Southampton to London Pipeline Project

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Environmental Statement (Volume D)
Appendix 16.2: Outline Construction Environmental Management Plan

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Southampton to London Pipeline Project

Esso Petroleum Company, Limited

Appendix 16.2: Outline Construction Environmental Management Plan

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Contents

Acronyms ..... **ii**
1 Introduction **1**
1.1 Overview 1
1.2 Purpose of the Construction Environmental Management Plan 1
2 Project Team Roles and Responsibilities **4**
2.1 Environmental Management Systems 4
2.2 Project Responsibilities 4
2.3 Information Training and Awareness 5
2.4 Emergency Procedures 5
2.5 Reporting 6
2.6 Complaints Procedure 6
3 Consents and Permissions **7**
3.1 Regulations 7
3.2 Consents, Permits and Licences 7
Annex A – Emergency Action Plan **8**
Annex B – Erosion and Sediment Control Plan **9**
Annex C – Water Mitigation and Management Measures **10**
Annex D – Site Waste Management Plan **11**
Annex E – Soil Management Plan **12**
Annex F – Community Engagement Plan **13**
Annex G – Dust Management Plan **14**
Annex H – Noise and Vibration Management Plan **15**
Annex I - Arboricultural Management Plan **16**
Annex J – Methodologies **17**

Acronyms

Acronym	Definition
BPM	Best Practicable Means
CEMP	Construction Environmental Management Plan
CoCP	Code of Construction Practice
CoPA	Control of Pollution Act
DCO	Development Consent Order
ES	Environmental Statement
PIG	Pipeline Inspection Gauge
REAC	Register of Environmental Actions and Commitments
SEP	Suitably Experienced Person
SWMP	Site Waste Management Plan

1 Introduction

1.1 Overview

1.1.1 Esso Petroleum Company, Limited (Esso) is making an application for development consent to replace 90km (56 miles) of an existing pipeline to transport aviation fuel between Boorley Green in Hampshire and the Esso West London Terminal storage facility in Hounslow. The replacement pipeline is 97km long taking into account that it cannot follow the line of the existing pipeline along its whole length due to new developments and environmental constraints.

1.1.2 Esso has already replaced 10km of pipeline between Hamble and Boorley Green in Hampshire. The replacement pipeline starts near Boorley Green at the end point of the previously replaced pipeline. The route runs generally in a northeast direction via Esso's Pumping Station in Alton. It terminates at the Esso West London Terminal storage facility. The areas of land to be permanently or temporarily used for the project are known as the Order Limits.

1.1.3 The route and Order Limits are broken down into eight separate sections:

- Section A – Boorley Green to Bramdean;
- Section B – Bramdean to South of Alton;
- Section C – South of Alton to Crondall;
- Section D – Crondall to Farnborough;
- Section E – Farnborough to Bisley and Pirbright Ranges;
- Section F – Bisley and Pirbright Ranges to M25;
- Section G – M25 to M3; and
- Section H – M3 to the West London Terminal storage facility.

1.1.4 This outline Construction Environmental Management Plan (CEMP) has been produced to support the application for development consent under the Planning Act 2008.

1.2 Purpose of the Construction Environmental Management Plan

1.2.1 A CEMP provides a consistent approach to the control of construction activities for a project. No stage of the authorised development would commence until a CEMP relating to that stage has been submitted to and approved by the relevant planning authority.

1.2.2 When completed, the CEMP would allocate responsible persons, indicators for completion, and site-specific control measures for where and when the measures would apply for environmental actions and commitments.

1.2.3 The CEMP would contain several 'daughter' documents, typically environmental plans such as the dust management plan. It is intended that such plans would be included in Annexes to the CEMP. Example Annexes A to J are presented at the end of this CEMP.

1.2.4 The outline CEMP is incomplete as it stands and is a template for the actual CEMP. Under requirement 6 of the draft Development Consent Order (DCO), the CEMP must be:

- substantially in accordance with the outline CEMP, reflect the relevant mitigation measures set out in the REAC;
- contain a record of all sensitive environmental features that have the potential to be affected by the construction of the authorised development;
- contain details of local community liaison responsibilities; and
- include any additional management plans.

