



Outline Construction Environmental Management Plan

Johnson Matthey, Clitheroe Works

Johnson Matthey

Johnson Matthey, Clitheroe Works, Pimlico Industrial Area, West Bradford Road, Clitheroe BB7 4QB

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Acronyms and Abbreviations

AIA	Arboricultural Impact Assessment
CEMP	Construction Environmental Management Plan
CDM	Construction (Design and Management)
COSHH	Control of Substances Hazardous to Health
EA	Environment Agency
EMS	Environmental Management System
EPPP	Emergency Pollution Prevention Plan
HGV	Heavy Goods Vehicle
HSE	Health and Safety Executive
HQE	Head of Quality and Environment
LPA	Local Planning Authority
NE	Natural England
NGR	National Grid Reference
PEA	Preliminary Ecological Appraisal
PEM	Project Environmental Manager
PPE	Personal Protective Equipment
RPA	Root Protection Area
SHE	Safety Health and Environment
TIS	Transport Information Sheet



1.0 Introduction

This document contains an outline Construction Environmental Management Plan (CEMP) prepared in support of a full planning application for the development of a Contractors Village and supporting infrastructure at Johnson Matthey, Clitheroe, Pimlico Industrial Area, BB7 4QB.

This outline CEMP was revised and updated as appropriate to accommodate any relevant requirements identified through the planning process, including any matters relevant to Ribble Valley Borough Council (RVBC) as the Local Planning Authority (LPA). The CEMP was used by the Contractor to ensure appropriate environmental management was implemented throughout the construction phase of the development.

This document should be read in conjunction with the Planning Statement, and any other technical assessment submitted in support of the planning application as may be appropriate.

A CEMP is a fluid document that would evolve during the different phases of the project. Further reviews of the detailed document may be required to address:

- best practice and any conditions required in the consent;
- incorporation of findings from pre-construction Site investigations;
- changes resulting from the construction methods used by the contractor(s); and
- unforeseen conditions encountered during construction.

It is understood that two full planning applications will be submitted for a proposed works at Johnson Matthey site at Pimlico Industrial Area, Clitheroe. The first planning application will cover two of the three working areas, providing a new Engineering Stores building and Control Room (centred on approximate National Grid References (NGRs): SD 74493 43161 and SD 74560 43186 respectively). These working areas, covered by the first planning application and within a separate outline CEMP are not referred to within the remainder of this report.

The second planning application will cover the proposed works providing a block of temporary offices in the southern-most working area (centred on approximate National Grid Reference (NGR): SD 74536 43090). This working area is hereafter referred to as 'the Site' within the remainder of this report.

This OCEMP has been prepared in support of a full planning application. The proposed development has already been completed prior to the submission of the application. Construction works commenced on 10 March 2026 and were completed on 10 April 2026.

The environmental management measures described within this document were implemented during the construction phase, including measures relating to noise, dust, waste management, traffic, site operations and protection of any environmental receptors.

1.1 Purpose of CEMP

The CEMP would be maintained and updated on site and would be augmented by associated design specifications and Construction (Design and Management) (CDM) 2015 Regulations documentation such as the Principal Contractor's Construction Phase Plan. Where appropriate, the CEMP, or plans within the CEMP, form part of the site induction which should be mandatory for all employees, contractors and visitors attending the site. All employees and contractors would have needed to familiarise themselves with the relevant contents of the CEMP and supporting appendices as directed.

Management practices and mitigation measures have been developed for those aspects of the construction works that could potentially affect the environment. The objectives of the CEMP are to:



- outline the proposed mechanisms for ensuring the delivery of environmental measures to avoid or reduce environmental effects identified;
- ensure procedures are in place so that there is a prompt response to effects requiring remediation, including reporting and any additional mitigation measures required to prevent a recurrence;
- provide an outline of the content that would be supplied in the construction method statements and strategies that would be prepared in order to secure mitigation measures in relation to different design aspects of the proposed development;
- ensure compliance with legislation and identify where it would be necessary to obtain authorisation from relevant statutory bodies;
- ensure that appropriate proposed development monitoring and reporting are in place;
- provide a framework for reporting, compliance auditing and inspection to ensure environmental aims are met; and
- set out the applicant's expectations to guide contractors on their requirements with regards to environmental commitments and environmental management.

1.2 Project Description

The description of the development provided in support of the proposals is as follows:

Placement of a temporary contractor's village for use during wider site construction activities.

The proposals entail the development of the following key components:

- Temporary block of offices

The main development involves of the temporary offices on an area of existing hard standing within the Johnson Matthey Clitheroe site.

Johnson Matthey is currently in the process of upgrading an existing catalyst manufacturing facility within an existing process building, which will require additional enabling infrastructure to be built. The wider works at the Site consist of an Engineering Stores Building and Control Room. The Engineering Stores Building will replace and enhance the former Engineering Stores Tent facility that has been demolished, to make way for the Control Building. The Engineering Stores Building will provide additional and purpose-built storage facilities for the entire Johnson Matthey Clitheroe Site, such that process plant spares and engineering equipment may be safely and securely stored. The Control Building is intended to serve as a central control function for the new plants, to reduce in-person PLC/HMI operator interaction with the process. The Control Building will also contain shower, toilet, changing and mess facilities, meeting rooms, Permit to Work offices and a Motor Control Centre (MCC). All of these facilities are necessary to enable the operation of the new plant, without exceeding the capacity of existing site facilities.

1.3 Site Description & Wider Site Setting

The proposed Site boundaries can be seen in Figure 1-1 (Site Location Plan). It is located approximately 1.15km north of the town of Clitheroe, Lancashire, and occupies an area of approximately 0.11ha.

The Site is predominantly industrial, located within the urban fringe of Clitheroe. The surrounding landscape is characterised primarily by agricultural fields, industrial uses and residential settlements, the closest being along Pimlico Road, approximately 250m east. Adjacent to the north and northeast of the site is the Hanson Cement and Lanehead Quarry.



