

Southampton to London Pipeline Project

Deadline 4

Appendix D: Outline Dust Management Plan
Application Document: 8.51

Planning Inspectorate Reference Number: EN070005

Revision No. 1.0

January 2020





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Acronyms and Abbreviations

Acronym	Definition
AQMA	Air Quality Management Area
AQO	Air Quality Objectives
CEMP	Construction Environmental Management Plan
CoCP	Code of Construction Practice
DCO	Development Consent Order
DMP	Dust Management Plan
ECOW	Environmental Clerk of Works
ES	Environmental Statement
Esso	Esso Petroleum Company, Limited
NO ₂	Nitrogen dioxide
PM ₁₀	Particulate matter with an aerodynamic diameter of 10 microns or less
SSSI	Site of Special Scientific Interest



1 Introduction

1.1 Overview of the Project

- 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 Works to install and commission the pipeline are expected to start from grant of Development Consent Order (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.
- 1.1.4 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 Outline Dust Management Plan

- 1.2.1 This Outline Dust Management Plan (DMP) has been produced as Appendix D to the Outline CEMP (**Document Reference 8.51**). The final DMP(s) would be in accordance with the Outline DMP. The final CEMP and appendices will be produced prior to construction and will be submitted and approved by the relevant planning authorities in accordance with Requirement 6 in the DCO. Esso and its supply chain of contractor(s) would adopt the control measures set out in the final DMP(s) when undertaking the construction of the project.
- 1.2.2 The Outline DMP should be read alongside the Outline Soil Management Plan (Appendix F of the CEMP), which contains the commitments relating to soil management including stripping, storage and reinstatement.

1.3 Aims and Objectives

- 1.3.1 The overarching aim of the DMP is to reduce air quality and dust impacts at local receptors during the construction of the pipeline and to maintain positive working relationships with local communities and the relevant planning authorities.
- 1.3.2 The objectives of the Outline DMP are to define:
- the contents and scope of the final DMP(s);



- existing good practice measures in relation to dust management, as set out within the Register of Environmental Actions and Commitments (REAC) in ES Chapter 16 (**Application Document APP-056**); and
- where details will be set out in the final DMP(s).

1.3.3 The Outline DMP relates only to the construction of the project, as there are no significant effects during operation.

1.4 Roles and Responsibilities

1.4.1 Overall roles and responsibilities for the project will be presented in the final CEMP. The main roles and responsibilities specific to the Outline DMP are set out in Table 1.1 along with the specification for the roles where applicable. The final DMP(s) will include further details in relation to organisational structure and the individuals with specific responsibilities.

Table 1.1: Roles and Responsibilities

Roles and Specification	Responsibilities
Environmental Manager	Responsible for producing the final DMP and for producing the methodologies for handling dust on the project. Also responsible for obtaining the approval of the relevant planning authority.
Environmental Clerk of Works	Responsible for ensuring the mitigation set out in the final DMP(s) is implemented, for undertaking periodic checks on site, and for investigating dust issues or complaints.

1.5 Structure of the Outline Dust Management Plan

1.5.1 The Outline DMP includes:

- Section 2: This contains a summary of the geographical context based on the details set out in Environmental Statement (ES) Chapter 13 (**Application Document APP-053**) and Appendix 13.2 (**Application Document APP-120**);
- Section 3: This includes the main body of the DMP, with the generic commitments and details about methods that would be employed to prevent or reduce dust emissions during construction; and
- Section 4: This outlines the site checks and reporting that would be undertaken in respect of dust and air quality.



