1MC04 Main Works - Contract Lot S2

Site Operating Plan - Waste Transfer and Treat Station - Ruislip Southern Sustainable Placement S2

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	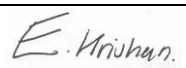		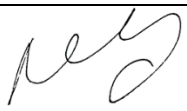			
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C01.1	Ellis Krishan	05/08/2021	James Ennis	17/08/2021	Mark Gaby	19/08/2021	RSSP - Waste Transfer and Treat Station (WTS) Permit
					Beth Lyon	30/09/2022	SCS updated to include receipt of waste by road
					Beth Lyon	25/10/2022	Table 1 confirmed for draft permit
C02	Ellis Krishan		Miles German	04/04/2023	Beth Lyon	05/04/2023	SCS updated to confirm operation and permitted area boundary

Contents

1 Introduction

1.1.1 Phase One of HS2 will provide dedicated high-speed rail services between London, Birmingham, and the West Midlands. It will extend for approximately 230km (143 miles). Just north of Lichfield, high speed trains will join the West Coast Main Line for journeys to and from Manchester, the North West and Scotland.

1.1.2 Phase One of HS2 is the first phase of a new high-speed railway network proposed by the Government to connect major cities in Britain. It will bring significant benefits for inter-urban rail travellers through increased capacity and improved connectivity between London, the Midlands, and the North. It will release capacity on the existing rail network between London, Birmingham and the West Midlands and so provide opportunities to improve existing commuter, regional passenger, and freight services.

1.1.3 The Materials Management Plan Framework for the HS2 scheme sets out a framework for materials reuse within the scheme. As part of the Materials Management Plan Framework the Waste Transfer and Treat Station - Ruislip Southern Sustainable Placement (RSSP-WTS) will be used as a transfer station, operated by Skanska Costain STRABAG Joint Venture (SCSJV).

1.1.4 In line with current waste legislation, the handling of excavated material at the site will need to be undertaken in line with the Environmental Permitting (England and Wales) Regulations 2016. In accordance with the HS2 Technical Standard on Waste Environmental Permitting the screening process for the proposed waste facility at Ruislip Southern Sustainable Placement Waste Transfer Station (RSSP-WTS), has identified the need for a Bespoke Permit application.

1.1.5 This Site Operating Plan has been prepared for the RSSP-WTS, operated by SCSJV. The site is located in a semi-rural area immediately north west of Ickenham and to the west of West Ruislip, in the London Borough of Hillingdon; centred around Grid Reference TQ06517 87233. This document forms one of a suite of documents that together will be submitted to the Environment Agency (EA) as part of an application for an environmental permit for the proposed RSSP-WTS site.

1.1.6 The RSSP-WTS will receive Tunnel Boring Machine (TBM) spoil arisings via a conveyor system from West Ruislip Portal. Alternatively, material will arrive by road in tipper lorries, should the conveyor system be unavailable for any reason.

1.1.7 This material will be temporarily stored and treated within the extent of the RSSP-WTS. The material arisings are to be treated with lime additives. This is to manage the moisture content of the arisings, making the material suitable for storage and transportation, and for placement (permanent deposit) in the Ruislip Southern Sustainable Placement (RSSP). Material will be identified as suitable for use in engineering and sent from the RSSP-WTS to the Copthall Cutting East (Copthall backfill) for use as engineering fill. GGBS (ground

granulated blast furnace slag) may be added for engineering purposes. This is a non-waste activity.

1.1.8 TBM arisings materials only – clays / soils from construction (tunnelling), are intended for transfer and treatment at the RSSP-WTS. Instances of non-conforming material are unlikely as the material is from a single source (tunnelling). Material arriving by road will have been inspected previously, and any material unsuitable for placement (with or without treatment) may have been rejected elsewhere.

1.1.9 However, if any non-conforming material (e.g., contaminated with concrete or oil) is identified, on arrival by conveyor or by road, then it will be isolated (quarantine) and/or directly removed from site via road without treatment to a suitably permitted facility.

1.1.10 The Site Operating Plan provides the following details:

- A summary of the operating times of the site.
- Waste Quantities, Types and Acceptance Procedures
- Description of the transfer process.
- Details of the site infrastructure
- Substances to be used
- Details of storage provision
- Quality control procedures.
- Plant arrangement and operation.
- Details of the measures that will be implemented to control environmental nuisance.
- Details of the records that are to be maintained.

