

# Southampton to London Pipeline Project

## Construction Environment Management Plan (CEMP)

Revision No. 1.0

June 2021

London Borough of Hounslow





## Contents

Acronyms and Abbreviations.....	ii
<b>1 Introduction.....</b>	<b>1</b>
1.1 Overview.....	1
1.2 Purpose of the Construction Environmental Management Plan .....	1
1.3 Structure of the Construction Environmental Management Plan .....	2
<b>2 Design and Construction.....</b>	<b>4</b>
2.1 Project Commitments .....	4
2.2 Construction Schedule .....	4
2.3 Environmental Pre-construction Surveys .....	5
2.4 Construction Phase Activities.....	6
2.5 Compounds .....	6
2.6 Working Hours.....	7
<b>3 Project Team Roles and Responsibilities.....</b>	<b>8</b>
3.1 Environmental Management Systems.....	8
3.2 Project Responsibilities .....	8
3.3 Site Checks and Reporting.....	9
3.4 Information Training and Awareness.....	10
3.5 Emergency Procedures .....	11
3.6 Reporting .....	11
3.7 Complaints Procedure.....	11
<b>4 Consents and Permits .....</b>	<b>12</b>
4.1 Consents, Permits and Licences.....	12



## Acronyms and Abbreviations

Acronym	Definition
CEMP	Construction Environmental Management Plan
CEP	Community Engagement Plan
CoCP	Code of Construction Practice
CTMP	Construction Traffic Management Plan
DCO	Development Consent Order
ECoW	Environmental Clerk of Works
EIA	Environmental Impact Assessment
ES	Environmental Statement
LEMP	Landscape and Ecological Management Plan
SANG	Suitable Alternative Natural Greenspace
SEP	Suitably Experienced Person



# 1 Introduction

## 1.1 Overview

- 1.1.1 Esso Petroleum Company, Limited (Esso) has been granted a Development Consent Order by the Secretary of State to replace 90km (56 miles) of an existing pipeline with 97km of new 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 project within this local authority area is broken down into 1 stage, based on geographical area. London Borough of Hounslow is host to 106m of the 97km pipeline route, all contained within Esso's West London Terminal storage facility. This Construction Environmental Management Plan (CEMP) applies to the section of works between (507 005E, 173 347N) and (507 126E, 173 380N) in the London Borough of Hounslow. This is shown on Sheet 13 in the Stages of the Authorised Development.
- 1.1.4 It is anticipated that works to install the pipeline will start in 2021 and be completed in 2023. The installation of the pipeline is planned to be completed within a two-year construction period. On completion of the installation works the contractor will hydrotest the pipeline and any post-construction monitoring required will be carried out.
- 1.1.5 The development authorised by the DCO must be undertaken in accordance with the CEMP pursuant to Requirement 6 of the DCO.

## 1.2 Purpose of the Construction Environmental Management Plan

- 1.2.1 An Environmental Impact Assessment (EIA) was carried out to assess the effects that the project, as presented within the application for development consent, would have on the environment. As part of this process, which included extensive stakeholder engagement, a number of commitments to good practice measures to be actioned during design and construction, were made. These were assumed to be part of the assessment process. In addition, mitigation measures were proposed and committed to, to offset any significant effects identified as part of the assessment.
- 1.2.2 The purpose of the CEMP and its appendices is to set out how environmental management will be undertaken during construction. The CEMP enables the



environmental commitments made within the Environmental Statement (ES) to be actioned within the project.

- 1.2.3 Esso will put in place robust procedures to inform and supervise all those working on the project including its supply chain of contractors, to make sure the control measures set out in the CEMP are adopted when undertaking the construction of the pipeline and ancillary works. The main responsibility for implementing these control measures will fall to Esso's Principal Contractor.
- 1.2.4 All operatives will be briefed by the Principal Contractor on the specific details within the CEMP prior to the commencement of works within London Borough of Hounslow. The briefings will be delivered by a suitably trained member of the team such as the site supervisor, Construction Manager, Environmental Manager or Environmental Clerk of Works (ECoW).
- 1.2.5 The project commitments and actions will be tracked during construction as outlined in Section 3: Roles and Responsibilities. No sensitive environmental features have been identified with the potential to be affected by the construction of the authorised development within London Borough of Hounslow.

