

White Rose Carbon Capture and Storage (CCS) Project

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The White Rose CCS (Generating Station) Order

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

ES Volume 3 Chapter J - Construction Environmental Management Plan

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure)



Applicant: Capture Power Limited
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Glossary

ASU	Air Separation Unit
AOD	Above Ordnance Datum
CCSA	Carbon Capture and Storage Association
CCS	Carbon Capture and Storage
CDM	Construction Design Management Regulations
CEMP	Construction Environmental Management Plan
CPL	Capture Power Ltd
DCLG	Department for Communities and Local Government
DCO	Development Consent Order
DCS	Data Control System
DECC	Department of Energy and Climate Change
EA	Environment Agency
EHS	Environmental and Health and Safety (typical related to a management system)
EIA	Environmental Impact assessment
EMS	Environmental Management System
EPC	Engineer Procure Construction contract
ES	Environmental Statement
EU	European Union
FEED	Front End Engineering and Design
GDP	Gross Domestic Product
GWe	Gigawatt electrical
HGV	Heavy Goods Vehicle
HSE	Health Safety and Environment
IED	Industrial Emissions Directive
PEIR	Preliminary Environmental Information Report
PFA	Pulverised Fuel Ash
MWe	Megawatt electrical
NE	Natural England
NGCL	National Grid Carbon Ltd
NSIP	National Significant Infrastructure Project
PPGN	Planning Policy Guidance Notes
SAC	Special Area of Conservation
SDC	Selby District Council
SINC	Sites of Importance for Nature Conservation
SPA	Special Protection Area
SoS	Secretary of State
SSSI	Site of Special Scientific Interest

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1 INTRODUCTION

1.1 OVERVIEW

This document presents the framework for Capture Power Limited's (CPL) future policies and procedures for managing environmental and social impacts during the White Rose Carbon Capture and Storage Project (the Project).

The purpose of this strategic level document is to set out the framework for effective environmental management, to a sufficient level of detail to support the Development Consent Order (DCO) for the Project. The document and the management plans it describes will be further developed as the Project progresses through the Front End Engineering and Design (FEED) process and will be adopted and further developed by the Engineering Procurement and Construction (EPC) contractor.

1.2 CAPTURE POWER LIMITED

CPL is formed of Drax CCS Limited, ALSTOM UK Holdings Limited and The BOC Group Limited. CPL is currently preparing an application for a DCO for a new 448 MWe (gross output) ultra-critical coal fired power station with carbon capture equipment and associated development. The Project will be located on land adjacent, and to the north, of the existing power station at Drax, North Yorkshire.

Detailed information regarding the Project can be found on the Project website ⁽¹⁾ and on the National Infrastructure Planning website ⁽²⁾ as the DCO process progresses.

1.3 CPL MANAGEMENT SYSTEM

Although Drax Power Ltd has a management system certified to ISO 14001, CPL will develop a fully integrated Environment, health, safety and Quality management system and this will be subject to a regular third-party audit.

⁽¹⁾ <http://www.whiteroseccs.co.uk/>

⁽²⁾ <http://infrastructure.planningportal.gov.uk/projects/yorkshire-and-the-humber/white-rose-carbon-capture-and-storage-project/?ipcsection=overview>

CPL is committed to the highest standards of environmental performance for the Project. CPL are developing high level procedures for environmental and health and safety (EHS) matters during construction (these to be reviewed and agreed with Alstom and will include the overarching Construction Environmental Management Plan (CEMP)) but it will be Alstom (as lead contractor) who drafts the detailed procedures (including the detailed CEMP) for agreement with CPL. During construction, Alstom will manage, monitor and audit the contractors and CPL will ensure that Alstom adhere to their own procedures and, through that, to CPL's procedures. CPL will employ an EHS Manager who will represent CPL's EHS interests on the site but the day-to-day EHS management will be with Alstom. Incidents will be investigated by contractors and/or Alstom and/or CPL depending on severity.

The CEMP will set out measures demonstrating how the construction contractor will deliver the commitments contained in the Environmental Statement (ES) and fulfil the requirements of the DCO.

