

Southampton to London Pipeline Project

Construction Environmental Management Plan
(CEMP)

Appendix C: Site Waste Management Plan

Revision No. 1.0

June 2021

London Borough of Hounslow





Contents

1	Introduction.....	1
1.1	Overview of the Project	1
1.2	Purpose of the Site Waste Management Plan	1
1.3	Aims and Objectives.....	1
1.4	Roles and Responsibilities	2
1.5	Structure of the Site Waste Management Plan	2
1.6	Waste Hierarchy	2
1.7	Project Commitments	3
1.8	Description of Works	5
1.9	Management and Handling of Site Waste.....	5
1.10	Storage, Assessment, Testing, Handling, Collection and Transfer Requirements to be Implemented for Site Waste	6
1.11	Typical Examples of Project Related Waste	7
2	Site Checks and Reporting.....	10
2.1	Site Checks and Reporting.....	10
2.2	Complaints Procedure	10



1 Introduction

1.1 Overview of the Project

- 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.
- 1.1.1 The project is broken down into stages based on geographical areas. Of the 97km pipeline route, 106m (one stage) is through the London Borough of Hounslow, all contained within Esso's West London Terminal storage facility, shown on Sheet 13 in the Stages of the Authorised Development.
- 1.1.3 This Site Waste Management Plan (SWMP) specifically applies to the section of works between (507 005E, 173 347N) and (507 126E, 173 380N) in the London Borough of Hounslow.
- 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 Construction Environmental Management Plan (CEMP) pursuant to Requirement 6 of the DCO.

1.2 Purpose of the Site Waste Management Plan

- 1.2.1 This SWMP has been produced as Appendix C to the CEMP. The CEMP, along with its appendices, is being produced prior to construction and is submitted for approval by London Borough of Hounslow as relevant planning authority in accordance with Requirement 6 in the DCO. Esso and its supply chain of contractors will adopt the control measures set out in this SWMP when undertaking the construction of the project.

1.3 Aims and Objectives

- 1.3.1 The key overarching aim of the SWMP is to identify the main sources of waste produced during construction of the project and how it should be disposed of.



1.3.2 The objectives of the SWMP are to define:

- the hierarchy of waste
- existing good practices in relation to site waste;
- the management and handling of waste including roles and responsibilities; and
- typical examples of project related waste.

1.3.3 The SWMP relates only to the construction phase of the project.

1.4 Roles and Responsibilities

1.4.1 Overall roles and responsibilities for the project are detailed in the CEMP. The main roles and responsibilities specific to the SWMP are set out in Table 1.1.

Table 1.1: Roles and Responsibilities

Role	Responsibilities
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 a land contamination specialist or soil specialist.
Site Waste Manager	The Site Waste Manager will be responsible for day-to-day waste management and maintaining site waste registers/documentation.

1.4.2 One of the key responsibilities of the Site Waste Manager will be to maintain the central register of all waste consignment notes together with schedules of carriers and disposal locations and waste datasheets to provide efficient tracking of waste management. This documentation will be available for review by the Environment Agency or local waste authority at any time. By maintaining the central register of waste records, the project will have an established method of record keeping for internal and external auditing purposes.

1.5 Structure of the Site Waste Management Plan

1.5.1 The SWMP covers site waste management during advance/enabling works, construction, reinstatement, pipeline testing, post construction and the implementation of other ecological mitigation measures, together with the subsequent maintenance and monitoring of these measures.

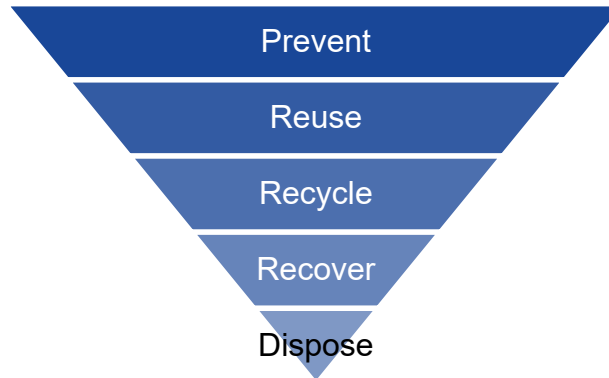
1.5.2 The SWMP includes:

- the main body of the SWMP, with the good practice measures, and details about methods that will be employed to manage waste during construction including additional mitigation measures; and
- the site checks and reporting that will be undertaken in respect of site waste management.