### **1.3 Technical Variation**

- 1.3.1 By agreement with landowners and relevant regulatory bodies it may be necessary to amend the details contained in the CEMP and its supporting appendices as a result of the iterative discussion and engagement that will continue after the CEMP has been approved. The resulting technical variation would not alter any of the underlying commitments, mitigations and methodologies set out in the CEMP. An example may be preconstruction surveys identify that a measure already committed to is no longer required in the Construction Environmental Management Plan.
- 1.3.2 Where there is a proposed technical variation, Esso will provide details to the Relevant Planning Authority together with evidence of relevant stakeholder approval whereupon, the Relevant Planning Authority will, acting reasonably, have 10 business days to either confirm its consent to the technical variation or provide its reasons why the change is not accepted including where it considers the requested variation is a Non-material or a Material Variation (as described below) If declined, Esso may then withdraw the request, treat the request as a Non-material or a Material Variation or appeal the decision in accordance with Part 2 of Schedule 2 of the DCO.

#### **Other Changes**

- 1.3.3 During the implementation of the Project it may be necessary or prudent to seek an alternative approach to the commitments, mitigations and methodologies set out in this approved CEMP. Pursuant to Paragraph 20 of Schedule 2 of the DCO, Esso and London Borough of Hounslow will adopt the following procedure in respect of a requested variation to the requirements of the CEMP.



### Non Material Change

- 1.3.4 Where Esso and its expert advisers reasonably consider that the variation is not likely to give rise to any materially new or materially different environmental effects to those assessed in the Environmental Statement, this would be considered a Non-material Variation.
- 1.3.5 Esso will provide London Borough of Hounslow with details of the requested variation (including any amendments to the relevant mitigation measures) together with a summary of why Esso considers the variation to be a Non-material. Upon receipt of the requested variation London Borough of Hounslow will, acting reasonably, have 15 business days to either confirm its consent to the Non-material Variation or provide its reasons why the change is not accepted. If declined, Esso may then withdraw the request, treat the request as a Material Variation or appeal the decision in accordance with Part 2 of Schedule 2 of the DCO.

### Material Change

- 1.3.6 Where Esso and its expert advisers reasonably consider that the variation is likely to give rise to any materially new or materially different environmental effects to those assessed in the Environmental Statement, this would be considered a Material Variation.
- 1.3.7 Esso will discuss the proposed variation with London Borough of Hounslow together with its proposals for appropriately assessing the Material Variation. Upon receipt of the assessment proposals, London Borough of Hounslow will, acting reasonably, have 10 business days to comment on the assessment proposals.
- 1.3.8 Following assessment of the proposed variation in accordance with any comments received Esso will provide London Borough of Hounslow with details of the requested variation (including details of any amendments to the relevant mitigation measures) together with the findings of the assessment and the reasons why Esso considers the variation is unlikely to give rise to any materially new or materially different environmental effects in comparison with the authorised development as approved (as identified in the environmental statement). Upon receipt of the requested variation London Borough of Hounslow will, acting reasonably, have 15 business days to either confirm its consent to the Material Variation or provide its reasons why the change is not accepted. If declined, Esso may then withdraw the request or appeal the decision in accordance with Part 2 of Schedule 2 of the DCO.

## **1.4 Structure of the Construction Environmental Management Plan**

- 1.4.1 The CEMP is an overarching document that contains several 'daughter' documents as appendices. These will contain more detailed information on particular topic areas. Supporting environmental plans are presented in the following appendices:
- Appendix A: Emergency Action Plan – sets out the emergency procedures to be put in place for potential environmental incidents.
  - Appendix B: Water Management Plan – sets out a framework for use and control of water on the project. It outlines the environmental risks and considers



appropriate methods to mitigate against these risks. It considers surface water and groundwater pollution, and surface water runoff contributing to flood risk.