The Site can be accessed via West Bradford Road and Pimlico Link Road approximately 300m northeast of the site, which connects to the A59. It is anticipated that construction and operational access will be taken primarily from Pimlico Link Road connecting to the A59.

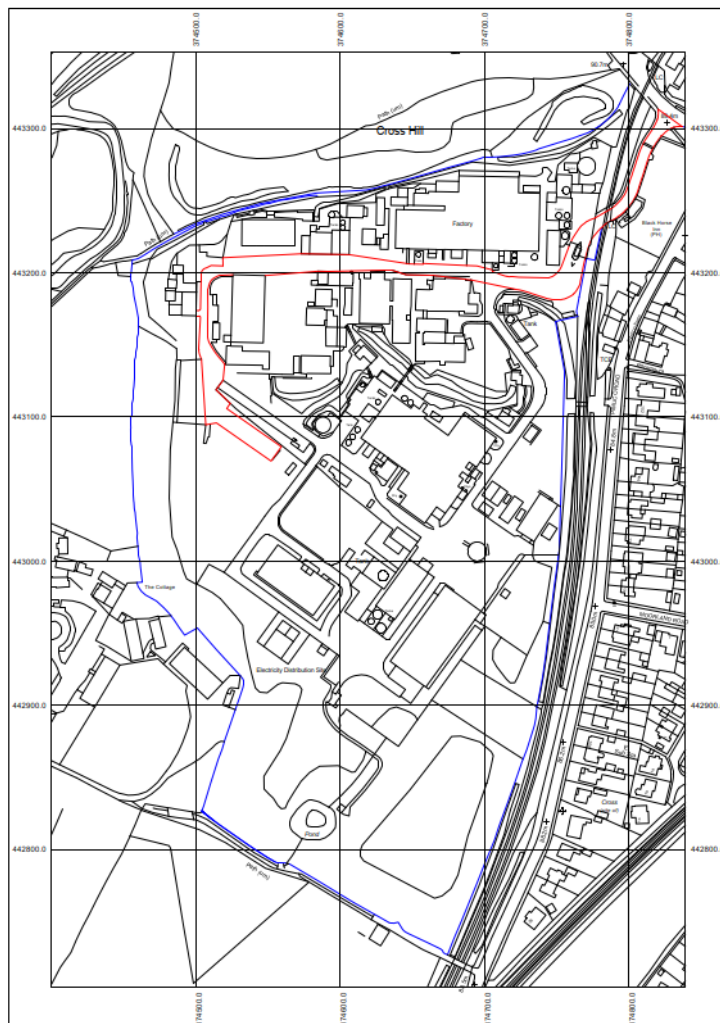


Figure 1-1 Site Location Plan

1.4 Scope of Works and Build Programme

The construction phase of this proposed development was completed in a relatively short period of time. The works include but are not limited to:

- Procurement Work
- Arrangement of the site, ready for the commencement of works
- Access points to be established
- Defining the site boundary and construction of fence and gates
- Deliveries of materials and offices
- Installation of the offices.

The elements listed above are not exhaustive but highlight the key elements of the construction programme.

1.5 Implementation

1.5.1 Implementation and Control

Compliance with the CEMP is the key control measure required during construction to ensure mitigation is appropriately addressed. It documents the principles and processes to be followed to implement all relevant agreed environmental mitigation.

The Principal Contractor should have been required to prepare a series of method statements. These method statements would detail how the contractor intends to implement the mitigation set out in the CEMP and should have been integrated with their detailed Construction Method Statements.

If any significant changes are required due to changing environmental sensitivities, results of pre-construction surveys, unforeseen events or for any other reason, these should be discussed and agreed with statutory bodies in advance of any amended works being carried out.



2.0 Basic CEMP Requirements

2.1 Legal Requirements

There will be a procedure for identifying legal requirements applicable to the works as well as other requirements (i.e. contractual). Compliance shall be periodically evaluated during audits.

The following sources can be used to ensure that management is aware of the legal and other environmental obligations:

- Industry bodies
- Specialist publications
- Specialist waste disposal contractors
- Environment Agency
- Local Authorities

2.2 Planning

This outline CEMP has been prepared to ensure consideration of the mitigation measures recommended in the environmental assessments undertaken is adhered to during construction. As set out in Section 1, this outline CEMP is considered a live working document, that will be reviewed and where necessary updated by the appointed contractor through the development of their specific method statements.

There is a procedure to identify significant environmental aspects related to the works and outline mitigation measures that are required to reduce the risk of environmental impact arising from that aspect. One of the criteria used to assess the significance of each aspect is associated legislation of contractual requirements.

As a result of the assessment of environmental aspects, all significant impacts shall be identified, and measurable objectives/mitigation set against them to reduce the impact of operation and service provision.

2.3 Contractor Responsibilities

This outline CEMP describes how construction activities have been undertaken and managed in accordance with legislative requirements and construction industry best practice.

The Contractor is responsible for the management of construction activities on site in line with the environmental considerations.

This outline CEMP is to be reviewed and further developed by the appointed contractor to reflect mitigation measures and conditions as construction has progressed.

All documentation in relation to the environmental management of the works shall be maintained by the Contractor and be available to the Client (or the Client's Representative).

The Contractor has implemented appropriate Environmental Management System procedures throughout the construction works, having regard to recognised environmental management principles where practicable.

The performance of the Contractor's enforcement of the CEMP in meeting environmental objectives and targets and in achieving effective environmental management shall be subject to on-going review.



The Contractor must assess risks arising from the construction works. The Management of Health and Safety at Work Regulations 1999 require that employers (and the self-employed) must undertake a suitable and sufficient risk assessment.

Risk assessments of potentially damaging construction activities have been undertaken by the Principal Contractor. Risk assessments will be a key control measure for identified hazards at the site.