2 Geographical Context

- 2.1.1 The Order Limits pass through different environments including predominantly rural areas to the south of the study area in Hampshire and in the South Downs National Park. The northern parts of the study area are generally more suburban and urban with the Order Limits passing through Farnborough, Frimley, Lightwater and Chertsey.
- 2.1.2 The air quality and dust assessment considered potential air quality and dust effects on both human receptors and ecological receptors. Further details can be found within ES Chapter 13 (**Application Document [APP-053](#)**) and in ES Appendix 13.2 (**Application Document [APP-120](#)**).
- 2.1.3 Human receptors include residential properties and community receptors including schools, shops, hotels, places of work, places of worship and recreational areas (such as golf courses, parks and footpaths). Examples within the Order Limits include Farnborough Hill and Salesian schools, Four Marks and Oak Park golf courses and Queen Elizabeth Park. Further details can be found within ES Chapter 13 (**Application Document [APP-053](#)**).
- 2.1.4 Ecological receptors include the following:
- Thursley, Ash, Pirbright and Chobham Special Area of Conservation;
 - Thames Basin Heaths Special Protection Areas;
 - Sites of Special Scientific Interest (SSSIs), for example Colony Bog and Bagshot Heath SSSI;
 - Local Wildlife Sites; and
 - Ancient Woodland.

3 Outline Dust Management Plan

3.1 Good Practice Measures

3.1.1 Esso has made a number of good practice commitments which would reduce dust and air quality impacts. These were set out in the REAC in ES Chapter 16 (**Application Document [APP-056](#)**). The commitments are indicated by a reference number, for example 'G21'. The ones relating to methods that would reduce dust and air quality impacts are listed in Table 3.1 and would be included in the final DMP(s). Other commitments to reduce dust and air quality impacts relevant to this Outline DMP are also set out within the Outline Soil Management Plan (**Document Reference 8.51**), Outline Water Management Plan (**Document Reference 8.51**) and the Outline Construction Traffic Management Plan (**Document Reference 8.51**).

Table 3.1: Good Practice Commitments Relevant to the Outline DMP

Commitment Number	Commitment
G13	Protection of earthworks and soil would be managed by methods such as covering, seeding or using water suppression where appropriate.
G14	An appropriate speed limit would be imposed on vehicles travelling on site.
G15	Wheel washing would be provided at all logistics hubs and large compound access points on to the highway. An adequate supply of water would be made available at these locations at all times.
G16	Compound access points to the public highway would be constructed with temporary hard surfacing.
G18	Bonfires and the burning of waste material would be prohibited.
G19	When loading and unloading materials from vehicles, including pipes and excavated materials, drop heights would be limited.
G20	Water assisted road cleaners would be deployed on public roads where necessary to prevent excessive dust or mud deposits.
G21	Vehicle loads would be sheeted during the transportation of loose, potentially dusty or contaminated excavation material.
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.
G25	Any activity carried out or equipment located within a logistics hub or construction compound that may produce a noticeable nuisance from dust, noise, lighting etc would be located away from sensitive receptors such as residential properties or ecological sites where practicable.
G30	A dust management plan would be produced, including the following measures to be implemented where relevant: <ul style="list-style-type: none"> • 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;



Commitment Number	Commitment
	<ul style="list-style-type: none"> • 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.

3.2 Construction Programme

3.2.1 The construction schedule has yet to be developed in detail, as this would be undertaken during the detailed design stage. The high-level construction programme will be included within the final CEMP. Details in relation to dust management will be added to this section in the final DMP, for example the main timings for soil stripping and reinstatement in terms of seasonal working.

3.3 Description of Works

3.3.1 A project description is set out within ES Chapter 3 (**Application Document [APP-043](#)**). This describes the main works that would be undertaken before, during and after installation of the pipeline.

3.3.2 This section of the final DMP will contain additional details based on the appointed contractor's final construction design and methodology. which would include:

- training for construction staff;
- site planning and preparation;
- construction plant, vehicles and equipment; and
- soil (stripping, storage and reinstatement) and water (control of runoff) management.



Training for Construction Staff

- 3.3.3 The final DMP(s) will contain details of training and toolbox talks for staff in relation to reducing dust impacts during works. This would be in accordance with commitment G28: *'Construction workers would undergo training to increase their awareness of environmental issues. Topics would include dust management and control measures'*.

Site Planning and Preparation

- 3.3.4 In accordance with commitment G25, the layout of logistics hubs and site compounds will be planned to locate activities or equipment that may produce a noticeable nuisance from dust away from sensitive receptors such as residential properties or ecological sites where practicable.