1.2 Associated Documents

1.2.1 This report should be read in conjunction with the following documents submitted for the permit application:

- Environmental Permit Application Forms (1MC04-SCJ_SDH-EV-FRM-SS05_SL07-000011);
- Non-technical summary(1MC04-SCJ_SDH-EV-NOT-SS05_SL07-000008);
- Site Condition Report (1MC04-SCJ_SDH-EV-REP-SS05_SL07-000009);
- Management Systems and Procedures (1MC04-SCJ_SDH-EV-PRO-SS05_SL07-000004);

- Noise and Vibration Monitoring Plan (1MC04-SCJ_SDH-EV-PLN-SS05_SL07-000015);
- Dust and Emissions Monitoring Plan (1MC04-SCJ_SDH-EV-PLN-SS05_SL07-000013).

1.2.2 Documents associated with the RSSP-WTS site are cross referenced where appropriate.

1.3 Limitations

1.3.1 This report has been prepared for and on behalf of SCSJV in response to their particular instructions. It is not intended for and should not be relied upon by any third party and any duty to such a party using this report for any purpose is excluded.

2 General Considerations

2.1 Hours of Operation

2.1.1 There are no restrictions on the hours of operations of the facility. The site will operate twenty-four hours per day, seven days per week including bank holidays. This includes operation in all weather conditions to reflect the TBM operations.

2.1.2 However, receipt of tipper vehicles carrying waste material, if received from the public highway will have restricted hours (e.g., no later than 10pm Mon-Sat).

2.1.3 When the site operates during the hours of darkness during the winter months the operator will provide portable electric lighting to:

- Ensure safe working conditions.
- Enable all waste to be properly identified.

3 Waste Quantities, Types and Acceptance Procedures

3.1 Waste Quantities and Storage

3.1.1 The RSSP-WTS facility will receive approximately 1,250,000m³ of material from the Tunnel Boring Machine (TBM) arisings. The material generated as part of the TBM drive will arrive at the RSSP-WTS facility via a conveyor system (or by road if the conveyor system is unavailable). The TBM material will arrive at the facility at a rate of between 500m³ to 3,000m³ per 24-hour day, dependent on the type of material the TBM is currently driving through. The average daily rate of material delivery from the TBM is anticipated to be within the region of 2,200 to 3,000m³ per day.

3.1.2 The TBM material will arrive at the facility untreated (by conveyor) and will be routed into one of three pugmill mixing plants. The mixing plants have the capability to be used for lime addition, or for mixing other additives for engineering only purposes (e.g., GGBS). Should the material already display suitable characteristics (e.g., material to be of a suitable consistency), then the material is to be routed directly back to Copthall backfill operations without entering the mixing plants.

3.1.3 Material entering the facility alternatively by road, if the conveyor system is unavailable may already have had lime added elsewhere (see section 4.2.3 of this document), or may not require any treatment prior to permanent placement in the RSSP , or as Copthall backfill. Equally, it may require lime addition at the RSSP-WTS facility – in pugmills or at/during the point of storage or transportation.

3.1.4 Ordinarily, material arriving by road will not be part of the RSSP-WTS permitted activity and will be taken directly to the stockpiling area to the south of the RSSP-WTS (which is outside the permitted area boundary).

3.1.5 Once the material treatment has been undertaken (at the pugmill mixing plants), a loading shovel and/or excavator will collect the material from the pugmill and load it into an Articulated Dump Truck (ADT) for transportation to the RSSP; or it will be loaded onto the return conveyor if designated for use as Copthall backfill. Should weather, operational time or other extraneous issues prevent the immediate removal and placement of the arisings as Copthall backfill or in the RSSP facility, material will initially be placed and spread into one of three TBM arising storage bins to maximise storage space within the RSSP-WTS facility.

3.1.6 Collectively, the three TBM arisings storage bins have a capacity to store up to 30,000m³ of material. The storage bins within RSSP-WTS give rise to approximately a maximum of 18 days running time for the TBM (assuming no onward movement of material), however, the storage bins must never be allowed to reach full capacity (30,000m³), as this would have to result in the postponement of TBM operations until capacity at the RSSP-WTS facility can be reduced.

