringing and welding of sections of pipe, access along the route, and laying of the pipe within the trench prior to backfilling. For inclusion in this PEI Report, a wider evaluation corridor has been defined in which further studies are being undertaken in order to optimise the preferred route.
- 5.3.42 The CO₂ Export Pipeline will extend to MLWS. The export pipeline would be extended beyond this point to connect to the off-shore storage facility, however, consent for this section of the pipeline is not being sought as a part of the DCO application.

Construction of Electrical Connection

- 5.3.43 The Proposed Development would connect to National Grid's Lackenby Sub-station. The connection between the Proposed Development and the sub-station would comprise up to 400kV electrical cables and control system cables which would be installed either above ground or below ground, or a combination of both. The corridors within which the Electrical Connection Corridor will run are shown on Figure 3-2C: Development Areas (PEI Report, Volume II). The routing will be from the PCC, via Tod Point sub-station and then either via the north and west of the Wilton International Complex or to the east and west of Wilton.

Construction of CO₂ Gathering Network

- 5.3.44 The CO₂ Gathering Network will be an above ground pipeline installed utilising existing support infrastructure (i.e. existing pipe racks, sleeper tracks, culverts and pipe bridges), where feasible. In the event that a pipe rack is at capacity, it is proposed that the pipe rack will be expanded to

accommodate the additional line. If this is not possible, the pipe line will be underground using open-cut techniques. The potential corridors for the CO₂ Gathering Network are shown on Figure 3-2E (PEI Report, Volume II).

5.3.45 Activities within the corridor will include the following associated activities:

- survey of proposed new pipeline route, including dilapidation surveys;
- undertaking of ground surveys i.e. topographical, EIA and geotechnical etc;
- obtain associated access permits and clearance certification;
- ground preparation and management of any associated excavation works;
- installation of new pipeline sections;
- construction of new pipe bridges and modification of existing;
- management of lifting operations for the positioning and installation of steelwork, piping sections, valves, materials and concrete supports etc;
- installation of temporary pig launching / receiving facilities;
- non-destructive testing of pipe work by radiography, magnetic particle inspection and ultrasonic;
- thickness surveys;
- hydrostatic piping testing;
- corrosion protection preparation and coating (including structural steel work supports) and installation of cathodic protection;
- electrical, control and instrumentation works;
- commissioning;
- reinstatement of fence lines, railing, supports, walkways and any other obstacles temporarily removed or modified by prior agreement to allow for construction and safe works access; and
- site clean-up.

5.3.46 The CO₂ Gathering Network will need to cross the River Tees. The preferred option for crossing the River Tees is using trenchless technologies using similar principles to the gas connection. The River Tees crossing is likely to take approximately three months to construct. A temporary works compound will be required at the drilling launch site and at the drilling exit site. If HDD is techniques are used then both the CO₂ Gathering Network pipeline and the gas pipeline would be constructed sequentially using the same equipment over a period of six months. If a auger bored tunnel is constructed, this will be used for both the CO₂ Gathering Network pipeline and the Natural Gas Connection pipeline.



Construction Staff

- 5.3.47 It is estimated that there will be up to 2,400 personnel contracted to work on the Proposed Development at the peak of construction. The peak of construction activity and traffic is anticipated to be in around month 24.
- 5.3.48 Construction staff are anticipated to travel to the Proposed Development via the existing trunk road and local networks. The Applicant will seek to maximise sustainable transport options such as public transport (including rail), cycling and car sharing in accordance with policy as outlined in the Framework Construction Workers Travel Plan (see the Transport Assessment in Appendix 16A: Traffic and Transportation, PEI Report, Volume III) and secured through a Requirement in the DCO.
- 5.3.49 Further detail is presented in the Construction Traffic Management Plan, and Construction Worker Travel Plan of the Transport Assessment presented within Appendix 16A: Traffic and Transportation in PEI Report, Volume III.

Construction Traffic and Site Access

- 5.3.50 All HGV construction traffic will access/depart the Site via existing access roads from the A1085 Trunk Road between Redcar and the A1053 Tees Dock Road, north of Grangetown and approximately 4 km south of the SSI site. From here, the A19 will be accessed from either the A66, passing north of Middlesbrough, or the A174, passing to the south.
- 5.3.51 There will be an estimated peak of around 40 HGV one-way movements per day to the Proposed Development.
- 5.3.52 The CO₂ Gathering Network and Electrical Connection Corridor south of the Tees will be accessed via the A1085, A174, A1053, Tees Dock Road. Access to the CO₂ Gathering Network and Natural Gas Connection Corridor north of the Tees will be via the A1185, A178, B1725 and Seaton Carew Road.
- 5.3.53 Abnormal loads may be delivered via the highway network. It may be possible to deliver large loads by boat using the existing Redcar Bulk Terminal or alternatively the roll-on roll-off facilities at Teesport located to the south-west of the PCC with the agreement of the Operators, Redcar Bulk Terminal Ltd. and PD Teesport respectively.
- 5.3.54 It is anticipated that there will be a single access point to the PCC and associated construction laydown area for vehicles during construction. The access point for construction traffic entering the Site is anticipated to be the existing accesses from the roundabout on the A1085 Trunk Road to the south-west of the Power and Capture Site or the roundabout at the terminus of the A1053 Tees Dock Road. This entrance can accommodate normal HGV traffic.
- 5.3.55 The same access will be used for the CO₂ Compressor Station, CO₂ Export Pipeline and Water Connections construction traffic. Access for construction of the Natural Gas Connection, the Electrical Connection and the CO₂ Gathering Network, will be via designated access points from the local road network.