- 3.3.5 In addition, the final DMP would include how the activities within commitment G30 (items to be included in the DMP) would be implemented at the site to help reduce the risk of dust. These include providing details on:

- the locations of temporary hard surfacing and wheel washing facilities at the compound access points with the local highway;
- specification of an appropriate site speed limit for vehicles travelling on site to limit dust generation;
- when water assisted road cleaners would be deployed on public roads to prevent excessive dust or mud and limiting dry sweeping of large areas;
- identification of sources of water for dust suppression; and
- links with the CEMP Appendix C: Outline Site Waste Management Plan to set out that there would be no bonfires or burning of waste materials at the site (G18).

Construction Plant, Vehicles and Equipment

- 3.3.6 This section of the final DMP will outline the vehicles and equipment that the contractor(s) propose to use at the site and how these would be used during construction. This section of the final DMP should be read in conjunction with the final CTMP, which will set out good practice measures relating to traffic management and construction vehicles, for example turning off engines when not in use to reduce emissions.

- 3.3.7 The section will include the measures to limit pollutant and dust emissions from construction plant and vehicles including:

- methods for checking that vehicles and equipment plant conform to relevant applicable standards and that they would be correctly maintained and operated in accordance with manufacturer's recommendations. Also, that these are operated in a responsible manner such as switching off engines when not in use and when it is safe to do so;
- outlining dust suppression techniques that would be available for use during cutting, grinding or sawing activities with the potential to generate dust;



- outlining detail for loading, unloading and transporting materials, including limiting the drop heights of material and sheeting vehicles' loads carrying loose or potentially dusty material or spoil during transportation;
- measures for controlling the number of handling operations to ensure that dusty material is not moved or handled unnecessarily; and
- outlining general good housekeeping principles such as keeping equipment readily available to clean any dry spillages; and cleaning up spillages as soon as reasonably practicable after the event using wet cleaning methods.

Soil and Water Management

- 3.3.8 This section of the final DMP will provide links to CEMP Appendix F: Outline Soil Management Plan and outline the methods to be taken during soil management (stripping, storage and reinstatement) to reduce the risk of dust, with reference to the relevant measures set out in commitment G30. This will include:
- further details about suitable weather conditions for undertaking works and measures that could be taken during extreme conditions such as prolonged drought;
 - outlining the methods for managing earthworks and exposed areas or soil stockpiles to prevent windborne dust. For example, covering, seeding or using water suppression;
 - outlining the methods for limiting de-compaction of the subsoil in windy conditions during reinstatement; and
 - setting out a programme of works to allow subsoil and topsoil to be returned at the earliest suitable time of year after construction has been completed.
- 3.3.9 This section of the final DMP will also provide links to CEMP Appendix B: Outline Water Management Plan and outline the methods to be control runoff of water or mud to reduce the spread of particulates that could subsequently be disturbed and become airborne.



4 Site Checks and Reporting

4.1 Site Checks

- 4.1.1 The contractor(s) will be responsible for record keeping and site checks during the construction period. The contractor would undertake regular audits and inspections as part of the compliance with the requirements of the final DMP. This would be in addition to the regular environmental inspections undertaken by the Environmental Clerk of Works (ECoW).
- 4.1.2 Table 4.1 in the final DMP will set out the site checks that would be undertaken during construction. Examples are provided in Table 4.1.

Table 4.1: Proposed Checks for Illustration

Action	Responsibility	Frequency
<i>Visual inspections to monitor for visible dust emissions or deposition on site, for example during soil handling; Conformance with the DMP, monitoring weather conditions during soil works and identifying problems and undertaking corrective actions where dust may be generated or has been generated.</i>	<i>Contractor</i>	<i>Daily during soil handling.</i>
<i>Checking conformance with the DMP including checking the use and condition of haul routes.</i>	<i>ECoW</i>	<i>Typically once a week.</i>

4.2 Complaints procedure

- 4.2.1 The complaints procedure would follow the process set out within the final CEMP. A record would be made of the complaint or incident for audit purposes.