- Appendix C: Site Waste Management Plan – identifies the main sources of waste produced during construction of the project and how it should be disposed of.
- Appendix D: Dust Management Plan – sets out how the project will avoid or reduce emissions to air and human exposure to emissions. It also promotes close working with relevant authorities to maintain air quality and provides for mitigation where dust soiling cannot be prevented.
- Appendix E: Noise and Vibration Management Plan – sets out measures to reduce noise and vibration impacts at local receptors during the construction of the pipeline. It also promotes positive working relationships with local communities and the relevant planning authorities.
- Appendix F: Soil Management Plan – sets out the generic commitments that the project has made and details about how soils will be protected, stored and reinstated as part of the works. It also outlines the monitoring and reporting that will be undertaken in respect of soils.
- Appendix G: Lighting Management Plan – sets out the project’s strategy for lighting including identification of light-sensitive locations, and measures to reduce impacts for example at bat roosts.

1.4.2 The CEMP sits alongside a number of other project documents that should be read in conjunction with the CEMP when implementing the project. The links between the CEMP and other documents are set out in Illustration 1.1 of the Code of Construction Practice (CoCP). The key documents include:

- Code of Construction Practice: The CoCP provides a consistent approach to the control of construction activities along the entire pipeline and mitigates potential impacts on people and the environment. The CoCP is a certified document with compliance secured under Requirement 5 of the DCO.
- Construction Traffic Management Plan (CTMP): This sets out how the project will manage both construction traffic and impacts on the wider traffic network during construction. The final CTMP will be approved by London Borough of Hounslow in accordance with Requirement 7 of the DCO.
- Community Engagement Plan (CEP): This sets out how the project will communicate with third parties during construction. It sets out the roles and responsibilities for engagement on the project and how complaints will be managed. The final CEP will be approved by London Borough of Hounslow in accordance with Requirement 15 of the DCO.
- Site-Specific Plans (SSPs): The SSPs provide location-specific construction methodologies. SSPs are certified documents with compliance secured under Requirement 17 of the DCO.



## **2 Design and Construction**

### **2.1 Project Commitments**

- 2.1.1 The project design is the result of a process of iterative design development that was introduced at project inception. Environmental considerations have had a key influence on the project, with knowledge gained through the EIA process, input from the project team (including the results of site surveys) and discussions with interested parties (such as landowners, local authorities and regulators). This has led to a number of commitments being included as part of the project, which are indicated by a code such as G123.
- 2.1.2 The project has also included measures for avoiding or reducing impacts to sensitive features, which have been built into the application for development consent. These include embedded design measures where specific commitments have been made to avoid or protect a feature.
- 2.1.3 Many of these features were avoided through the final design of the Order Limits. Where features still lie within the Order Limits and where additional commitments have been made, these are secured within the design.
- 2.1.4 Reduced working widths: This is where the working width is reduced within the Order Limits from the standard 36m width, to reduce impacts to sensitive environmental or community features including representation of the working methodologies. There are no reduced working widths within London Borough of Hounslow.
- 2.1.5 For most of the route, the pipeline would be installed using an Open Cut technique. There are no trenchless crossings within London Borough of Hounslow.

### **2.2 Construction Schedule**

- 2.2.1 It is anticipated that works to install the pipeline will start in 2021 and be completed in 2023.
- 2.2.2 Within London Borough of Hounslow the programme is anticipated to follow the phasing shown in the Stages of the Authorised Development (Requirement 3).

### **2.3 Environmental Pre-construction Surveys**

- 2.3.1 Baseline environmental surveys were undertaken as part of the EIA and were recorded within the ES. Further pre-construction surveys have been carried out to supplement the baseline information as per the requirements of Commitment G33.
- 2.3.2 Pre-construction surveys include:
- archaeological trial trenching – the results will be used to determine where preservation in situ can be applied, and to define the type of archaeological mitigation by record which would be required. Further details can be found in the Archaeological Mitigation Strategy;



- additional protected species surveys to support the final licence applications and to inform detailed site-specific measures for the exclusion and/or translocation of species during construction:
  - bat surveys – ground and climbing surveys for hibernation and summer activity across the project;
  - great crested newt surveys – habitat suitability surveys at previously unvisited ponds between mid-April and the end of June;
  - otter (*Lutra lutra*) and water vole (*Arvicola amphibius*) surveys – from mid-March until the end of June and then a second survey from July to October. These surveys will be to complete baseline survey where site access was previously denied;
- badger surveys – multiple survey types across the project to include sett monitoring from early spring onwards at targeted setts; and
- invasive non-native plant species survey – during the summer across the project.