Practical measures (both physical measures and sensitive working practices) should have been considered and implemented to avoid or reduce impacts during construction. In line with Health and Safety Executive (HSE) guidance, all practicable steps have been taken to prevent danger to any person at the site.

2.4 Emergencies

A set of emergency contingencies are in place which will manage any unexpected incidents on site. These will include emergency response plans, contact information and emergency arrangements.

There will be emergency phone numbers on site and key personnel such as first aiders and the site manager is included within this.

2.5 Monitoring & Auditing

Environmental policies and contractor environmental objectives are communicated to all personnel through induction procedures, specific designated workshops, and toolbox talks. Relevant policy documents are available to view on site notice boards.

All activities that may have had an impact on the environment will be controlled by the implementation of procedures and method statements. Each procedure and method statement were reviewed by a competent person or project manager to ensure that they are in line with this plan as well as other applicable environmental requirements.

Compliance with the environmental management system requirements, policy, and objectives as well as compliance with the project environmental plan should be evaluated through periodic internal audits. The main monitoring tools are:

- Site visits and inspections.
- Physical monitoring (noise, vibration, and air pollution).
- Watching brief activities (i.e., ecology).
- Waste records.
- Records of material import.

Regular inspections of the Site shall occur to ensure compliance with the CEMP, and to minimise the risk of damage to the environment. All environmental incidents shall be reported to the Environmental Manager/Co-ordinator.

The Environmental Manager/Co-ordinator shall undertake monthly inspections and complete an assessment of the works' environmental performance measured against environmental standards, relevant legislation, and the CEMP objectives. The Environmental Manager/Coordinator shall produce a monthly report detailing environmental performance and non-compliances and shall inform the Project Manager of all findings.

Environmental key performance indicators applicable to the works should be measured and included in the progress reports to the client as required. The parameters measured will include energy/fuel consumption, resource consumption and waste and emissions.



2.6 Communication

Regular meetings will be held between the involved parties to discuss the progress of the project, the requirement for any additional environmental considerations, any complaints and any upcoming works which will require further mitigation. If it is identified that the Local Authority will need to be consulted, they will be invited to attend these meetings.

2.7 Environmental Induction, Awareness, Information and Training

A record of all staff training for those involved would have been kept on site. All those who attended site would have been appropriately inducted on environmental considerations, including Toolbox Talks in respect of relevant ecological constraints.

2.8 Security

Security on the Site should be maintained through the proposed perimeter fencing with the site's existing CCTV coverage and routine security patrols. The Client and Principal Contractor will be responsible for the site security and have ensured there are sufficient measures in place to prevent access from the public.



3.0 Roles and Responsibilities

During construction there have been key responsibilities for the applicant, the Principal Contractor and their teams. Establishing roles and responsibilities in relation to construction would be important in order to ensure the successful construction of the proposed development, including the implementation of the CEMP. The personnel, who implement, monitor and respond to the CEMP, are the applicant construction team and the Principal Contractor.

3.1 On Site Structure and Responsibility

Any environmental measures identified through the planning process and relevant guidance were considered during the construction phase and communicated to site personnel as appropriate.

The Contractor's dedicated specialist team (collectively known as the Contractor's Environmental Team) and any other relevant specialist whom the Contractor deems to be necessary in discharging the contract's CEMP obligations include the following:

- Contracts Manager
- Safety Health and Environment (SHE) Manager
- Site Manager
- Head of Quality and Environment (HQE)
- Project Environmental Manager (PEM)/ Environmental Co-ordinator

All site-based staff have a role in following good practice and being responsible for carrying out their activities without detrimental effects on the environment. Staff should comply with systems of work and undertake tasks in accordance with their training. All site-based staff are responsible for reporting any environmental concerns and incidents to their supervisors, including suggestions for improvements.

The Client should ensure that all relevant environmental documentation is communicated to the Contractor and the Environmental team. The Client is responsible for setting the standard for environmental management on-site, as stated in the contracts, and should report any environmental concerns and respond appropriately to incidents.

3.2 Health and Safety

The construction works have been undertaken in accordance with primary health and safety legislation, namely:

- Health and Safety at Work Act 1974; and
- Construction (Design and Management) (CDM) Regulations 2015.

The construction works for the proposed development would fall under the CDM Regulations 2015. As such, the Principal Contractor would provide a Construction Phase (Health & Safety) Plan in accordance with the CDM regulations. This plan would include (but not be limited to) a construction programme, emergency procedures, site layouts and fire plans, method statements and details of the proposed induction programme. This induction programme has included both the Principal Contractor's site-specific rules as well as the Client's requirements and should include instructions to all staff regarding the Emergency Pollution Prevention Plan (EPPP) and relevant procedures.

An induction is required for all workers (permanent / temporary / contractor / subcontractor), Site visitors, applicant representatives or other 3rd parties. Inductions would be documented.



Plant operators and construction staff would be trained by the Principal Contractor with regard to spill prevention/mitigation measures and procedures and in the use of relevant mitigation material (e.g. spill kits).

Staff and subcontractors employed by the Principal Contractor would have been trained and have to prove certification for any plant, vehicle or use of specialist equipment such as electrical and hot works.

3.3 Construction Management Team

The applicant has appointed a Construction Management Team, led by a Construction Site Manager. The team would have included, as a minimum, a Resident Engineer. Prior to appointment of a Principal Contractor, the applicant would own the CEMP, and the document would become uncontrolled copies when printed.

It would have been the team's responsibility to ensure that the Principal Contractor adheres to and complies with the principles of the CEMP and their Method Statements. This would have likely been the responsibility of the Resident Engineer, and the applicant Construction Manager. The team would also be responsible for:

- regular liaison with the Principal Contractor's Site Manager;
- maintaining environmental risk registers;
- communicating with regulators and consultees such as Natural England (NE), the Environment Agency (EA) and RVBC regarding any changes that need to be made to the CEMP including the Schedule of Mitigation; and
- ensuring that any required changes are approved and updated within the CEMP.