1.6 Waste Hierarchy

1.6.1 The project will follow the hierarchy shown in Illustration 1.1 in relation to site waste.

Illustration 1.1: Waste Hierarchy



1.7 Project Commitments

- 1.7.1 Esso has committed to a number of mitigation measures which will reduce waste impacts. The commitments are indicated by a reference number, for example (G77). The ones relevant to the SWMP are listed in Table 1.2. The following sections of the SWMP set out further details, in addition to the commitments, about how the construction works will be undertaken.

Table 1.2: Project Good Practice Measures Relevant to the SWMP

Commitment Number	Commitment
G7	<p>Appropriate site layout and housekeeping measures would be implemented by the contractor(s) at all construction sites. These may include:</p> <ul style="list-style-type: none"> • preventing pest and vermin control and treating any infestation promptly. This would include arrangements for the proper storage and disposal of waste produced on site; • inspecting and collecting any waste or litter found on site; • locating or designing site offices and welfare facilities to limit the overlooking of residential properties; • locating designated smoking/vaping areas to avoid significant nuisance to neighbours; • managing staff/vehicles entering or leaving site, especially at the beginning and end of the working day; • avoiding the use of loudspeaker systems or radios; and • managing potential off-site contractor and visitor parking.
G18	Bonfires and the burning of waste material would be prohibited.
G23	All plant and vehicles would be required to switch off their engines when not in use and when it is safe to do so.
G71	<p>For all areas, the following strategic approach would be taken for the management of both known and unknown land contamination:</p> <ul style="list-style-type: none"> • a desk based qualitative risk assessment would be undertaken on the basis of available information to ascertain areas of known and unknown contamination; • working method statements would be produced based on the assessment; • contingency plans would be developed for dealing with various forms of known or unknown contamination to allow work to progress with limited delay. These procedures would clearly define methods for dealing with any areas of unexpected contamination to manage immediate risks and prevent any contamination, ground gas, airborne contaminants or odour spreading from the affected area, and for appropriate disposal. Measures would contain protocols for dealing with areas of potential asbestos-containing materials, should they be encountered. <p>For areas where potential contamination is known or strongly suspected to be present as a result of past activities, the following would also be undertaken:</p> <ul style="list-style-type: none"> • ground investigation information would be shared and developed as appropriate; • risks to receptors would be assessed, and mitigation and working methods to control those risks would be developed. Risks would include: encountering contaminated dust, soils and groundwater; and where the presence of ground gas and/or vapours may lead to confined space risks, such as in excavations; • a Suitably Experienced Person would ensure that risk areas are identified, working methods followed and mitigation carried out appropriately; • made ground and materials known or strongly suspected of being contaminated would be segregated from natural and inert materials; and • ground arisings deemed unsuitable for re-use within the project would be disposed of appropriately for example to a soil treatment centre or landfill.
G74	Excavation materials identified by the Watching Brief as being potentially contaminated and unsuitable for re-use within the project would be segregated from other materials and transported off-site in suitable vehicles for off-site testing and subsequent disposal. Vehicles would contain and cover the materials to prevent loss of leachate, dust or other materials during transport.
G77	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.



1.8 Description of Works

- 1.8.1 A project description is set out within Environmental Statement Chapter 3 (**Application Document APP-043**). This describes the main works that will be undertaken before, during and after installation across the whole project.
- 1.8.2 This SWMP applies to the installation of the pipeline in the London Borough of Hounslow between (507 005E, 173 347N) and (507 126E, 173 380N).
- 1.8.3 The following sections of the SWMP contain additional details based on the appointed contractor's final construction design and methodology (further details of which can be found in the CEMP), which include:
- a general description of the work being carried out;
 - justification of why the methods selected represent Best Practicable Means in terms of control of waste; and
 - anticipated rates of progress.

1.9 Management and Handling of Site Waste

- 1.9.1 Management and handling of site waste will vary depending on the work cycle being undertaken at any specific time.
- 1.9.2 The high-level project programme is outlined in Requirement 3 Stages of the Authorised Development.
- 1.9.3 The following activities will be required to install the pipeline in London Borough of Hounslow:
- Open cut trench in existing Esso West London Terminal storage facility (c.106m in London Borough of Hounslow) - examples of wastes created are excavation arisings (if not reused).

1.10 Storage, Assessment, Testing, Handling, Collection and Transfer Requirements to be Implemented for Site Waste

- 1.10.1 There are no construction compounds within London Borough of Hounslow however each individual construction compound across the project will have designated waste storage areas.
- 1.10.2 The size and number of waste storage facilities will vary depending on the type of waste that is likely to be generated for that specific section of the works. In each location there will be a combination of 1,000l wheelie bins to cater for the welfare waste and large skips (e.g. 20-yard or 40-yard skips) for other segregated waste.
- 1.10.3 Waste will be separately collected and stored either at the individual construction compounds or centrally at the logistics hubs.
- 1.10.4 When sufficient quantities have been collected at the construction compounds, the waste will either be recycled at the site, disposed of directly to a recycle/waste facility or collected and held at a logistics hub for onward recycle/disposal.