2.3.3 As per Commitment G33, the decision as to whether pre-construction surveys are required, as set out above, has been based on the following points:

- where access is now available to land that was previously targeted for survey work but in respect of which access was previously denied;
- where professional judgement identifies a change to the baseline of an area from that reported in the ES and which requires further assessment; or
- to update or confirm information on the location of sensitive archaeology or protected species.

2.3.4 In addition to the species-specific surveys, a walkover survey will be undertaken to validate existing information no more than three months prior to submission of the protected species licence applications to check for any further changes.

2.3.5 The project will have licensed ecologists available to take account of changes to the programme which may affect mitigation measures and require further pre-surveys to those already carried out/scheduled.

## 2.4 Construction Phase Activities

2.4.1 A project description is set out within ES Chapter 3 (**Application Document [APP-043](#)**). This describes the main works that will be undertaken before, during and after installation including reinstatement. In addition, the CoCP contains information that sets out how the works will be undertaken in general and with regard to specific settings, and will comprise construction methodologies for:

- Open Cut;
- trenchless crossings;
- streets;
- watercourses;



- woodland;
- working near trees;
- hedgerows;
- schools;
- sports pitches and golf courses; and
- suitable alternative natural greenspaces (SANGs).

2.4.2 In addition, SSPs have been developed for areas where there are a number of different site sensitivities and complexities between the environmental and engineering constraints. These locations were identified during the examination process, as areas that will require careful design and routeing. There are no SSPs within London Borough of Hounslow.

## **2.5 Compounds**

2.5.1 Dedicated compound areas will provide welfare facilities, storage, and short-term offices for site-based staff. There are no construction compounds within London Borough of Hounslow.

## **2.6 Working Hours**

2.6.1 Working hours will be in accordance with the approved DCO Schedule 2 Part 1, section 14:

(1) Subject to sub-paragraphs (2), (3) and (4), construction works must only take place between 0800 and 1800 on weekdays (except public and bank holidays) and Saturdays, except in the event of an emergency.

(2) In the event of an emergency, notification of that emergency must be given to the relevant planning authority and the relevant highway authority as soon as reasonably practicable.

(3) The following operations may where necessary, continue or take place on an exceptional basis outside the working hours referred to in sub-paragraph (1)—

- (a) trenchless construction techniques which cannot be interrupted;
- (b) filling, testing, dewatering and drying;
- (c) works required to mitigate delays to the construction of the authorised development due to extreme weather conditions; and
- (d) commissioning of the pipeline works.

(4) Nothing in sub-paragraph (1) precludes—

- (a) the receipt of oversize deliveries to site and the undertaking of non-intrusive activities;



(b) start-up and shut-down activities up to an hour either side of the core working hours and undertaken in compliance with the CEMP; and

(c) works on a traffic-sensitive street where so directed by the relevant highway authority, pursuant to a permit granted under the permit schemes and following consultation by the relevant highway authority with the relevant planning authority under the terms of such scheme.

(5) In this Requirement—

(a) “emergency” means a situation where, if the relevant action is not taken, there will be adverse health, safety, security or environmental consequences that in the reasonable opinion of the undertaker would outweigh the adverse effects to the public (whether individuals, classes or generally as the case may be) of taking that action; and

(b) “non-intrusive activities” means activities which would not create any discernible light, noise or vibration outside the Order Limits.

2.6.2 A period of one hour may be utilised either side of the core construction working hours at the start and end of each day to include activities such as job start meetings, toolbox talks, safety briefings, training, refuelling plant & equipment, setting up of material & equipment, installation of traffic management systems, and general housekeeping measures. Noise and light emissions will be kept to a minimum and these start-up and shut-down activities would not involve the operation of construction plant and equipment.