- 5.3.56 Based on the anticipated peak construction workforce there will be an estimated peak of around 1,029 passenger vehicle one-way movements per day to the Proposed Development.

Construction Working Hours

- 5.3.57 Construction working hours will generally be Monday to Friday 07:00 to 19:00 and Saturday 07:00 to 13:00, however it is likely that some construction activities will be required to be 24 hours at certain times. This is principally for certain construction activities that cannot be stopped, such as concrete pouring. Where on-site works are to be conducted outside the core hours, they will comply with any restrictions agreed with the planning authorities, in particular regarding control of noise and traffic. Twenty-four hour working for certain activities has therefore been assessed in Chapter 11: Noise and Vibration (PEI Report, Volume I) assuming that less noisy activities occur at night and which do not exceed existing ambient noise levels at sensitive receptors. Chapter 11: Noise and Vibration sets out specific mitigation and control measures required to prevent disturbance from night-time construction activities. Requirements in the draft DCO will secure the working hours and the approach to exceptions to the usual working hours.
- 5.3.58 Given the above, activities that could generate a noise nuisance will not be undertaken at night, including but not limited to sheet piling, piling, use of impact wrenches, concrete scabbling, use of reversing sirens, and concrete jack hammering. A noise monitor will be installed at the boundary of the Site, with a day-time and night-time noise limit to be used during construction agreed with RCBC.

Storage of Construction Plant and Materials

- 5.3.59 There will be gravelled laydown areas positioned close to access roads on the Site where any materials will be unloaded and then transported to the area of works. It is not envisaged that these will be used for long term storage of materials (storage will be for six months or less). At the end of the shift, small mobile plant will be returned to a secure overnight plant storage area where drip trays will be utilised under the various types of plant, if required.
- 5.3.60 Laydown areas/construction compounds for construction materials for the CO₂ Gathering Network and gas and electrical connections will be required. These will be located within the Connection Corridors. Separate laydown areas may be required for works to the north and south of the River Tees.
- 5.3.61 Storage areas for flammable/toxic corrosive materials will be located in a separate, locked, bunded and fenced off area. Material data sheets will be available for all these materials and the COSHH (Control of Substances Hazardous to Health) assessments kept within the relevant risk assessment for the task, all subject to the Applicant's approval.
- 5.3.62 Although options to utilise existing site power are also being explored, temporary generators are likely to be required during construction and mobile generators will be used along the construction corridors.



Lighting

- 5.3.63 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. A Lighting Strategy will be prepared for regulatory approval as required.
- 5.3.64 Lighting will be designed so as not to cause a nuisance outside of the Site in relation to views from residential receptors or light disturbance to ecological receptors.

Wheel Wash Facilities

- 5.3.65 A self-contained wheel wash will be installed and will be used by vehicles prior to exiting the construction site prior to joining the public highway.
- 5.3.66 For loads unable to use the fixed wheel wash, a localised wheel washing facility will be set up to cater for these, to minimise effects to the highway.

Construction Environmental Management Plan (CEMP) and Site Waste Management Plan (SWMP)

- 5.3.67 The Applicant will require that the contractor produces and maintains a CEMP to control site activities to minimise any impact on the environment. This will include industry best practice measures, and specific measures set out in this PEI Report. A Framework CEMP will be included in the ES which will accompany the DCO application.
- 5.3.68 The purpose of the CEMP is:
- to ensure nuisance levels as a result of construction and operation activities are kept to a minimum;
 - to comply with regulatory requirements and environmental commitments; and
 - to ensure procedures are put into place to minimise environmental effects during construction.
- 5.3.69 In order to manage and monitor waste generated on the Site during construction, a framework Site Waste Management Plan (SWMP) will also be developed as part of the framework CEMP, which allows for waste streams to be estimated and monitored and goals set with regards to the waste produced. The CEMP and SWMP will accompany the DCO application.
- 5.3.70 The SWMP will require that the contractor segregates waste streams on-site, prior to them being taken to a waste facility for recycling or disposal. All waste removal from the Site will be undertaken by fully licensed waste carriers and taken to permitted waste facilities.

Commissioning

- 5.3.71 Commissioning of the Proposed Development will include testing of the process equipment and will take approximately six months per CCGT and



Capture Train. A commissioning plan will be required to be agreed with the Environment Agency under the Environmental Permit, which will specify monitoring and control procedures to be used and set out a schedule of commissioning activities.

- 5.3.72 Commissioning activities are defined as dynamic, energised, functional testing. These activities will generally be carried out using inert materials such as air, water and nitrogen. Hydrocarbons (excluding lubricants) will not be introduced during this phase.
- 5.3.73 Commissioning of the CO₂ Gathering Network will involve pressure testing using water and nitrogen. Wastewater following testing will be disposed of to a sewer. On completion of nitrogen pressure testing, nitrogen will be vented to the atmosphere.
- 5.3.74 Construction best practice measures that will be adopted during the construction phase have been taken into account in the EIA. Construction works will be undertaken in accordance with the environmental commitments identified in Chapters 8 to 24 (PEI Report, Volume I) and having regard to relevant legislation.

5.4 References

Defra (2009). *Construction Code of Practice for the Sustainable Use of Soils on Construction Sites*. London: Department for Environment, Food and Rural Affairs.

The Eels (England and Wales) Regulations 2009 (SI 2009/3344). London: The Stationery Office.