3.1.7 If maximum storage capacity is achieved, and the receiving material facility is not ready to take the material, then the material will be removed from the storage bins and placed in the designated storage (stockpiling) areas to the south of the Copthall Covert forested area. Material will be stored there until the material can be safely and efficiently removed from storage and onward to permanent placement (e.g., placement in RSSP or Copthall backfill).

3.1.8 Once material has passed through the mixing plants at the RSSP-WTS facility, onward movement of the material will be via a return conveyor to the Copthall backfill area (or by haul road in the event that the conveyor is unavailable); whilst material movement for placement within the RSSP will be via a designated haul road (internal).

3.2 Permitted Wastes

3.2.1 In accordance with the Council Decision 2003/33/EC, soils and stones can be admitted without testing providing that they do not originate from contaminated sites (EWC code 170504), they are a single source of waste type, and there is no suspicion of contamination.

3.2.2 The materials to be accepted have been classified using the EWC codes as detailed in Table 1. It is anticipated that the material will comprise European Waste Code 17 05 04, soil, and stones, generated from the TBM arisings (predominantly a mixture of clays, sand, and a small amount of chalk), and 19 03 07 once limed at the RSSP-WTS (or elsewhere (West Ruislip Portal) at a permitted treatment facility. A waste classification assessment has been conducted, confirming that TBM material is suitable for placement in the RSSP (landfill).

3.2.3 **Acceptable wastes are single source (tunnelling) arisings only, consisting of:**

Waste Code	Waste Description
17 05 04	Soil and stones (TBM arisings)
19 03 07	Solidified waste (TBM arisings solidified with lime)

Table 1 – Acceptable waste types[1] (ref. sec. 4.1.4)

3.2.4 Waste materials that are suspected to not conform to the EWC code shown in Table 1 will not be treated/ stored within the designated storage and treatment areas within the RSSP-WTS facility. This material will be removed from the incoming conveyor system and placed within a separate materials quarantine area, where this material shall be dealt with separately.

3.2.5 Suspected non-conforming wastes are to be delineated via visual inspection of materials along the incoming conveyor, or on tipping of material by an appropriately qualified person. Chemical testing will be used to ascertain and verify the waste classification of the material, prior to a decision being made on how the quarantined material is managed.

4 Waste Acceptance and Control Procedures

4.1 Introduction

4.1.1 The site will only accept waste generated from Tunnel Boring Machine (TBM) spoil arisings via a conveyor system from West Ruislip Portal, or by road (via Harvil Road to a single entrance gate) in the event that the conveyor is unavailable. Waste will arrive by a conveyor located to the northeast of the facility, directly from the area of material generation (West Ruislip Portal).

4.1.2 Where waste is received from the tunnels via the conveyor, the waste transfer station is considered to be the place of production. No waste transfer note will be created at this point. Conveyor telemetry will provide a continuous volume feed with information sent to the SCSJV data library.

4.1.3 For road haulage an annual waste transfer note (AWTN) will be generated.

4.1.4 See Table 1 of this document for acceptable waste types.

4.1.5 Expected types and volumes of waste to be generated are to be identified using the Site Waste Management Plan template on the SCSJV appointed online Waste Portal database.

4.1.6 Waste characterisation will be undertaken on the materials at the RSSP-WTS site.

4.1.7 All waste leaving the site shall be recorded using the SCSJV appointed online Waste Portal database.

4.2 Waste reception at site

4.2.1 The site clerk will ensure that the wastes have come from TBM arisings originating from construction of Northolt Tunnel West via the West Ruislip Portal only.

4.2.2 Preferentially, all wastes entering the facility will enter the facility via the designated conveyor system. If for any reason the conveyor is unavailable (e.g., completion of construction or maintenance), material will be transported from West Ruislip Portal by road in tipper lorries.

4.2.3 TBM arisings from West Ruislip Portal will be treated with lime stabilisation methodology. The purpose of liming is to improve the suitability of the physical state of the material, for storage, transportation, and placement. The lime treatment is solidification only (19 03 07).

4.2.4 Vehicular transportation of outgoing wastes from the RSSP-WTS facility will be along an internal haul road for placement at the Ruislip Southern Sustainable Placement (RSSP) area. Non-waste material for engineering fill may be transported by road off-site if necessary (i.e., in the event that the return conveyor is not available).