### 3 Project Team Roles and Responsibilities

#### 3.1 Environmental Management Systems

- 3.1.1 The project will comply with the ISO 14001:2015 requirements.
- 3.1.2 The Project Leadership will implement management processes and briefings to ensure that the works are carried out in accordance with current legislation and guidance. This will be achieved by application of well-established work processes that apply the recognised BS EN ISO 14001 standard.
- 3.1.3 The Principle Contractor has an Environmental Policy that meets the requirements of ISO 14001 through their internal Business Management System procedures. The policy statement will be displayed on the site notice boards, publicised to all site staff and operatives, and made available to interested parties upon request.

#### 3.2 Project Responsibilities

- 3.2.1 The Principal Contractor will undertake the construction works in accordance with the DCO and its associated documents including this CEMP and its appendices. The relevant aspects of this CEMP will be notified to the workforce at commencement of works within London Borough of Hounslow to highlight the relevant commitments and responsibilities to those undertaking the work.
- 3.2.2 Procedures for monitoring construction processes against the project environmental measures are set out in the sections below. Specific individuals and roles have been identified, as well as control measures, training procedures, monitoring systems and emergency procedures to be employed throughout the different phases.
- 3.2.3 Overall roles and responsibilities for the project are presented in Table 3.1. These roles may be delivered by multiple people across the project, who are designated that specific responsibility e.g. ECoW.
- 3.2.4 Additional Suitably Experienced Persons (SEPs) that will be required on site in support roles for the ECoW have been identified for each stage, and their roles defined. There may be several SEPs to allow for observation of more than one area at a given time; however, the same person could undertake more than one role if suitably experienced.

**Table 3.1 Overall Roles and Responsibilities**

Roles	Responsibilities
Environmental Manager	The Environmental Manager will be responsible for the maintenance of all environmental plans and registers, including monitoring that the environmental measures and mitigations are implemented on site and as recorded within the CEMP. They will be the main point of contact for all environmental matters on the project. They will oversee ecological pre-construction surveys. They will also develop good working relationships with key external stakeholders such as the Environment Agency, Natural England and the local authorities.



<b>Roles</b>	<b>Responsibilities</b>
Environmental Clerk of Works	The ECoW will monitor that the works proceed in accordance with relevant environmental Development Consent Order requirements and adhere to the required mitigation measures. The ECoW will be supported as necessary by appropriate specialists (G3, G41).
Permits and Consents Manager	The Permits and Consents Manager will work with the Environmental Manager to draft and submit permits and consents on behalf of the project, track the progress, provide updates and communicate approvals.
Construction Manager	Responsible for the management of the construction of the project.
Works Supervisor	Responsible for delivering the site works in accordance with the requirements of the CEMP and implementing good environmental practices required by the Environmental Manager. They are responsible for managing operatives, plant and their areas of work in accordance with the principles of good environmental practice.
Archaeological contractor	A specialist archaeological contractor will be engaged to deliver archaeological trial trenching across the project. An archaeological watching brief will also be put in place if sensitive archaeological locations are identified.
Design Engineer	The Design Engineer will be responsible for the incorporation of environmental design criteria and method statements within the detailed design of the pipeline in consultation with the Environmental Manager.
Senior HSSE Lead	Responsible for all Health and Safety processes and procedures for the project.
First Aiders	Those identified in site inductions and method statements as people to contact in the event of minor injuries or incidents.
A suitably qualified and experienced person	This person will be expected to have the relevant experience to supervise the relevant aspects of the works, which might include an arboriculturist, land contamination specialist, soil specialist, ecologist, archaeologist.
Land Agent	The Land Agent will provide the main liaison role between the Contractor and the relevant landowner. They will agree preconstruction conditions and sign off completion and handover.
Site Waste Manager	The Site Waste Manager will be responsible for day-to-day waste management and maintaining site waste registers/documentation.
Communications Lead	The Communications Lead will be the point of contact for, and responsible for responding to any communications regarding environmental issues or complaints.