1.4 *KEY PROJECT COMPONENTS*

The Project has been developed to demonstrate oxy-fuel CCS technology installed on a modern, state-of-the-art, ultra-supercritical coal fired power plant with the ability to co-fire biomass. It includes the following main components:

- Oxy-fuel boiler, steam turbine generator and other power block components;
- Air Separation Units (ASU) which separate oxygen from air, considerably reducing the content of nitrogen entering the boiler, and in turn resulting in a CO₂ rich flue gas (the oxy-fuel process) which can then be processed and captured;
- a flue gas cleaning system within the plant to reduce atmospheric pollutants arising from combustion; and
- a Gas Processing Unit (GPU) to process and compress the flue gas to achieve the required storage CO₂ specifications and pressure.

The Project will also include the following:

- ancillary plant, equipment and buildings;

- internal roads plus car and heavy goods vehicle (HGV) parking;
- security fencing;
- site raising to levels agreed with the Environment Agency (EA) to provide flood protection to essential site infrastructure;
- landscaping within the site boundary;
- connection to the electricity grid infrastructure;
- connection terminal point within the site boundary for the CO₂ pipeline;
- inter-connections with the existing Drax Power Station for water, fuel transport, and other ancillary fuels / materials;
- surface water management systems and foul drainage provision; and
- lighting.

1.5 *PURPOSE OF THE CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN*

The purpose of the CEMP is:

- to provide a mechanism for ensuring that measures to mitigate potentially adverse environmental impacts are implemented;
- to ensure that standards of good construction practice are adopted throughout the Project;
- to provide a framework for mitigating impacts that may be unforeseen or unidentified until construction is underway;
- to provide assurance to third parties that their requirements with respect to environmental performance will be met; and
- to provide a framework for compliance auditing and inspection to enable CPL to be assured that its aims with respect to environmental performance during construction are being met by the EPC contractor.

This Framework CEMP contains a strategic level of detail and is in draft form. It will be further developed prior to commencement of works on site in

collaboration with the EPC contractor, who will have to demonstrate how it will comply with these requirements as part of the tendering process.

The CEMP will be iteratively developed as the Project proceeds through the detailed design and construction phases, to reflect the results of any discussions with regulators and consultees and to include details of the requirements imposed by permissions and consents obtained.

1.6 *STRUCTURE OF THE DOCUMENT*

The remainder of this document is structured as follows:

- *Section 2* describes the general principles of the CEMP.
- *Section 3* describes CPL's policy on environmental management, as well as the legislation and codes of practice relevant to the Project.
- *Section 4* describes the roles and responsibilities of the various parties involved, including communications, training, monitoring, inspection and auditing.
- *Section 5* gives an overview of the management plans that will be developed by the EPC contractor and that all works will be required to comply with.

2 *GENERAL PRINCIPLES OF THE CEMP*

2.1 *INTRODUCTION*

The CEMP will be implemented through the designation of key roles and responsibilities for environmental management (*Section 4*) and a series of issue or activity-specific management plans that include statements of environmental requirements and commitments (*Section 5*). These will be developed in accordance with the underlying principles of good environmental management set out below and will be further developed in consultation with key stakeholders throughout the permitting and development process for the Project.

2.2 *DESIGN AND CONSTRUCTION PRINCIPLES*

The Project has been designed to date to ensure that its impacts can be minimised and this approach will continue through the remainder of the design process. This includes mitigation that is embedded into the design of the Project through the use of industry standard methods and procedures. The Project will be managed in line with the following design and construction principles.

- The Project will be constructed and operated with due regard to environmental and anthropogenic sensitivities within and adjoining the Project site and along access routes.
- Project-related installations will be designed, constructed, operated, and maintained in line with current best practice and to meet all relevant design and safety parameters.
- The Project site will be designed, constructed and operated to facilitate safe access to all areas that will require environmental monitoring.

2.3 *HEALTH AND SAFETY PRINCIPLES*

The safe operations and behaviours of the on-site workforce and contractors during construction are a priority for CPL. The key principles of the CEMP that will contribute to a safe Project site are as follows.

- CPL will fulfil its obligations as Client under the CDM Regulations.

- Health and Safety awareness training will be mandatory for all on-site workers and contractors.
- The Project EHS manager will have authority over the work of all contractors with to regard to health and safety issues.
- CPL will ensure provision of adequate health and safety facilities for the Project workforce.
- CPL will ensure provision of appropriate signage across the Project site regarding the safe behaviours and procedures required.
- Industry standards for health and safety will be applied across the Project site and CPL will seek continuous improvement in health and safety performance.