4.2.5 The site office is operated by a clerk who will record the movement of vehicles carrying waste materials into and from the site and identify the loads they are carrying. The clerk will complete Waste Transfer Notes (WTNs) and is responsible for their safe storage. The site clerk will sign the WTN to confirm the details are correct. The WTN will be signed after inspection of the waste on return of the vehicle after the waste has been unloaded. WTNs will be made available for inspection by representatives of the Environment Agency on request.

4.2.6 The site clerk will ensure that a fully completed WTN is received for every load (unless part of a multiple consignment, such as an AWTN) and includes the appropriate EWC Code and SIC code.

4.2.7 Other than where AWTNs are in use for TBM arisings, the delivery driver will be issued with a receipt, in the form of a ticket for each load of waste.

4.2.8 Only authorised waste carriers and exempted authorities will be allowed on site. Any new waste carrier must provide evidence of registration (registration certificate or official copy certificate) to the Site team / SCS Environmental Advisor. In addition, occasional checks of waste carriers will be carried out to check that their registration is still current using the Environment Agency's Public Register. These verification checks will be stored on site.

4.3 On-site verification

Waste reception

4.3.1 All waste delivered to site will be visually inspected, along the conveyor system and on unloading in the holding area by a competent operative. The objective of this inspection is to detect the presence of unauthorised waste. TBM arisings transported by road will have been inspected prior to loading elsewhere. Inspection will occur again on unloading at the RSSP-WTS facility. Material suitable for treatment or placement only is expected to be transported to the facility by road.

4.3.2 The site clerk and operative at the holding area will use two-way radios so that visual inspection and cross-checking of any waste load can be carried out. The Site Supervisor or their nominee will also carry a radio so that they can be made aware of potential problems at the earliest opportunity. This might, for example, be the arrival of a waste delivery containing unauthorised waste. The Site Supervisor will then be able to ensure that such waste is handled safely and removed from site as soon as practicable.

4.3.3 After inspection of the load, the site clerk will sign the Waste Transfer Note to confirm that the details are correct.

Holding Area

4.3.4 Waste delivered to site via the conveyor will be visually inspected by a competent operative as it enters the holding area.

4.3.5 The operative will observe every load as the waste is unloaded from the conveyor (/ tipper lorries).

4.3.6 If the operative's inspection detects any unacceptable waste (wastes which don't meet the description of wastes accepted), it will be dealt with in accordance with the waste rejection procedures below (4.4).

Weighing Area

4.3.7 Weighbridge already installed on site by SCS, appropriately calibrated, operated by sub-contractor.

4.3.8 A robust checking and assurance mechanism for incoming materials ensured by volume surveys and density tests.

4.3.9 Each ADT (articulated dump truck) carrying material crossing from the STA to the SSPA boundary will go via the weighbridge.

4.3.10 Operator to provide material movements and weighbridge data to SCS on daily basis.

4.3.11 SCS to ensure HMRC compliance and taxation requirements (in accordance with LFT1). SCS nominated person to ensure collation of above data for taxation purposes and to ensure mound volumes are adequately tracked.

Multiple consignments

4.3.12 The sole source of waste is from TBM arisings from the construction of the Northolt Tunnels via West Ruislip Portal, consequently it is proposed to use an AWTN or 'season ticket' for the same waste carrier to cover the delivery of multiple loads for a period of up to 12 months providing the waste is consistently of the same type (i.e. its composition does not change). This paperwork will be stored and attached to the multiple consignment note when the contract is completed.

4.4 Waste rejection procedures

4.4.1 Only waste from TBM arisings from the construction of the Northolt Tunnels via West Ruislip Portal will be accepted at the site and as a consequence the risk of non-compliant waste being received at the site is considered low.

4.4.2 Where visual inspection has identified waste from the conveyor that is suspected to be contaminated, the material will be transferred to an isolation compound for disposal offsite by road.

4.4.3 The site clerk will inform the Site Supervisor or their nominee who will then inspect the load with the delivery driver and, where practicable, ensure that the unacceptable waste is returned to the waste producer.

4.4.4 Wastes that have been deemed unacceptable will be removed from the site within 5 calendar days of receipt.

4.4.5 Each load of waste dispatched from the site will be accompanied by a Waste Transfer Note.

4.4.6 The Site Supervisor or his nominee will record the incident in the site diary and will issue a Rejected Waste Form.

4.4.7 Copies of Waste Rejection Forms and letters issued to waste carrier will be stored securely and filed with other relevant contract documentation.