- 1.10.5 The type of waste material being stored will dictate what containers, laydown areas, bins or hard standings are required to facilitate the waste storage including measures to prevent pest and vermin.
- 1.10.6 Contaminated or hazardous waste – these will have separate designated areas within the construction compound or hub. Handling and storage of these will be dependent on the level, type or classification of the waste.
- 1.10.7 Waste Designation Code and Classification – all waste will be identified and allocated the appropriate waste code from the European Waste Catalogue (EWC). The assessment will be undertaken by the Site Waste Manager. Waste will be classified using the Waste Acceptance Criteria (WAC) as identified in the EWC designation table, examples of which are shown in Table 1.3.

Table 1.3: EWC Designation Code Description (examples)

Description	Restrictions	EWC Code
Glass packaging	None	15 01 07
Concrete	Selected construction and demolition (C&D) waste only	17 01 01
Bricks	Selected C&D waste only	17 01 02
Tiles and ceramics	Selected C&D waste only	17 01 03
Mixtures of concrete, brick, tiles and ceramics	Selected C&D waste only	17 01 07
Glass	Separately collected glass only	20 01 02
General waste	Waste from compound etc	20 03 01

- 1.10.8 Testing – where required, WAC testing will be undertaken. The purpose will be to confirm that classification is correct in respect to either inert wastes or hazardous wastes. WAC testing may be required for the disposal of inert wastes, such as glass, ceramics and wood, depending on the specific waste handlers' requirements.
- 1.10.9 Waste handling, collection and transfer – any company collecting waste must be legally authorised to do so. This requires the project to ensure that any company collecting its waste is either:
- registered as a waste carrier (registered carriers hold a licence which must be checked);
 - exempt from requiring carrier registration; or
 - a waste collection authority in England and Wales, waste disposal authority in Scotland or a district council in Northern Ireland (licence not required).
- 1.10.10 Registered waste carriers are licensed by their respective environmental regulator and are issued with a Waste Carriers Licence (valid for three years).
- 1.10.11 All parties involved in the carriage of waste must sign and retain a copy of the transfer documentation. This is a legal requirement, and failure to maintain a record of waste collections can result in prosecution. Completed Waste Transfer Notes and Hazardous Waste Consignment Notes must be kept on file for:
- Waste Transfer Note – two years; and



- Hazardous Waste Consignment Note – three years.

1.10.12 Prior to the removal of waste from site, a waste consignment note must be completed, detailing what is to be moved, its origin and its final destination.

1.11 Typical Examples of Project Related Waste

1.11.1 Whilst not all relevant to London Borough of Hounslow, the project has identified the following as potential site-generated generic waste which will be controlled by the SWMP, with particular details being produced in line with the legislative requirements for off-site waste disposal for the following items during the multiple stages of the works:

- Trees, shrubs and vegetation – vegetation arisings will be disposed of responsibly. Small quantities may be reused on site to create ecological habitat (Commitment G62). Any trees, shrubs or vegetation that cannot be recycled on site, and therefore highlighted as requiring removal, shall be disposed of as inert waste at a recycle facility – subject to agreement with the landowner.
- Trench arisings (not topsoil) – to be reused where possible. Where this is not practicable, they will be sent to a recycling facility for disposal.
- Highways – spoil excavated from works in the highway will be tested and sent to a recycling facility for disposal.
- Asphalt/bitumen – material removed from the highways or private roads will be segregated and disposed of at a specialised recycling facility.
- Cement/concrete – cement or concrete arisings will be collected and recycled as hardcore at a recycling facility. Cement washings shall be collected into a designated area and disposed of off-site.
- Rebar – all offcuts of rebar shall be collected and recycled off-site at a recycling facility for disposal.
- Wooden formwork/temporary works – all wooden formwork/temporary works or support timbers shall be disposed of as hazardous waste where it has come into contact with poured concrete. However, clean (non-concrete impacted) used timber will be collected and reused, sent to a recycling facility or disposed of.
- Packaging/dunnage – the bulk of the packaging/dunnage is expected to be the timber frames that the pipes will be delivered on. There are likely to be other unquantifiable pieces of equipment delivered in a variety of protective packaging. Packaging/dunnage will be collected and recycled for reuse or sent to a recycling facility for disposal.
- Each pipe will have two plastic end caps that will be collected and recycled or sent to a recycling facility for disposal.
- Crushed stone – crushed stone will form the surface of the temporary compounds. When the compound is no longer required, the crushed stone will be removed with the ground returned to its original condition unless the landowner requests otherwise. Where suitable, the stone will be recycled to other site compounds or sent to a recycling facility for disposal.