The CEMP will also:

- define 'set to work' procedures;
- define the process of site inductions and how Method Statements are developed; and
- define how refresher training, learning points, toolbox talks etc are provided.

2.4 ENVIRONMENTAL MANAGEMENT PRINCIPLES

Environmental management issues throughout the life of the Project, including detailed design through to completion, will be governed or guided by a number of 'standards', including:

- those contained in legislation;
- those established by industry codes of practice;
- those required by CPL's environmental policy; and
- commitments made in the DCO, during consultation and measures and conditions / requirements set out in any associated permissions or consents granted.

The project will be managed in line with the following environmental management principles.

- CPL will work and adhere to an Environmental Management System.
- Contractors tendering for construction contracts will be required to provide evidence of a management system that corresponds to the environmental performance requirements of CPL's management system.
- The Project EHS manager will have authority over the work of all contractors with regard to environmental management issue

2.5

COMMUNITY LIAISON

Ensuring that the local community is appropriately and accurately informed about the Project and its construction activities is a priority for CPL. The key principles of the CEMP that will ensure good relationships between CPL and the local community are as follows:

- CPL will have a *Stakeholder Communications Plan* that will notify and inform local residents of planned works, particularly where works extend beyond normal working hours.
- Information regarding the Project will be available to the general public via the CPL website, including information regarding the construction schedule and a helpline telephone number for public use for fielding enquires.
- CPL will have a system for recording and responding to complaints regarding the Project.

3 COMPANY POLICY AND LEGISLATION

3.1 GENERAL CONSIDERATIONS

CPL and its contractors will conduct their activities in such a way as to give full consideration to the health and safety of their employees and any affected persons, and give due regard to the conservation of the environment, in line with relevant EU Directives, UK legislation, government guidance, industry Codes of Practice, and CPL policy.

3.2 COMPANY POLICY

CPL is a consortium of three well established companies, each with its own environmental management system (EMS). It is probable that Drax Power Ltd will include the operation of the Project (once constructed) within its existing EMS and Environmental Permit. Drax Power Limited's EMS ⁽¹⁾ is ISO 14001:2004 certified (verified as certified up to 31 October 2016).

The Environmental Policy of Drax Power Limited is provided in *Figure 3.1*.

3.3 LEGISLATION, STANDARDS AND CODES OF PRACTICE

This section outlines the European Directives, UK legislation, government guidelines, industry standards and codes of practice relevant to the construction and operation of the Project. The list provided in *Table 3.1* is intended to highlight the key considerations and should not be considered as exhaustive. It will be the contractor's responsibility to put in place measures to comply with all relevant legislation, standards and codes of practice, as well as with the commitments made in the ES and with DCO requirements that are relevant to construction activities.

⁽¹⁾ EMS for the generation of electricity by the combustions of coal, oil and renewable fuels, incorporating flue gas desulphurisation, the disposal or sale of ash and gypsum, and the production of biomass fuel pellets.