4.5 Duty of Care

Overview

4.5.1 Section 34(1) of the Environmental Protection Act 1990 imposes a Duty of Care on any person who imports, produces, carries, keeps, treats, or disposes of controlled waste. The Duty of Care is now implemented by way of The Waste (England & Wales) Regulations 2011 SI 988.

4.5.2 The above regulations require an adequate waste description to be provided and a Waste Transfer Note (WTN) to be completed, signed, and kept by the parties to a waste transfer. There are, however, some circumstances where a waste carrier will not provide a WTN for each load (e.g., where the load is part of a regular multiple consignment). To ensure that each load can be accounted for, SCS has arranged the site receipt docket in a way that duplicates the information required by the WTN. The Duty of Care is therefore complied with in all respects providing a waste description is received from the waste carrier, a site receipt docket is duly completed, and a copy given to the waste carrier.

4.5.3 WTNs will be kept in a safe place for a period of six years, to allow inspection by the Environment Agency, in accordance with the Duty of Care Regulations.

Duty of Care transfer note

4.5.4 The duty of care transfer note will state the:

- A unique WTN reference number;
- A written description of the waste;
- The six-digit EWC code from the List of Waste in WM3 [R1]
- The quantity of waste;
- How the waste has been packed and contained;
- The facility address that the waste is being transferred to;
- The licence, permit or exemption number of the destination facility;
- The time, date, and location of the transfer;

- The name, address and role of the waste producer and the waste carrier;
- A record of the relevant registration numbers of each party e.g., Registered Waste Carrier's certificate number;
- Signature of all parties involved in the transfer;
- The 2007 Standard Industrial Classification (SIC) code for the project/contract;
- Confirmation that the waste hierarchy has been considered and implemented; and
- If the waste is going directly to a landfill site - a declaration confirming that the waste has been pre-treated and how e.g., segregation for reuse, recycling, or recovery.

Site receipt docket

4.5.5 The information required on a site receipt docket will be the:

- Name of the site;
- permit number;
- waste carriers trading title and address;
- waste description and/or produce code;
- source of the waste by unitary authority or council;
- waste carriers order number if available;
- transfer note number;
- date and time of delivery;
- name and signature of the SCSJV representative (Name: The initials and surname of the person raising the ticket must be entered in block capitals. Signature: signature of the person raising the ticket); and
- quantity of waste unloaded.

Documentation procedure

4.5.6 One ticket per load of approved material will be issued for every load. The ticket will be generated electronically using a bespoke electronic system. A copy of the ticket will be retained at site, and a second copy will be given to the driver at the time of unloading. The ticket must be kept for six years.

4.5.7 Only EA registered waste carriers will be allowed on site, and a list of known waste carriers will be maintained by SCSJV.

4.5.8 Once the site is in operation SCS may review the documentation procedure and move to paperless system.

4.6 Sampling and analysis of waste received

4.6.1 It is expected that the waste received will have been characterised by the Ground Investigations that have been undertaken to characterise the materials to be generated by the various works. Any wastes that have not been subject to this previous testing will need to be sampled and tested in order to characterise the material prior to entering the facility.

4.6.2 To enable SCSJV to keep full documented records and demonstrate compliance with legislation, a Sampling Plan Template must be produced. These are documents drawn up in accordance with Appendix D of the Guidance on the Classification and Assessment of Waste (WM3) [R1].

4.6.3 Sampling Plans must include, but are not limited to, the following:

- Details of involved parties;
- Background information researched;
- Site details;
- Process or nature of arising;
- Type, form, and amount of material;
- Known physical, biological, or chemical characteristics;
- Operational procedures that may affect characteristics;
- Previous investigations or analysis;
- Constituents to be tested - i.e., standard waste suite, plus any additional items;
- Health and safety precautions, and access restrictions;
- Technical Goals - i.e., for waste classification of soils;
- Name and organisation of testing contractor;
- Statistical approach to be used - methodology provided by testing contractor;
- Sampling approach and pattern - methodology provided by testing contractor;
- Identify sampling locations - drawing of site showing sampling points including depths; and
- Sample details - e.g., 3 samples at 1m depth, to be named appropriately.

Number of Samples Required

4.6.4 The frequency of sampling will be dependent on the amount of ground investigation laboratory testing data for the waste source. Where no laboratory test data is available, representative sampling will be undertaken on each waste source. For reference, this can be one sample per 5,000m3 or in case there is a visible change in material types/ composition.