1.2.5 The CEMP would be submitted to and approved by the relevant planning authorities, in compliance with Requirement 6 of the draft DCO.

1.2.6 Esso and its supply chain of contractor(s) would adopt the control measures set out in the CEMP when undertaking the construction of the pipeline and ancillary works.

Construction Schedule

1.2.7 Works to install and commission the pipeline are expected to start from grant of DCO and be completed by early 2023. Certain advance works may take place prior to development consent where consented under alternative regimes, for example, the Town and Country Planning Act 1990.

1.2.8 A programme of ongoing community and consultee engagement would be included in Annex F Community Engagement Plan.

Construction Phase

1.2.9 Prior to the main construction works, several activities would be completed such as pre-construction surveys and archaeological trial trenching. The contractor(s) would produce a list of relevant pre-construction works with a schedule for their completion. Examples of enabling works phase activities are presented within the Code of Construction Practise (CoCP) (Appendix 16.1 within the Environmental Statement (ES)).

1.2.10 The contractor(s) would produce a list of activities required for each stage of installation of the pipeline with a schedule for their completion.

Post Installation Phase Activities

1.2.11 On completion of the installation works the contractor would hydrotest the pipeline and land used temporarily would be reinstated to an appropriate condition relevant to its previous use (G94). Any post-construction monitoring required would be carried out.

Construction of Above Ground Infrastructure

1.2.12 The contractor(s) would produce a complete list of activities required for the construction of the new pigging station at Boorley Green and replacement pump at Alton. Examples of these activities are presented within the CoCP (Appendix 16.1 within the ES).

2 Project Team Roles and Responsibilities

2.1 Environmental Management Systems

2.1.1 The contractor(s) would outline their environmental management systems here. For example, adherence to ISO 14001.

2.2 Project Responsibilities

2.2.1 The project would incorporate the embedded design measures, environmental good practice measures and mitigation measures committed to by Esso within the draft DCO. These are found in full within Chapter 16 Environmental Management and Mitigation and the draft DCO.

2.2.2 As part of the CEMP, the contractor(s) would be required to plan their works in advance to integrate the embedded design measures and agreed mitigation into the construction methods.

2.2.3 Procedures for monitoring construction processes against the project environmental measures would be proposed by the contractor(s) and agreed as outlined within Chapter 16 Environmental Management and Mitigation, within the ES. Specific individuals and their roles would be identified, as well as, control measures, training procedures, monitoring systems and emergency procedures to be employed throughout the different phases. Additional Suitably Experienced Persons that would be required on site in support roles for the Environmental Clerk of Works would be identified for each stage and their roles defined.

2.2.4 The contractor(s) organisational structure and the individual responsibilities for implementation of the measures at each stage of the project would be detailed in this section. The contractor(s) would also include a reporting structure for responsible staff for regular activities and for emergency procedures. An example layout of this chapter is provided here.

2.2.5 Overall roles and responsibilities for the project would be presented in Table 2.1. Examples have been provided for illustration.

Table 2.1: Overall Roles and Responsibilities (*Illustration only*)

Roles	Responsibilities
Environmental Manager	*Protected species licensing*
Environmental Clerk of Works	*Noise and vibration monitoring*
Archaeological contractor	*Trial trenching*
Design engineer	*Siting of environmental barriers*

Roles	Responsibilities

2.2.6 In addition, there may be specific roles and responsibilities within each phase of the project.

2.2.7 Main roles and responsibilities for specific phases would be presented in Table 2.2. This could include: pre-construction surveys; preparation of plans such as the Noise and Vibration Management Plan or application for specific discharge consents.

Table 2.2: Key Roles and Responsibilities During Specific Phases (*Illustration only*).