The applicant Construction Manager and Resident Engineer would have the power to stop works at any stage should it be deemed necessary, i.e. if there were risks posed to environmental receptors from construction that could not be mitigated immediately.

3.3.1 Resident Engineer

The applicant would have appointed a Resident Engineer for the construction of the proposed development. The Resident Engineer would provide support to the applicant Construction Management Team and would have day to day responsibility for monitoring the proposed development onsite on behalf of the Construction Manager.

The Resident Engineer would have a wide range of duties including but not limited to:

- overseeing construction works to ensure conformance with the specification, monitoring quality and progress and most importantly ensure that health, safety and the environment is given a high priority at all times. The Resident Engineer would effectively be the applicant's eyes and ears on the Site and would report directly to the applicant Construction Manager;
- authority to stop the construction works in the case of a health and safety, environmental or quality issue. This would be applicable where to delay would cause additional or prolonged risk or damage;
- reviewing construction related documents from all contractors – including method statements and risk assessments and providing comments directly onsite to the Principal Contractor; and
- reporting all environmental or health and safety incidents and near misses to the Construction Manager in a form and timescale required by the Construction Management Team.



3.4 Principal Contractor

The Principal Contractor would have been required to comply with and regularly review the CEMP throughout the construction period. This would include being aware of any changes or updates to the CEMP following the identification of any new environmental sensitivity or any proposed development changes. These changes would have been controlled and implemented by the applicant Construction Management Team, as required.

The Principal Contractor and their team (including any sub-contractors) would have been responsible for:

- undertaking their duties in accordance with CDM 2015;
- liaising with the applicant's Construction Management Team;
- completing the construction of the proposed development in a manner which complies with all relevant laws, rules and regulations;
- acquiring licenses and permits as necessary for their works;
- ensuring that all method statements in line with the principals set out in the CEMP have been provided;
- planning, managing, monitoring and coordinating all pertinent activities relating to construction;
- liaising with and providing justification to the regulators and consultees such as NE, the EA and RVBC if any significant changes are required from the Schedule of Mitigations;
- developing and implementing an Environmental Incident Response Plan and ensuring that all personnel (including sub-consultants and sub-contractors) understand and are aware of procedures to be undertaken should an environmental incident occur. This would sit as an additional appendix in the final CEMP;
- ensuring that all personnel receive training and are aware of the potential to damage to sensitive environmental receptors and procedures required to be implemented to avoid, minimise and mitigate against such damage;
- verifying the competence and resources of all personnel working on the proposed development and any sub-consultants and sub-contractors that were engaged on the proposed development; and
- implementing the Schedule of Mitigation.

3.5 All Site Personnel

All Site personnel, including all members of the applicant and Principal Contractor's teams, all sub-contractors and sub-consultants would have been required to:

- attend all inductions and site-specific training; and
- implement control measures throughout the site, as required.

3.6 Communication

During the construction period, communication with relevant parties was undertaken as necessary. Any incidents or significant changes were managed and addressed as appropriate to the nature of the works. The following key project contacts were identified:

- the Resident Engineer, who would have been on Site for the majority of the construction phase;



- the applicant's Construction Project Manager; and
- the applicant's communication contact.

Any resident who had a question regarding the construction of the proposed development would have been directed to one of these contacts. All questions would have been logged and responded to within a specified number of days.

Careful monitoring of any complaints received, including recording details of the location of the affected party, time of the disturbance and nature of the issue would assist with managing the works to reduce the likelihood of further incidents.



5.0 Construction Programme & Phasing

5.1 Construction

The construction works lasted approximately 1 month and were undertaken prior to the submission and determination of the planning application. Construction commenced on 10 March 2026 and were completed on 10 April 2026.

Construction activities were generally undertaken within accepted working practices of 0800 hours to 1800 hours on weekdays (excluding bank holidays) and no working hours on weekends or bank holidays.

Where necessary, limited construction works may have occurred outside the above times to allow for essential activities that must be unavoidably scheduled outside of the specified construction hours. The term 'essential activities' relates to such works that, if not completed within a particular sequence or within a particular time frame, would have been of detriment to the safety or construction of the project(s) and may include such activities as those that require continuous periods of operation.

The following phases have been taken into account for the construction:

- Erection of any environmental protection measures required by the consent;
- Mobilise equipment to site and prepare any temporary construction compounds;
- Transport storage equipment and supporting infrastructure to site and install; and
- Finalise supporting infrastructure and any landscaping prior to operation

A detailed construction programme was used by the Principal Contractor during the construction phase and informed the implementation of environmental management measures on Site.



6.0 General Construction Good Practice

6.1 Contaminated Soils

The Site comprises hardstanding developed land within an existing industrial site. The risk of encountering contaminants within the soils is therefore considered low. However, a watching brief should have been maintained for encountering potentially unexpected contamination during the preparatory and subsequent construction works.

If contaminated ground was encountered then it should have been investigated, risk assessed and dealt with accordingly by a competent qualified person. Where required, a remediation strategy would have been designed and agreed with the relevant authorities before implementation.

Site staff would have been provided with Personal Protective Equipment (PPE), which may include nitrile gloves, protective overalls, safety goggles and face masks.

6.2 Surplus and Waste Material

6.2.1 Introduction

The Principal Contractor would have taken all reasonable steps to ensure that all waste from the Site is dealt with in accordance with the requirements under the Environmental Protection Act 1990 (and amendments) and that materials would have been handled efficiently and waste managed appropriately, in accordance with the applicant's Construction EHS plan.

Appropriate waste classification, management, disposal and waste carrier documentation and licences have been obtained (e.g. complete waste transfer notes prior to waste leaving Site, ensure all waste carriers have a valid waste carrier's registration certificate, ensure wastes are disposed of at a correctly licensed site, complete notification for hazardous waste to the EA).