4.6.5 Additional validation samples will be taken monthly on all waste streams to confirm continued compliance with the permit.

Sampling Determinants

4.6.6 All soil samples will be prepared and analysed by a UKAS laboratory using the MCERTS performance standards. The analysis procedure and chemical determinands will be reviewed from time to time to consider advances in practical experience, waste research and analytical technology, and may also vary as a result of changes in legislation.

4.6.7 Samples will be tested for a combination of the most commonly occurring organic and inorganic contaminants as listed below, unless they can be scoped out based on previous analysis results (e.g., from a Ground Investigation):

- Heavy metals (As, Cd, Cu, Mo, Pb, Hg, Ni, Sb, Se, Zn);
- Chromium III & VI;
- pH;
- Phenol index;
- Asbestos screen (with immediate identification and quantification if found);
- Total Petroleum Hydrocarbons (TPH) CWG & Chromatographs;
- Confirmation as to whether TPH has arisen from diesel or petrol;
- Benzene, toluene, ethyl benzene and xylenes (BTEX);
- Speciated 16 Polycyclic Aromatic Hydrocarbons (PAHs);
- All results corrected to dry weight terms;
- Moisture content correction type (i.e., wet, or dry correction) and value specified; and
- Full Waste Acceptance Criteria (WAC) analysis (single step leaching test).

4.6.8 (Note: untreated material can be handled, as inert waste (17 05 04) and limed material as non-hazardous waste (19 03 07) by third parties for the purposes of handling and disposal).

5 Site Infrastructure

5.1 Proposed Infrastructure

5.1.1 The built transfer and treatment facility will comprise the conveyor and treatment capability, and constructed temporary storage areas for excavated materials received by conveyor (or road) from the TBM procedures.

5.1.2 The site infrastructure includes:

- A two-way conveyor system. This allows for incoming TBM arisings to be brought into the facility, and sent to designated pugmills/silos for lime treatment, or addition for engineering purposes e.g., GGBS. The return conveyor allows outgoing TBM arisings to be transported for placement as Copthall backfill. 'Tipper units' are designated along the conveyor - facilitating movement of materials into the storage bins and treatment areas;
- Waste treatment area – which comprises a concrete apron, without reinforcing steel, the concrete apron will sit on a stabilised soils foundation to reduce import of aggregate. This area includes designated silos and pugmills for liming for material treatment, and for addition of e.g., GGBS;
- Waste storage area – which comprises three TBM arisings storage areas (bins), each with a capacity of 10,000m^3. The bin foundations will comprise a 200m thick reinforced concrete slab, and the bin walls will comprise a pre-cast concrete unit which is 3.8m in height. Roof cladding will be placed on top of the bins so that they are covered. A designated materials quarantine area is to be placed adjacent to the TBM storage bins, for materials that do not conform to the suitability standards.
- Drainage: A series of designed falls will drain the waste treatment area to a perimeter filter drain and associated catchpits along the perimeter drainage system (at maximum intervals of 100m).

  The filter drain will carry any runoff to an attenuation pond. The attenuation pond outfall will be filtered through a silt extraction unit and a pH reduction plant before being discharged at the given discharge location;
- One-way perimeter haul road (internal) system around the main waste transfer station apron. This will be constructed so that the haul road will have cross falls to a filter drain, connected to the main drainage system;
- An additional haul road (internal) will be constructed from the RSSP-WTS facility to the RSSP, to allow for the onward conveyance of treated TBM arisings for placement at the RSSP. This haul road will be a concrete construction and will require two sewer pipeline crossings, one high pressure gas main crossing and one high pressure water

main crossing.

5.1.3 There will be limited welfare facilities within the RSSP-WTS facility, as the main existing Copthall South offices will provide the bulk of facilities required for the operations. These offices are located directly to the west of the RSSP-WTS permit boundary.

5.1.4 Wheel wash facilities and re-fuel areas are also currently in place at the Copthall South offices, which forms the entrance to the RSSP-WTS facility. It is proposed that the wheel wash/fuel facilities within the Copthall South offices will be used for RSSP-WTS traffic. Attenuated surface water is available on site for use in these processes if required.

5.1.5 In addition to the wheel wash, SCS road sweeper vehicles are regularly patrolling Harvil Road to ensure this road is kept clear of mud and debris (including from RSSP-WTS traffic).