Figure 3.1 *Drax Power Limited's Environmental Policy*

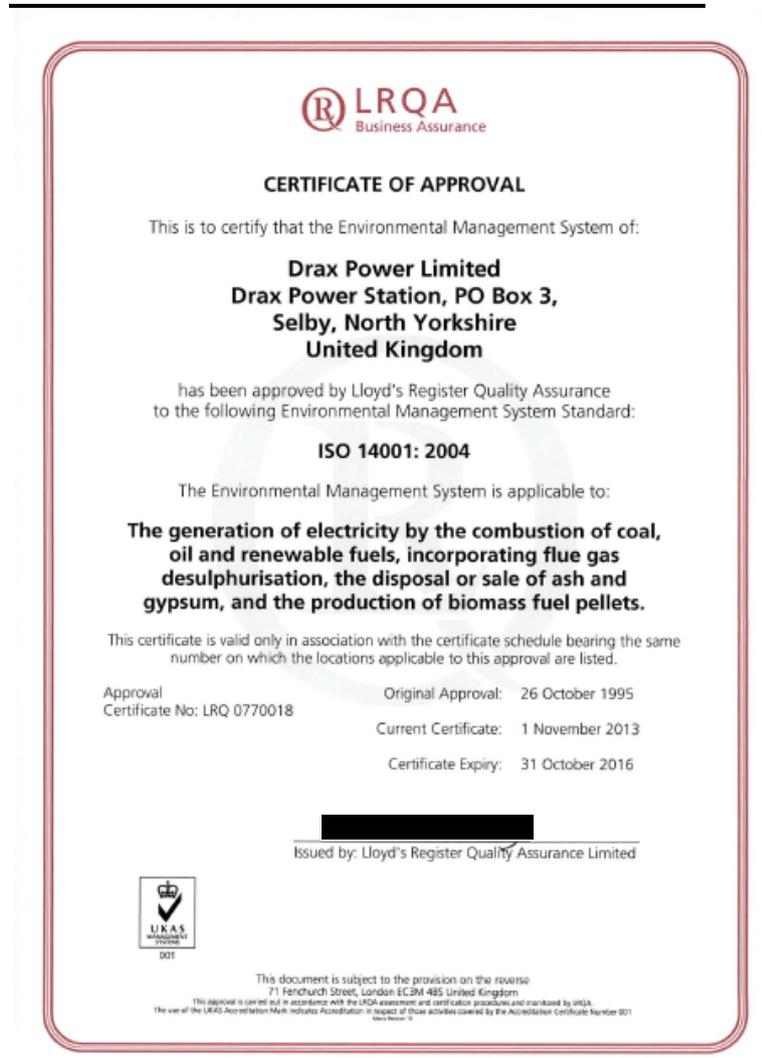


Table 3.1 *Key Legislation, Standards, and Codes of Practice*

Environmental Topic	Key EU Directives, UK Legislation, Codes of Practice and Guidelines	Relevance to the Project
Air Quality	Directive on Industrial Emissions (2010/75/EU)	Sets emission limits for coal fired power stations as well as other industrial facilities
	Environmental Protection Act 1990	Creates the main regulatory controls over 'statutory nuisance' including smoke, fumes, gases, dust, steam, smells or other effluvia arising on industrial premises so as to be prejudicial to health or a nuisance.
	Clean Air Act 1993	Regulates smoke emissions e.g. from on-site burning of waste.
	Air Quality Standards Regulations 2010	Sets ambient air quality standards for particulate matter (PM ₁₀).
	Environment Act 1995	Requires local authorities to periodically review and assess air quality And develop Air Quality Management Plans.
	Air Quality Strategy for England, Wales, Scotland and Northern Ireland 2007	Implements the Air Quality Standards Regulations 2010.
	Department of the Environment, Food and Rural Affairs, Expert Panel on Air Quality Standards	Air Quality Standards Guidelines developed by the Defra Expert Panel on Air Quality Standards.
	The Environment Agency for England and Wales (2010) Horizontal Guidance Note H1: Annex F	Guidelines derived from UK occupational exposure standards and from the World Health Organization, as presented in the Environment Agency's Guidance Note H1.
	Institute of Air Quality Management Guidance on the Assessment of Dust from Demolition and Construction (2014)	Guidance for developers, their consultants and environmental health practitioners on how to undertake a construction impact assessment.
	Institute of Air Quality Management Guidance on Air Quality Monitoring in the Vicinity of Demolition and Construction Sites (2012)	Best practice recommendations for approaches to monitoring dust.
	Guidance on the Assessment of the Impacts of Construction on Air Quality and the Determination of their Significance (IAQM, 2012)	
Noise and Vibration	EU Directive 2002/49/EC relating to the assessment and management of environmental noise	Defines a common approach to avoiding, preventing and reducing harmful effects from exposure to environmental noise.
	Environmental Noise (England) Regulations 2006 (as amended)	Transposes EU Directive 2002/498/EC into UK law.
	Control of Pollution Act 1974 (Part III)	Gives local authorities the power to impose requirements on how construction works are carried out, particularly in relation to noise and vibration.