Waste streams would include wastes generated by plant, machinery and construction workers over the period of the works, for example waste oils, sewage, refuse (paper, carton, plastic etc.), wooden pallets, waste batteries, fluorescent tubes etc.

6.2.2 Hazardous and Other Wastes

Table 6-2 Table 6-1 lists some of the waste types that may have been generated during the construction works. Although some waste types may be generated across the site such waste materials would have been stored within a designated area only. Waste materials generated would be taken to the designated area on a daily basis to be managed thereafter.

Table 6-1 Common Construction Wastes

EWC Code	Description
3 01 10*	Used mineral hydraulic oil (non-chlorinated)
13 02 08*	Other waste engine, gear or lube oil
13 02 05*	Waste engine, gear or lube oil (non-chlorinated)
13 02 08*	Other waste engine, gear or lube oil
16 01 07*	Oil filters
20 01 23*	Discarded equipment containing CFCs e.g. waste fridges & freezers
16 06 01*	Lead batteries



EWC Code	Description
16 07 08*	Oily waste from transport and storage tanks
16 10 01*	Hazardous liquid wastes to be treated off-site
20 01 21*	Fluorescent tubes and other mercury-containing waste
20 01 33*	Hazardous batteries and accumulators that are collected separately
15 02 02*	Absorbents, filter materials, wiping cloths, clothing contaminated by dangerous substances
15 01 01	Cardboard or paper packaging
15 01 02	Plastic packaging e.g. toner & ink cartridges, polythene sheeting
15 01 03	Wooden packaging e.g. timber pallets
15 01 04	Metallic packaging e.g. drink cans, paint tins
16 01 03	Tyres
16 01 15	Antifreeze fluids that do not contain dangerous substances e.g. Coolants
16 01 17	Ferrous metal from vehicles e.g. car parts
16 02 14	Non-hazardous waste electricals e.g. washing machines, power tools
16 05 05	Gases in pressure containers i.e. gas cylinders
17 01 01	Concrete
17 02 01	Wood from construction or demolition e.g. timber trusses, supports, frames, doors
17 04 11	Cables that do not contain dangerous substances e.g. electric cabling
17 05 03*	Soil and stones containing hazardous substances
17 05 04	Soil and stones other than those mentioned in 17 05 03
20 01 01	Paper & card similar to that from households e.g. office paper, junk mail
20 01 30	Non-hazardous detergent e.g. flushing agent/universal cleaner
20 01 39	Separately collected plastics e.g. plastic containers, bottles
20 03 01	Mixed waste similar to that from households e.g. mixed office, kitchen &
20 03 04	Septic tank sludge

**Denotes Hazardous Waste, as categorised by the European Waste Catalogue.*

Foul water from the onsite facilities at the construction works compound would have been removed from Site by an appropriately licensed contractor.

6.2.3 Regulatory Compliance

Where required, waste would need to be transferred to a licensed waste management site or site with a waste exemption. The Principal Contractor would ensure that the Site is licensed and that the licence permits the Site to take the type and quantity of waste involved. Copies of the waste management licence or waste exemption license would need to be held on file.

A 'Waste Transfer Note' must be completed by all parties involved and must be retained for a period of two years. Sub-contractors excavating and hauling waste offsite must complete their own Waste Transfer Notes and copy them to the Principal Contractor. It is not necessary to have a Waste Transfer Note for each load of waste, and a Waste Transfer Note can be issued weekly or monthly as a season ticket.



It would have been the responsibility of the Principal Contractor to ensure that other parties involved in the transport, storage and disposal of waste were legally entitled to carry out their duties.

6.3 Dust Mitigation

Best construction practice is adopted to control dust and potential impacts to air quality. This CEMP sets out the measures adopted to minimise dust during construction activities. Vehicle and plant emissions will be controlled by implementing the following measures:

- Engines of all vehicles, mobile and fixed plant on site are not left running unnecessarily.
- Plant will be well maintained, with routine servicing of plant and vehicles to be completed in accordance with the manufacturers recommendations and records maintained for the work undertaken.
- All project vehicles, including off-road vehicles, will hold current MOT certificates, where applicable and where required due to the age of the vehicle, (or to be tested to an equivalent standard) and that they will comply with exhaust emission regulations for their class.
- All commercial on road vehicles used in construction must meet the European Emission standards pursuant to the EC Directive 98/69/EC (commonly known as Euro Standards) of Euro 3 during any works.

Hazardous substances, such as diesel, oils, chemicals, cement, concrete and paint have the potential to cause serious pollution. The Environment Agency Pollution Prevention Guidance will be followed.

Good practice measures as listed in Table 6-2 would have been adopted where practicable during construction to control the generation and dispersion of dust such that significant impacts on neighbouring habitats should not occur. The hierarchy for mitigation would be prevention -suppression- containment.

Table 6-2 Dust Mitigation Measures

Site Application	Mitigation Measures
Highly Recommended	
Communications	Develop and implement a stakeholder communications plan that includes community engagement before work commences on site.
	Display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary. This may be the environment manager/engineer or the site manager.
	Display the head or regional office contact information.
Monitoring	Carry out regular site inspections, record inspection results, and make an inspection log available to the local authority when asked.
	Increase the frequency of site inspections by the person accountable for air quality and dust issues on site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.
Operating Vehicle/Machinery and Sustainable Travel	Ensure all vehicles switch off engines when stationary - no idling vehicles.
	Avoid the use of diesel- or petrol-powered generators and use mains electricity or battery powered equipment where practicable.