Roles	Responsibilities	Relevant Phase
Environmental Clerk of Works	*Pre-construction surveys*	*Enabling phase*
Site Foreman	*Dewatering activities*	*Installation phase*
Environmental Manager	*Hydrostatic testing discharge consents*	*Post Installation phase*

2.3 Information Training and Awareness

2.3.1 Construction workers would undergo training to increase their awareness of environmental issues. Topics would include but not be limited to:

- dust management and control measures;
- location and protection of sensitive environmental sites and features;
- adherence to environmental buffer zones;
- noise reduction measures;
- working with potentially contaminated materials;
- flood risk response actions; and
- agreed traffic routes, access points etc. (G28)

2.3.2 Contractor(s) would propose a training programme for construction workers within this section.

2.4 Emergency Procedures

2.4.1 An Emergency Action Plan would be developed for the construction phase which would outline procedures to be implemented in case of unplanned events such as site flooding, pollution incident, disease outbreak etc (G179).

2.4.2 The contractor(s) would provide details here.

2.5 Reporting

2.5.1 The contractor(s) would develop a reporting structure to ensure that activities on site are monitored and that incidents are effectively actioned.

2.6 Complaints Procedure

2.6.1 The contractor(s) would develop produce a complaints procedure.

3 Consents and Permissions

3.1 Regulations

3.1.1 It would be the responsibility of the contractor(s) to ensure all licences, consents and permits are obtained within the relevant timescales. Key regulations potentially applicable to the site include but are not limited to:

- Control of Pollution Act 1974;
- Health and Safety at Work Act 1974;
- Wildlife and Countryside Act 1981;
- Environmental Protection Act 1990;
- Water Resources Act 1991;
- Environmental Protection (Duty of Care) Regulations 1991;
- Noise and Statutory Nuisance Act 1993;
- Environment Act 1995;
- Special Waste Regulations 1996;
- Countryside and Rights of Way Act 2000;
- Control of Pollution (Oil Storage) (England) Regulations 2001;
- Control of Substances Hazardous to Health Regulations 2002;
- Landfill Regulations 2002; and
- Waste (England and Wales) Regulations 2011.

3.2 Consents, Permits and Licences

3.2.1 The contractor(s)' would set up and maintain a register with details of consents, permits and licences required for the project including those which have been disapplied through the DCO process.

Annex A – Emergency Action Plan

A1.1.1 An Emergency Action Plan would be developed for the construction phase which would outline procedures to be implemented in case of unplanned events such as site flooding, pollution incident, disease outbreak etc (G179).

Annex B – Erosion and Sediment Control Plan

B1.1.1 An Erosion and Sediment Control Plan would be produced by the contractor prior to the start of the construction phase.

Annex C – Water Mitigation and Management Measures

C1.1.1 The CEMP would set out the water mitigation and management measures and where they would need to be used. These measures would include, but not be restricted to, the following:

- details of when dewatering would be likely;
- measures to segregate construction site runoff from natural catchment runoff;
- details of measures to attenuate runoff rates before discharging at controlled rates to receiving watercourses;
- design of any holding or settlement lagoons or other treatment system required prior to discharge to the environment;
- details of mitigation measures for all work or compound areas located within flood risk areas;
- where construction activities would be located, preferably outside of the floodplain; and
- details of any water abstraction and discharge points relating to the works. (G130)

Annex D – Site Waste Management Plan

D1.1.1 A Site Waste Management Plan (SWMP) would be developed prior to construction. The contractor(s) would maintain and monitor the SWMP throughout the construction phase and oversee that any sub-contractor(s) adhere to the SWMP (G77).

Annex E – Soil Management Plan

E1.1.1 The contractor(s) would produce a Soil Management Plan. In developing the plan, the contractor would take note of the principles within the guidance "Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (Department for Environment, Food and Rural Affairs, 2009)", and "Good Practice Guide for Handling Soils (Ministry of Agriculture, Fisheries and Food, 2000)". The Soil Management Plan would include, but not be limited to:

- specification of maximum storage periods, angles and heights of soil stockpiles;
- reference to published soil types;
- specification for where a soils watching brief may be required;
- controls on use of construction machinery in areas where soils have not been stripped; and
- specification of the role of the Suitably Experienced Person (G150).