Environmental Topic	Key EU Directives, UK Legislation, Codes of Practice and Guidelines	Relevance to the Project
	Environmental Protection Act 1990 (ss.79-82) (as amended by the Noise and Statutory Nuisance Act 1993).	Provides controls over 'statutory nuisance' including noise emitted from premises so as to be prejudicial to health or a nuisance. The amendment through the Noise and Statutory Nuisance Act 1993 applies the controls to nuisances arising from vehicles, machinery, and other equipment.
	British Standard 5228: Noise Control on Construction Sites and Open Sites (BSI 2009)	Recognised by Statutory Order as the accepted guidance for noise control during construction work.
	Noise Act 1996 (as amended)	Controls night-time noise, giving local authorities the power to prosecute and confiscate any noise-making equipment.
	Guidelines for Environmental Noise Impact Assessment, Institute of Environmental Management and Assessment (2014)	Core principles for the assessment of impacts of development proposals
Water Quality	EU Directive 2000/60/EC (the Water Framework Directive)	Commits European Union member states to achieve good qualitative and quantitative status of all water bodies by 2015.
	The Water Environment (Water Framework Directive) (England and Wales) Regulations 2003	Transposes the Water Framework Directive into UK law.
	EU Directive 2008/105/EC (the Priority Substances Directive)	Aims to phase out of discharges, emissions and losses of hazardous substances listed in the Directive.
	EU Directive 2007/60/EC on the Assessment and Management of Flood Risks (the Floods Directive)	Requires member states to assess the risk of water courses and coast lines within their territory, map the flood extent as well as assets and the population at risk within these areas, and to take adequate and coordinated measures to reduce this flood risk.
	Water Act 2014	Part 3 of the Water Act 2014 focuses on the environmental permitting regime relating to water abstraction and pollution prevention and control, enabling operators to apply for a single rather than multiple permits.

Environmental Topic	Key EU Directives, UK Legislation, Codes of Practice and Guidelines	Relevance to the Project
	Water Resources Act 1991 (as amended) Section 85	<p>Makes it an offence to discharge poisonous, noxious or polluting material, into any 'controlled waters', either deliberately or accidentally. Polluting materials include silt, cement, concrete, oil, petroleum spirit, sewage or other debris and waste materials.</p> <p>'Controlled waters' include all watercourses and water contained in underground strata. Road drains and surface water gullies generally discharge into controlled waters and should be treated as such.</p> <p>It is an offence to discharge trade effluent to the public sewer or to a sewage treatment works without the consent of the Water Authority.</p>
	Environmental Protection Act 1990	It is a statutory nuisance to cause a watercourse to be so foul or obstructed that it is prejudicial to health or a nuisance.
	Environmental Permitting (England and Wales) Regulations 2010	Permitting regime for discharges to controlled waters. There is a 2013 draft amendment (Environmental Permitting (England and Wales) Regulations 2013) to these Regulations that has not yet been made as a UK Statutory Instrument that will be intended to transpose Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control).
	Salmon and Freshwater Fisheries Act 1975 (as amended)	Makes it an offence to discharge effluent which damages fish, their food or their spawning ground, into water containing fish.
	British Standard Code of Practice for Earthworks BS 6031:2009	Detailed methods for controlling drainage from construction sites.
Geology, Hydrology and Contamination	EU Directive 2000/60/EC (the Water Framework Directive)	Commits European Union member states to achieve good qualitative and quantitative status of all water bodies including ground waters by 2015. The primary requirement is that groundwater is protected at least to the same level as that required by the Groundwater Directive (see below).