Site Application	Mitigation Measures
Operations	Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems.
	Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate.
	Use enclosed chutes and conveyors and covered skips.
	Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.
	Ensure equipment is readily available on site to clean any dry spillages and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.
Preparing and Maintaining the Site	Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is possible.
	Erect solid screens or barriers around dusty activities or the site boundary that are at least as high as any stockpiles on site.
	Fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period.
	Avoid site runoff of water or mud.
	Keep site fencing, barriers and scaffolding clean using wet methods.
	Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site. If they are being re-used on-site cover as described below.
Site Management	Cover, seed or fence stockpiles to prevent wind whipping.
	Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken.
	Make the complaints log available to the local authority when asked.
Waste Management	Record any exceptional incidents that cause dust and/or air emissions, either on- or offsite, and the action taken to resolve the situation in the logbook.
	Avoid bonfires and burning of waste materials.
Desirable	
Construction	Avoid scabbling (roughening of concrete surfaces) if possible.
Earthworks	Where appropriate, re-vegetate or cover earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable.
	Use Hessian, mulches or tackifiers where it is not possible to re-vegetate or cover, as soon as practicable
Monitoring	Principal Contractor to undertake regular on-site inspections to confirm if dust is being generated, where receptors (including roads) are nearby, to monitor dust, record inspection results, and make the log available to the local authority when asked. This should include regular dust soiling checks of surfaces such as street furniture, cars and windowsills within 100m of site boundary, with cleaning to be provided if necessary.



Site Application	Mitigation Measures
	With respect to operating vehicle/machinery and sustainable travel:
	Impose and signpost a maximum speed limit of 5mph on surfaced or unsurfaced haul roads and work areas (if long haul routes are required these speeds may be increased with suitable additional control measures provided, subject to the approval of the nominated undertaker and with the agreement of the local authority, where appropriate).
	Implement a Travel Plan that supports and encourages sustainable travel (public transport, cycling, walking, and car-sharing).
Trackout	Use water-assisted dust sweeper(s) on the access and local roads, to remove, as necessary, any material tracked out of the site. This may require the sweeper being continuously in use.
	Avoid dry sweeping of large areas.
	Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport.
	Record all inspections of haul routes and any subsequent action in a site logbook.

IAQM guidance sets out a range of site-specific mitigation measures that can be implemented at a construction site in order to minimise potential dust and particulate matter (PM₁₀) emissions. The following measures should be implemented at the development site during the construction of the proposed development in order to reduce the potential for nuisance for local residents:

- The name and contact details of the person(s) accountable for air quality and dust issues displayed on the site boundary;
- Any dust and air quality complaints will be recorded in a log, which will be made available to the local authority when asked. The log will record the cause(s) of any complaints and the measures taken to reduce the emissions in a timely manner;
- All on-site employees will be trained and certified. Regular tool-box talks will take place to ensure that all employees are aware of the potential for dust impacts, and the procedures to follow in the event of any complaints;
- Regular on-site inspections will take place to monitor dust, and inspection results will be recorded. Visual inspections will take place along the site access road, especially where this is located in close proximity to existing residential properties;
- Solid screens or barriers will be erected around operations where there is a high potential for dust production, and will be kept clean;
- Materials that have the potential to produce dust will be removed from site as soon as practically possible;
- All on-site vehicles/plant will have their engines switched off when stationary;
- All cutting, grinding and sawing equipment will be used in conjunction with suitable dust suppression techniques, such as water sprays. An adequate water supply will be available on site for dust suppression purposes;
- Drop heights from loading shovels and other material handling equipment will be minimised in order to reduce the potential for emissions of dust and PM₁₀; and



- Vehicles entering and leaving the site will be covered to prevent the escape of materials.

6.4 Noise Management

The adoption of Best Practicable Means, as defined in the Control of Pollution Act 1974, is typically the most effective means of controlling noise from sites. Within the constraints of efficient site operations and the requirements of the relevant British Standards, the following is advisable:

- Limit the use of particularly noisy plant, i.e. do not use particularly noisy plant early in the morning;
- Limit the number of plant items in use at any one time;
- Plant maintenance operations should be undertaken as far away from noise-sensitive receptors as possible;
- Phasing the works to maximise the benefit from perimeter structures;
- Any compressors brought on to site should be silenced or sound reduced models fitted with acoustic enclosures;
- Reduce the speed of vehicle movements;
- All pneumatic tools should be fitted with silencers or mufflers;
- Ensure that operations are designed to be undertaken with any directional noise emissions pointing away from noise-sensitive receptors where practicable;
- When replacing older plant, ensure that the quietest plant available is considered wherever possible; any deliveries/spoil removal vehicles should be programmed to arrive and depart during daytime hours only;
- Drop heights must be minimised when loading vehicles with rubble;
- Care should be taken when loading vehicles to minimise disturbance to local residents. Vehicles should be prohibited from waiting within the site with their engines running;
- All plant items should be properly maintained and operated according to the manufacturers' recommendations in such a manner as to avoid causing excessive noise. All plant should be sited so that the noise impact at nearby noise-sensitive properties is minimised; and
- Local hoarding, screens or barriers should be erected as necessary to shield particularly noisy activities.

Any problems concerning noise from construction works can sometimes be avoided by taking a considerate and neighbourly approach to relations with local residents. Works should not be undertaken outside of the hours agreed with the local authority.

6.5 Site Lighting

Temporary Site lighting may be occasionally required for specific activities to ensure safe working conditions, during periods of limited natural light but should be carried out within the limits of the permissible working hours. It is intended the type of lighting would be non-intrusive and specifically designed to negate or minimise any effect to local properties and any other environmental considerations.



7.0 Traffic Management

7.1 Vehicle Movements

7.1.1 Scheduling

HGVs have been scheduled outside of network peak periods.

All contractors would be responsible for the proper organisation of their deliveries, including booking said deliveries. Deliveries must be booked with the Site Manager at least 24hrs in advance in order to accommodate special requirements e.g. usage of a forklift or crane to unload. It is also the Contractor's responsibility to apprise themselves of the various protocols associated with delivery to site.

The booking of a delivery shall include imparting the following information to the Site Manager:

- the specific area within the Site for which the delivery is destined;
- subcontractor name and contact telephone number;
- content of the delivery;
- name of the haulage company;
- anticipated arrival time;
- estimated duration on site; and
- special requirements – forklift/crane.