### **3.3 Site Checks and Reporting**

- 3.3.1 Pre-site condition surveys will be undertaken by the contractor as part of the site setup. After construction, post site condition surveys will be undertaken by the contractor and discussed with the landowner prior to handover.
- 3.3.2 In accordance with Commitment G10, regular site checks would be carried out across the project to monitor accordance with the CEMP and other associated plans. Where nuisance is predicted or already occurring, appropriate remediation measures would be put in place to mitigate in accordance with measures outlined



within the CoCP and CEMP. The frequency of inspections would be increased when activities with a high potential to cause nuisance are being carried out, or conditions increase the risk of nuisance, e.g. windy conditions increase dust risk.

- 3.3.3 Site Checks and inspections will include checks against compliance with commitments and actions as made by the project.
- 3.3.4 The programme of site inspections will be controlled by the Environmental Manager and implemented by the ECoW, who will draw on appropriate suitably experienced specialists for specific tasks. In accordance with Commitment G41, *'The ECoW would monitor that the works proceed in accordance with relevant environmental DCO requirements and adhere to the required mitigation measures. The ECoW would also be involved with any targeted additional mitigation strategies that may be required'*.
- 3.3.5 In accordance with Commitment G9, *'A central Environmental Log would be set up. The Log would be available to view by the local authority if requested. It would be a living document and kept up to date and referred to on a regular basis. This would have three main purposes:*
- *to record all comments and complaints made to the site together with resulting actions and outcomes;*
  - *to record where and when environmental monitoring takes place and what if any action is required and when it has been completed; and*
  - *to record the results of site inspections and note the measures taken where required.'*
- 3.3.6 The results of inspections will be recorded in the Environmental Log. Findings will be disseminated to the wider construction team as appropriate and additional procedures put in place if required.

## **3.4 Information Training and Awareness**

- 3.4.1 In accordance with Commitment G28, all staff and operatives working on the project will undergo a site-specific induction, which includes the following environmental topics:
- ecology: species which are specific to the project, management, mitigation and controls;
  - water management: legislation, agreed buffer zones, best practice, control mechanisms. Flood risks and emergency response procedures;
  - waste management: legislation, segregation, contamination, best practice;
  - nuisance: dust, behaviour, noise, vibration, management and controls;
  - working around trees: tree and root protection;
  - contaminated land: recognising and dealing with contaminated material;
  - spill and emergency response; and
  - defined walkways, routes and working areas.



3.4.2 Further training delivered throughout the project will include:

- weekly environmental toolbox talks giving targeted information about site-specific issues;
- spill kit training; and
- asbestos training - all staff.

3.4.3 The operatives delivering the project will specialise in areas of construction, for example site clearance, open cut, trenchless, urban, rural, semi-urban and reinstatement. Therefore, not all training will be appropriate for all staff. Additional training will be given for the following to the relevant operatives:

- site-specific plan locations;
- narrow working methodologies;
- work near notable trees and within root protection areas; and
- working near protected species (G172).

### **3.5 Emergency Procedures**

3.5.1 An Emergency Action Plan can be found in Appendix A of this document. This outlines procedures to be implemented in case of unplanned events such as flooding and pollution incidents in accordance with Commitment G179. It will also provide contact details for during an emergency.

### **3.6 Reporting**

3.6.1 An action plan will be developed as a tool to track the implementation of the commitments during construction. The action plan will be checked by the Environmental Clerk of Works during visits to the site and any non-compliance will be discussed with the contractor.

3.6.2 The contractor(s) will develop a reporting structure so that activities on site are monitored and incidents are effectively actioned.

### **3.7 Complaints Procedure**

3.7.1 The name and contact details for the project will be displayed at the entrance to all compounds. This will include an emergency telephone number (G27). In addition, details of the works including contact details will be provided to each community ahead of the work commencing. This will be as set out in the Community Engagement Plan.

3.7.2 Any complaints regarding environmental issues will be discussed with the Construction Manager and the Environmental Manager, and appropriate action will be taken, and the conclusion recorded. A record will be made of the incident for audit purposes.



## **4 Consents and Permits**

### **4.1 Consents, Permits and Licences**

- 4.1.1 The project will be run in compliance with all relevant legislation, consents and permits in accordance with Commitment G44.
- 4.1.2 The project has set up a detailed consents and permits tracker. The tracker is managed by the Permits and Consents Manager and maintains a full list of permits and consents in place or required for the project including those which have been disapproved through the DCO process.