Environmental Topic	Key EU Directives, UK Legislation, Codes of Practice and Guidelines	Relevance to the Project
	EU Directive 2006/118/EC (the Groundwater Daughter Directive, which superseded the previous Groundwater Directive 80/68/EEC)	Transposed into UK law through the Environmental Permitting (England and Wales) Regulations 2010; Section 161A WRA 1991 and Anti-Pollution Works Regulations 1999 (works notices); Section 93 WRA 1991 (Water Protection Zones); Part 2A EPA 1990 and associated regulations.
	EU Directive 2007/EC on the assessment and management of flood risks	Establishes flood risk management plans.
Public Rights of Way	Countryside and Rights of Way Act, 2000	Makes provision for public access to the countryside, amends laws relating to public rights of way and establishes traffic orders.
	Highways Act 1980	Prevents 'wilful obstruction' of highways (including footpaths and bridleways) without lawful authority.
	Town and Country Planning Act 1990	Protects public rights of way from obstruction, diversion, damage and closure.
Waste	EU Directive (2008/98/EC) (the revised Waste Framework Directive)	Defines waste throughout the EU and provides the legislative framework for all aspects of waste handling.
	EC Council Directive 91/689/EEC (the Hazardous Waste Directive)	Commits member states to the controlled management of hazardous wastes as identified by the Directive.
	The Waste (England and Wales) (Amendment) Regulations 2012 (amending the Waste Regulations 2011)	Revised requirements for collection, recovery and transport of waste and requirement of businesses to demonstrate that they have followed the waste hierarchy.
	Special Waste Regulations (Amendment) (Wales) Regulations 2001	Implements the Hazardous Waste Directive into UK law.
	Hazardous Waste (England and Wales) Regulations 2005 (as amended)	Defines hazardous waste and require producers to register annually if quantity is greater than 500 kg/year.
	Environmental Protection Act 1990 (Part II)	applies to 'controlled waste', comprising both hazardous and non-hazardous waste.
	Special Waste Regulations 1996 (as amended)	Defines special waste.
	The Waste Management (England & Wales) Regulations 2006 (as amended),	Provisions for the controlled management of hazardous waste from the point of production to the final point of disposal or recovery.
	Waste Management Licensing Regulations 1995 (as amended)	Dictates the licensing requirements applicable to the management of waste (directly to the licensing of a site or activity) and it's, processing and disposal.

Environmental Topic	Key EU Directives, UK Legislation, Codes of Practice and Guidelines	Relevance to the Project
	Environmental Protection Act 1990, Section 34.	Sets out duty of care provisions.
	Environmental Protection (Duty of Care) Regulations 1991 (as amended)	Places a duty of care on waste producers to ensure that waste is handled correctly
	Waste Management, the Duty of Care, A Code of Practice as issued by the Defra.	This code of practice is imposed by the Environmental Protection Act 1990. The duty applies to any person who produces, imports, carries, keeps, treats or disposes of controlled waste and breach of the duty of care is an offence.
	Site Waste Management Plans Regulations 2008	Although revoked in December 2013, these regulations nonetheless provide useful guidance for the development of <i>Site Waste Management Plan</i> .
	Control of Pollution (Amendment) Act 1989	Makes it an offence to transport controlled waste unless registered with the Environment Agency.
Archaeology and Cultural Heritage	Ancient Monuments and Archaeological Areas Act 1979	Offers legal protection to designated heritage assets.
	Planning (Listed Buildings & Conservation Areas) Act 1990	Provision for the listing of buildings recognised by English Heritage for their special architectural or historic interest.
	Planning Policy Statement : Planning for the Historic Environment Practice Guide (PPS5), 2012	Sets out government objectives for planning for the historic environment, and provides guidance on the application of policy including the management of heritage assets and significance in planning.
Landscape and Visual	European Landscape Convention (2000)	Commits member states to implement national policies and measures relating to the consideration of landscape in planning.
Ecology	EC Council Directive 2009/147/EC on the Conservation of Wild Birds(the 'Birds Directive')	Provides a framework for the conservation and management of wild birds in Europe and provides for the identification and classification of Special Protection Areas (SPAs).
	EC Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (The 'Habitats Directive')	Promotes biodiversity by requiring member states to designate of Special Areas of Conservation (SAC).
	Conservation of Habitats and Species Regulations 2010 (as amended)	Transposes the Habitats Directive into UK law.
	Wildlife and Countryside Act 1981 (as amended)	Offers protection to specified animals and plants including Great Crested Newts, reptiles and Water Voles.
	The Countryside and Rights of Way Act 2000	Access to Open Country, Public Rights of Way, Nature Conservation and Areas of Outstanding Natural Beauty.

Environmental Topic	Key EU Directives, UK Legislation, Codes of Practice and Guidelines	Relevance to the Project
	The Natural Environment and Rural Communities Act 2006	Implements key elements of the Government's Rural Strategy (published July 2004), the UK Biodiversity Action Plans.
	Protection of Badgers Act 1992	Makes it an offence to kill or injure a badger or to interfere with badgers' sets.
	Hedgerow Regulations 1997	Protects 'important' hedgerows in England and Wales from removal and replacement.
	Nationally Significant Infrastructure Projects and Protected Species Licencing Guidance	A full draft mitigation licence application must be made in advance of the formal submission to the PINS where protected species are identified on site and for which a licence application is considered necessary.