E1.1.2 Where identified in the Soil Management Plan, a Suitably Experienced Person would be employed to oversee the management of soil during stripping, handling, storage and reinstatement (G148).

Annex F – Community Engagement Plan

F1.1.1 A proportionate Community Engagement Plan would be produced and implemented (G31).

Annex G – Dust Management Plan

G1.1.1 A dust management plan would be produced, including the following measures to be implemented where relevant:

- control runoff of water or mud to reduce the spread of particulates that could subsequently be disturbed and become airborne;
- return subsoil and topsoil at the earliest suitable time of year after construction has been completed;
- manage earthworks and exposed areas or soil stockpiles to prevent wind borne dust. Use methods such as covering, seeding or using water suppression;
- limit de-compaction of the sub-soil in windy conditions during reinstatement;
- construct compound access points to the public highway with temporary hard surfacing;
- enforce an appropriate speed limit for vehicles travelling on site to limit dust generation;
- make an adequate water supply available for effective dust/particulate matter suppression/mitigation;
- protect sand and other aggregates from drying out.
- limit drop heights when loading and unloading materials from vehicles including pipes and excavated materials;
- control the number of handling operations to ensure that dusty material is not moved or handled unnecessarily;
- where there is a risk of dust nuisance when using cutting, grinding or sawing equipment, use in conjunction with suitable dust suppression techniques;
- keep equipment readily available to clean any dry spillages;
- clean up spillages as soon as reasonably practicable after the event using wet cleaning methods;
- limit dry sweeping of large areas;
- no bonfires or the burning of waste materials;
- provide adequate wheel washing facilities at access points on to the public highway;
- deploy water assisted road cleaners on public roads when necessary to prevent excessive dust or mud deposits;
- sheet vehicle loads during the transportation of loose or potentially dusty material or spoil; and
- undertake inspections to monitor dust and record results in the inspection log. The frequency of inspections to be increased when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions. (G30)

Annex H – Noise and Vibration Management Plan

H1.1.1 The Noise and Vibration Management Plan would include the following details in relation to the project within the relevant local authority area:

- description of works pursuant to DCO;
- programme;
- plant noise and vibration data;
- receptors at risk of >1.0mm/s peak particle velocity and a protocol for providing prior warning and explanation;
- best practicable means (BPM) measures (as defined in Section 72 of CoPA 1974 for the control of noise and vibration);
- predicted noise and vibration levels; and
- BPM justification for short term higher noise/vibration levels or out of hours working and community communication details. (G100)

Annex I - Arboricultural Management Plan

I1.1.1 An arboricultural impact assessment would be undertaken to inform an arboricultural management plan.

I1.1.2 The contractor(s) would consider and apply, where practicable, the relevant protective principles set out in the National Joint Utilities Group Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees ('NJUG Volume 4' (2007)). This would be applied to trees within the Order Limits which would be preserved through the construction phase, and to trees outside of the Order Limits where such measures do not hinder or prevent the use of the relevant working width for construction. (G95)

I1.1.3 Working widths would be reduced in specific locations where trees or hedges are present. Where notable trees would be retained within or immediately adjacent to the Order Limits, the trees and their root protection areas would be protected where they extend within the Order Limits and are at risk. This would be by means of fencing or other measures. (G65)

I1.1.4 Works to notable trees, where at risk of damage, would be supervised by the ECoW.(G86)

Annex J – Methodologies

J1.1.1 The contractor(s) would provide a series of reviewed methodologies. The number of construction activities subjected to this process would be decided on a risk-based approach and could include site preparation, pipe-laying, trenchless crossings and reinstatement.

J1.1.2 Each methodology would include the measures that need to be undertaken to meet the requirements outlined in the CEMP. (G2)

J1.1.3 Where sensitive features are to be retained within or immediately adjacent to the Order Limits, an appropriate buffer zone would be created where this extends within the Order Limits. The buffers would be established using appropriate fencing and signage. Suitable methodologies would be produced to ensure that construction works are undertaken in a manner that reduces the risk of damage or disturbance to the sensitive feature (G40).

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