- Steel pipework/plate and welding waste – all offcuts of steel pipe and plate shall be collected and recycled off-site at a designated location/recycling facility.
- Pipe coating and wrapping materials – all offcuts and waste wrapping material shall be collected and recycled off-site at a designated location/recycling facility.
- Drilling mud (bentonite) – drilling mud (bentonite) utilised as part of the horizontal drilling process will be collected, reused where possible or sent to a recycling facility for treatment and disposal.
- Greases and oils – all greases and oils will be collected and sent to a recycling facility for treatment and disposal as hazardous waste.
- Pre-construction and post-construction drainage materials – the project will use plastic, concrete, brick and stone-based materials as part of the pre-construction and post-construction drainage installation. Waste generated will be collected and sent to a recycling facility for treatment and disposal.
- Flume pipes and associated materials – the project will be using a number of flumes of various materials, diameters and lengths which will be reused/recycled where possible through the length of the scheme and either treated and reused, or sent to a recycling facility for disposal, when no longer required.
- General office and welfare waste – logistic hubs and construction compounds will have a number of offices and cabins. The following have been identified:
 - General office waste – items that are not classified as hazardous that cannot be reused, recycled or separated are the only types of waste that will be disposed of in general waste bins (for landfill).
 - Paper – paper will be separated from the general waste stream and placed in dedicated paper bins.
 - Cardboard – waste card and cardboard will be collected separately and placed in suitable containers for collection by a recycling contractor.
 - Food – biodegradable kitchen and canteen waste included with general waste.
 - Metals/aluminium – waste metals and aluminium, including cans, will be separated from the general waste stream and collected by a recycling contractor.
 - Plastic – waste plastic items (food and drink containers, wrapping materials, bags, etc.) will be separated from the general waste stream and collected by a recycling contractor.
 - Mixed recycling – co-mingled dry recyclables which include plastic, paper and cans will be separated from the general waste stream and stored for collection by a recycling contractor.
 - Glass – waste glass (not including bulbs and fluorescent tubes) will be separated from the general waste stream and stored for collection by a recycling contractor.



- Ink cartridges (not toner) – cartridges will be separated from the general waste stream and stored separately for collection by a specialist contractor.
- Toner cartridges – toner cartridges will be separated from the general waste stream and stored separately for collection by a specialist contractor.
- Feminine hygiene – a specialist contractor will be employed to collect feminine hygiene products via small bins placed in female toilet cubicles. This is controlled waste but must be kept separate from all other waste streams.
- Clinical waste – any material containing blood or bodily fluids such as dressings, bandages and clothing is classed as clinical waste and considered to be hazardous. This will be disposed of in similar fashion to feminine hygiene waste.
- Waste electrical and electronic equipment – redundant computers, monitors and any other waste electrical equipment are described as waste electrical and electronic equipment. These items are classed as hazardous waste and must never be disposed of into the general waste stream. They will be stored separately while awaiting collection by a specialist recycling or disposal contractor.
- Fluorescent light tubes – these may contain mercury and, as such, are classed as hazardous waste. Waste fluorescent tubes will be separated and securely stored on-site for collection by a specialist waste contractor.
- Batteries – all batteries will be separated from the general waste stream, stored separately in secure containers and collected by a specialist recycling contractor.

1.11.2 Contaminated waste – the project will identify, sample and test arisings which have a potential to be contaminated. The results of this testing will dictate the mitigation measures required. If treatment is practicable, this will be carried out on site. If not, disposal of contaminated waste will be to a licensed facility for treatment.



2 Site Checks and Reporting

2.1 Site Checks and Reporting

2.1.1 The contractor(s) will be responsible for record keeping and site checks during the construction period. Site checks and inspections will be undertaken regularly throughout the construction period as set out below, to monitor compliance with the requirements of the SWMP. This will be in addition to the regular environmental inspections undertaken as identified in Table 3.2 of the CEMP.

2.1.2 Table 2.1 sets out the site checks that would be undertaken during construction.

Table 2.1: Site checks

Action	Responsibility	Frequency
Visual inspection of stockpiles, waste storage and skips. Ensuring secure, appropriately segregated and tidy	Works Supervisor	Weekly
Checking conformance with Waste Duty of Care requirements: Undertaking checks of Waste Transfer Notes, waste carrier licences and ensuring that Environmental Permits are in place for disposal sites	Site Waste Manager	Monthly

2.2 Complaints Procedure

2.2.1 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.

2.2.2 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.