4 *ROLES, RESPONSIBILITIES AND REPORTING*

4.1 *ENVIRONMENTAL MANAGEMENT ROLE OF CPL*

As the developer of the Project, CPL will have responsibility for:

- ensuring the dissemination of information to the workforce and contractors regarding required operations and behaviours;
- monitoring the performance of contractors;
- development of mechanisms for resolving problems;
- acting as the point of contact for consultation and feedback with landowners, statutory consultees, the public and other interested parties; and
- the overall environmental management and performance of the Project.

In order to achieve this, CPL will appoint an Environment, Health and Safety (EHS) manager who will be independent of any of the contractors involved in the construction and will be competent to undertake the environmental management of the Project. The EHS manager will be supported by an environmental auditor and a Project ecologist and Project archaeologist who will undertake regular audits of the contractor on behalf of CPL.

4.2 *ENVIRONMENTAL MANAGEMENT ROLE OF THE CONTRACTOR*

The Project will be constructed under a contract covering engineering, procurement, construction, and commissioning services. In addition to statutory obligations, the EPC contractor will be obliged to adopt the environmental working practices operated by CPL, which will apply to all works relating to the Project.

All contractors are responsible for their own contribution to environmental performance and are responsible for ensuring compliance with:

- all relevant legislation and codes of practice;
- the environmental controls and mitigation measures in the CEMP;

- all consent requirements relating to the Project and associated permissions, permits and licences; and
- any environmental or other codes of conduct required by CPL.

Contractors will be required to undertake regular environmental inspections and reporting to enable CPL to monitor and evaluate performance.

Contractors will need to demonstrate to CPL's satisfaction how they will ensure that the requirements of the CEMP are being complied with. Contractors will also be required to demonstrate commitment to the CEMP. The performance of contractors in complying with the CEMP will be monitored and audited by CPL.

Compliance and non-compliance (established during audits) with the provisions of the CEMP will be recorded by the CPL Project team and records will be held in the site office and available for inspection. The EHS manager will be empowered to stop the works if he is of the opinion that the provisions of the CEMP are not being met.

4.3 *EXTERNAL COMMUNICATIONS*

CPL will be responsible for formal external communications, particularly those with regulators, consultees and the public. This includes all consultation processes, events and communications, and the provision of adequate complaints and grievance mechanisms. Contractors may be required to attend meetings with regulators, consultees and the public as appropriate, but always in the presence of a CPL representative.

4.4 *TRAINING*

CPL will establish procedures to ensure the awareness of all its employees regarding the following:

- their roles and responsibilities in achieving compliance with the Environmental Policy and the requirements of the CEMP;
- the potential environmental effects of their work activities and the environmental benefits of improved performance; and
- the potential consequences of departure from agreed operating procedures.

CPL will provide appropriate environmental awareness training for all personnel whose work may have a significant effect upon the environment. All personnel performing specific assigned tasks with significant environmental effects are qualified on the basis of appropriate education, training or experience, as required. The categories of staff whose work has a significant effect on the environment will be identified during the management plan development process. However, all staff will have some basic level of awareness briefing.

4.5 *ENVIRONMENTAL MONITORING DURING CONSTRUCTION*

Monitoring of the environmental effects of construction will enable the effectiveness of environmental mitigation to be evaluated. It will also allow environmental problems to be identified and responded to at an early stage.

CPL will ensure that an appropriate programme of environmental monitoring is implemented and that the Project is built in accordance with the provisions of the CEMP and identify and implement any environmental improvements which contribute to the overall environmental performance.

Typical Project activities that will require environmental monitoring during (and in some cases, following) construction will include (but not be limited to):

- site clearance, monitoring for potential effects on sensitive habitats or protected species;
- earthworks and excavations, monitoring for potential contamination to be present in excavated soils;
- earthworks and general construction activities, monitoring for the generation of airborne dust;
- dewatering of excavations, monitoring for the quality of water discharges or sediment laden runoff;
- construction site drainage performance including surface water management and foul drainage provision, monitoring for the quality of water discharges;
- use of vehicles and plant, monitoring of noise and gaseous emissions to atmosphere;

- excavation, soil deposition and landscaping – monitoring of the condition and treatment of areas for excavation, spoil deposition and landscaping;
- traffic movements, monitoring of traffic volumes and flows to and from the site on public highways;
- waste management, monitoring of correct waste handling, storage, and removal procedures including the correct documentation of waste carriage;
- interconnections with the existing Drax Power Station for water, fuel transport, and other ancillary fuels / materials, monitoring of fuel and oil storage and fuelling activities and facilities and with attendant environmental controls to be agreed with an environmental auditor.; and
- site lighting, monitoring to ensure that any required lighting is suitably cowed and not directed onto environmental sensitive areas.