All contractors and sub-contractors will be formally notified of scheduling requirements.

7.1.2 Vehicle Routing

All HGVs accessing and departing from the Site have been required to route primarily from Pimlico Link Road connecting to the A59.

7.1.3 Abnormal Loads

Likely construction methodology should suggest that there will be no abnormal loads required during the construction phase. It is not anticipated for the requirement of abnormal loads, however, should the construction methodology alter due to contractor preference, the correct procedures for notifying the Local Highways Authorities should be adhered to.

7.2 Plant and Material Loading and Unloading

Within the Site, a dedicated area should be reserved for vehicles making deliveries, enabling them to park, turn and unload or load clear of the public highway. This area should be cleared prior to construction commencing and maintained as such thereafter i.e. clear of any material storage or other obstruction. All vehicles must be able to enter and leave in forward gear with sufficient space for turning at all times.

The intention is to minimise the impact of the construction traffic on nearby roads. Any phases of the development work that would have involved a significant level of importation and/or exportation of construction materials or spoil should have therefore been restricted to periods outside the peak hours of traffic activity.

All vehicles attempting to gain access to the Site should be vetted by the Principal Contract on arrival. Drivers entering for the first time will be handed a document on arrival detailing the protocols for entering the Site and be expected to adhere to them. Deliveries of any plant machinery or building materials should be scheduled in advance and as such be expected.



It is not envisaged that a holding area will be necessary as the project is expecting deliveries to be on the whole small and infrequent. Contractors will, where possible and practical, utilise 'just-in-time' deliveries to reduce the requirement to store large amounts of materials on site.

Delivery protocols include:

- deliveries will not be scheduled for highway network peak periods;
- major deliveries should be pre-arranged with 24hrs notice where possible;
- drivers should call ahead to ascertain a clear entrance and the availability of banksmen;
- if drivers are required to exit their vehicle for any reason during the course of the delivery, full PPE must be worn; and
- all HGVs must be guided by trained banksmen.

Any breach of the conditions of entry to the Site will be dealt with by the Principal Contractor. All contractors, sub-contractors etc. will be formally notified of these restrictions.

7.2.1 Off-loading Requirements

Typically, all materials should be unloaded by the haulage company making the delivery. As such, the Principal Contractor and their subcontractors shall advise haulage companies to provide equipment to facilitate unloading on-site and to seek and obtain any relevant licenses and approvals well in advance. Often haulage companies deploy Lorry Mounted Cranes or Truck Mounted Forklifts. Any specific loading/unloading requirements are to be advised.

7.3 Storage of Plant and Materials

Plant and materials shall be stored in a designated area and where possible, materials should be scheduled to be delivered on a 'just in time' basis in order to prevent congestion within the Site.

Any Subcontractor making deliveries to the Site shall comply with standard protocols, including those regarding delivery scheduling and the wearing of appropriate PPE. Any Subcontractor not complying with procedure will be refused access to the Site with other materials and plant until this has been rectified.

No materials may be left anywhere in or around the compound other than the designated area for storage.

The Trade Subcontractor will supply any appropriate equipment, including protective cages and signage at their expense. Storage areas will be inspected on a regular basis to ascertain that housekeeping and COSHH procedures are being strictly adhered to. Any Control of Substances Hazardous to Health (COSHH) waste must be sited within the Waste Management area of the Site compound. All PPE shall be kept in allocated drying rooms/welfare facilities or in the Trade Subcontractors offices.



8.0 Pollution Prevention Measures

8.1 Environmental Incident Response Plan

The Principal Contractor would be responsible for developing and implementing an Environmental Incident Response Plan. The plan should provide reference to procedures to be followed in the event of a specific incident. In general, if an environmental incident was to occur, the following would take place immediately:

- mitigation would have been implemented to stop or reduce impacts from the incident;
- if these were ineffective, work in the area would cease immediately;
- if necessary, monitoring would have been undertaken to identify the source of the incident;
- work would only recommence once it is considered that it would not continue to adversely impact sensitive environmental receptors; and
- provision of a full report by the Principal Contractor to the applicant following an incident occurring.

The Environmental Incident Response Plan would reflect site-specific conditions/issues. The Principal Contractor should submit the detailed Plan to the applicant for approval prior to any construction works commencing onsite. The Plan would provide:

- a summary of local environmental sensitivities, e.g. environmentally designated areas, protected species or habitats and high amenity areas;
- an outline of the construction works and appropriate references to other environmental plans and construction method statements;
- an inventory of stored materials and emergency response spill kits;
- details on training requirements, evidence of training of Site staff / plant operators in emergency response procedures including inclusion of Environmental Incident and Response training in Site inductions and toolbox talks; and key staff contacts for environmental management and emergency response.
- detailed procedures to be taken in the event of an incident or emergency (including procedures for positioning and movement of plant) and identification of relevant personnel who was responsible for implementing such procedures; and
- contact telephone numbers for the emergency services and EA Pollution Hotline (0800 80 70 60).

A plan of the Site would also be provided, detailing:

- all areas of potential pollution sources including the locations of car parks, delivery and fuel / chemical storage areas, oil separator equipment, excavations and any other high-risk areas that could give rise to pollution.
- the location of potential sensitive environmental receptors, including sensitive habitats or species, surface watercourses, drains or culverts where pollution may travel to; and
- the location of spill kits and other pollution control or emergency response equipment.

The procedures for responding to a major pollution incident would have been a regular topic at onsite toolbox talks and management meetings in order to ensure that the incident response plan is fully understood by all personnel, and that all involved know their role in it. Any lessons learnt from any response to real incidents would have been fed back into the plan to ensure that best practice was followed.



8.2 Re-Fuelling of Vehicles, Plant and Machinery

Generally, re-fuelling of mobile plant and machinery would have been carried out at a designated location within the Site, and all fuel and chemical storage have complied with relevant storage regulations. Refuelling will be undertaken in a designated and lined refuelling area, and a spill procedure will be documented, and spill kits kept in the vicinity of potentially hazardous materials storage areas. All staff will be trained on the use of these spill kits.

Vehicle re-fuelling would have taken place either at a dedicated impermeable refuelling pad or by mobile double bunded bowsters at their place of work. The refuelling pad would have an impermeable base and bund with a capacity of 110% with sumps provided such that they do not drain directly into the surface water drains. Where practicable, drainage will be passed through oil interceptors prior to discharge. Refuelling would have been carried out using an approved mobile fuel bowser with a suitable pump and hose. Absorbent material (spill kits) would have been available onsite and deployed to contain drips and small spillages.

All other fuels, oils and potential contaminants, as well as waste oils, would have been stored in secure, fit for purpose containers within bunded containment as appropriate and in accordance with the requirements of the Control of Pollution (Oil Storage) (England) Regulations 2001 and best practice guidelines (such as Pollution Prevention for Business). Oils and chemicals will be clearly labelled, and the site should retain an up-to date COSHH inventory.

The bunded containment would have a capacity of 110% of the volume to be stored and would have impervious, secured walls and base. Maintenance of mobile plant would take place within the construction compounds only and mobile plant would have been maintained in good operational order and any fuel/oil leaks recorded for attention.

8.3 Spillage

Areas at risk of pollutant spillage, including construction compounds, vehicle maintenance areas and hazardous substance stores (including fuel, oils and chemicals) should be bunded and carefully sited to minimise the risk of hazardous substances entering drainage systems or water courses. All fuel, oils and other polluting substances will be securely stored in suitably bunded containers on impermeable surfaces in accordance with CIRIA C532. Storage of these potentially polluting substances will be away from any water course. The total quantity and range of potential pollutants to be used on-Site is anticipated to be small.

Spillage of fuel, oil and chemicals should be minimised by implementation of an Emergency Pollution Prevention Plan (EPPP) which would have been prepared by the Principal Contractor. In the event of any spillage or pollution of any watercourse the emergency spill procedures as described in the EPPP would have been implemented immediately.

Machinery will be routinely checked to ensure it is in good working condition to reduce the risk of leaks, and any static machinery and plant will, where practicable, have integral drip trays of 110% of the capacity of the fuel tank.

8.4 Other Storage

Aggregate material stockpiles would generally be limited to within work areas. This material would have been transported and deposited directly to the point of use from the storage point.

Stripped topsoil/superficial soil would be stockpiled as bunds in a suitable location away from the area of movement of heavy vehicles, machinery and equipment, to minimise compaction of soil. Stockpiling of excavated material would have been managed such that the potential contamination of down slope water supplies and/or natural drainage systems is mitigated / minimised.



9.0 Ecology

A Preliminary Ecological Appraisal and several protected species surveys have been undertaken in support of the proposals. The assessments have identified that there will be no unacceptable impacts on any ecological features present. The need for any additional pre-commencement surveys was considered in the context of the time elapsed since the initial surveys were undertaken.



10.0 Implementation of CEMP Principles

10.1 Introduction

This CEMP records the environmental management principles and measures that were considered and applied during the construction phase of the development. The measures implemented were proportionate to the scale and nature of the works undertaken.

10.2 Publicity and Consultation

The construction requirements and measures taken to minimise impacts on surrounding receptors were communicated to key stakeholders and relevant individuals.

The CEMP is a dynamic document and can be altered to accommodate any emerging requirements, constraints or opportunities as the proposals progress.

Signage have been displayed at appropriate locations on the hoarding; this will include a mandatory Health & Safety notice board which will display signage regarding mandatory PPE requirements with any key contact details located at the main entrance. The various safety signage was monitored by the Site Manager to ensure it is always present and legible.

Commencement dates for construction have been communicated to local stakeholders who will be able to provide their input to the project at any time. This could include, for example, members of the public who wish to raise a concern, or a member of staff with a suggestion. All input has been recorded and, whether actioned or not, are considered as part of a review process.

10.3 Staff/Driver/Contractor Information

All Staff/HGV drivers/contractors have been provided with details of the Site restrictions and implemented measures.

A Transport Information Sheet (TIS) should be produced which details the Site's requirements and restrictions. The factsheet will be provided to all sub-contractors and new staff and used within the tendering and appointment process.

The TIS should include the following:

- Staff Transport Information:
 - Promotion of sustainable travel/car sharing.
 - Car parking arrangements.
 - Site access arrangements.
- Operational Vehicle Information:
 - HGV access requirements and restrictions.
 - Loading/unloading requirements (wheel wash etc.).
 - Waste disposal directions.
- Monitoring and Reporting procedures/contacts.

Site transport restrictions, implemented measures, and operational preferences will be reaffirmed during regular staff/contractor briefing sessions on site. It should be made clear that a breach of rules and restrictions may be subject to standard disciplinary procedures.



10.4 Monitoring and Reporting

Monitoring and reporting procedures were implemented at the Site prior to the commencement of the construction works and were maintained throughout the construction process.

The procedures will encourage all stakeholders to report any issues, breach of restrictions, or risks, to site management.

Inspections should identify any health and safety concerns and any other anomalous occurrences which may result in detrimental impacts to the highway, such as mud/detritus on the carriageway derived from the construction site. Records of said inspections should be kept and made readily available for inspection on request.

Site staff and drivers are expected to contribute to the monitoring and reporting programme, highlighting any instances such as vehicle routeing violations or where unwanted material is deposited on the highway from site vehicles.

Site management contact details have been advertised at the Site Access in order to allow members of the public to report any issues.

Any complaints should be addressed and dealt with through the Site Manager, recorded on the Complaints Register and forwarded to the Assurance Manager who will ensure satisfactory close out.





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