4.6 *INSPECTION AND AUDITING*

Contractors will be required to undertake a programme of environmental inspections and audits appropriate to their scope of work, and to demonstrate that their responsibilities under the CEMP are being fulfilled. In addition, CPL will carry out periodic environmental audits of the contractor, as appropriate, to verify compliance with the CEMP.

Accidents/incidents will be investigated and reviewed by the EPC Contractor's EHS Manager and/or CPL's EHS Manager as appropriate.

4.7 *CONTINGENCY PLANNING FOR EMERGENCIES AND ENVIRONMENTAL INCIDENTS*

Procedures to deal with emergencies and incidents will be set out in a specific site emergency response plan. Environmental incidents can be defined as unexpected events which lead to, or could in different circumstances have led to, adverse effects on people, property or on environmental resources such as natural habitats or watercourses.

Emergency response protocols will be detailed in CPL's site management procedures. All of the works associated with the Project will be conducted in accordance with Project-specific risk assessments and method statements, to be prepared by the contractor, and agreed in advance with CPL.

Responsibility for the site emergency Response procedures will lie with the HSE Manager (or similar). Accidents will be investigated and reviewed by the Safety Manager and Health, Safety and Environment Officer.

5 MANAGEMENT PLANS

5.1 INTRODUCTION

The Environmental Statement (ES) has identified environmental receptors, significant residual effects, and proposed mitigation measures. This information will form the basis of an Environmental Aspects and Impacts Register (or similar) that will be presented as an integral part of the CEMP.

The CEMP will be the vehicle for the delivery of the mitigation measures set out in the ES. Composed of a series of issue or activity-specific management plans, the CEMP will develop the commitments made in the ES into detailed site-wide environmental management requirements and procedures that are designed to ensure compliance with the consent requirements and conditions agreed for the Project.

The EPC contractor will be responsible for developing detailed Procedures and Methods Statements to manage and control all of the aspects and impacts identified. Contractors will be required to demonstrate the use of Best Practicable Means as defined in the Environmental Protection Act 1990, to prevent 'statutory nuisances' from occurring and be required to comply with any conditions imposed during the consenting process.

5.2 ISSUE/ACTIVITY SPECIFIC MANAGEMENT PLANS

The CEMP is likely to include (but not be limited to) the following issue or activity-specific management plans.

Design and construction management plans:

- *General Site Operation Plan; and*
- *Contractor Management Plan.*

Health and safety management plans:

- *Health and Safety Plan; and*
- *Site Emergency Response Plan.*

Environmental management plans:

- *Air Quality and Dust Management Plan;*
- *Noise and Vibration Management and Monitoring Plan;*

- *Surface and Ground Water Management Plan;*
- *Soil Management Plan;*
- *Site Waste Management Plan;*
- *Traffic Management Plan;*
- *Archaeological Management Plan;*
- *Biodiversity Management Plan; and*
- *Stakeholder Communications Plan.*

5.3 **KEY ELEMENTS OF THE MANAGEMENT PLANS**

Each management plan will include the following key elements:

- definition of roles and responsibilities;
- description of activity based triggers for implementation of mitigation measures with cost estimates where applicable;
- clear monitoring, inspection and auditing plans including the designation of person(s) responsible;
- evidence of implementation and maintenance of the plan such as the reporting of monitoring results (as applicable) compared to relevant standards;
- description of measurable performance indicators against which monitoring results can be compared;
- defined inductions, training, and capacity-building for those responsible and a roll-out plan of systematic staff and contractor training;
- provision for the review of training packages and training attendance.
- provision for recording that all relevant subcontractors and employees have reviewed the CEMP and relevant policies;
- provision for receiving, reporting and resolving complaints and grievances; and
- provision for plan to be maintained up to date and relevant.