5.1.6 An SCS UKAS accredited laboratory will be situated in the southwest corner of the RSSP-WTS facility. This laboratory will be outside of the delineated boundary for the RSSP-WTS facility.

5.1.7 Aerosol cannons will be mounted on the storage bin walls and the tripper gantry along the conveyor to allow for dust suppression measures to be implemented. Low level misters will also be mounted alongside the perimeter haul road. The misters and the aerosol cannons will be mains fed (to assure supply).

5.1.8 Lighting may be mounted on the tipper gantry and will be on self-supporting lighting towers and/or poles. The lighting will be designed to safely illuminate all working on the RSSP-WTS area to accommodate 24/7 working. The lighting will incorporate anti-glare shielding to protect the adjacent dwellings from night-time light intrusion, additional light intrusion measures may be required, such as strategic fencing, canopies.

5.1.9 The approximate location of the site infrastructure is shown in Appendix A (1MC04-SCJ-EN-SKE-SS05_SL07-650028 and 1MC04-SCJ-EN-SKE-SS05_SL07-650029).

5.2 Description of the Transfer Process

Plant Arrangement and Operation

5.2.1 Upon delivery to the site, TBM arisings will be temporarily stored in the holding compound areas (storage bins) of the site if they do not require treatment. Should the materials require treatment, they will be treated in the designated treatment zone (incorporating bins and silos/pugmills) and then placed / returned within the storage areas.

5.2.2 Any materials not complying with the required properties for permanent placement or engineering, or having been contaminated (e.g., by plant spillage) will be stored in a quarantine storage area. The storage areas are described below.

5.2.3 The TBM arisings storage bins will be founded on a 200mm thick reinforced concrete slab. The bins will be retained by a pre-cast concrete unit, which will be 3.8m tall and below the pre-cast

units the reinforced concrete slab foundation will be 300mm in thickness. Material stored within the storage bins will be at a maximum of 3.3m in height.

5.2.4 The bins will be separated by a series of 406mm diameter columns, which are to be founded on 1m x 1m x 1m concrete pad foundations. The columns will extend in height above the pre-cast concrete unit (3.8m) and will accommodate the roof cladding, which will allow for the storage areas to be covered.

5.2.5 TBM arisings entering the facility for storage via a conveyor system will be placed into the storage bins, with the tipper unit attached to the conveyor allowing for deposition of arisings from the conveyor and into the storage bins. The tipper unit is to be designed so that TBM material is to be deposited from the conveyor and the top of the pre-cast unit (3.8m), but below the roof cladding.

5.2.6 Should the incoming TBM materials display poor quality characteristics (e.g., excess moisture contents), then these materials will require treatment. The facility comprises a concrete structural apron for the treatment of materials and will incorporate designated lime silos/ pugmills for materials treatment, and those dedicated for addition of e.g., GGBS. Materials will be placed into the treatment area via a tipper unit attached to the incoming conveyor system. Once treated in the mixing plant, the material will be placed in one of the three TBM arisings storage bins. It will be stored until there is a requirement for placement at RSSP, or use at Copthall backfill. The treatment station will be connected to the facility drainage system through a number of designed falls and catchpits.

5.2.7 The designated materials isolation holding bunded compound has been designed to structurally adjoin the TBM arisings storage bins but is separated by structural columns and pre-cast units. These structural features will allow for the separation of the quarantine areas from the general storage areas, to prevent the mixing of these materials.

5.2.8 The front face of the storage bins will remain open, which will allow a loading shovel and/or Articulated Dump Truck (ADT) to collect material for placement on the return conveyor (material going to Copthall backfill) or for placement in trucks/ wagons for onward placement at RSSP.

5.2.9 Excavated soils will be delivered to the site via an overhead conveyor system which enters the RSSP-WTS facility from the northeast and crosses over the main railway line.

5.2.10 A one-way system for vehicles is implemented. This applies to vehicles entering, or exiting the main facility (treatment area, storage bins and concrete apron), and/or via a haulage road to the RSSP for placement, and for vehicles carrying material to or from the stockpiling area and Treatment Pad 1 (not part of the permitted facility).

5.3 Surface Water Management

5.3.1 A Drainage Technical Report has been written for the scheme, which incorporates the operations that will take place at RSSP-WTS (1MC04-SCJ-EN-REP-SS05_SL07-000027).

5.3.2 The extent of land required to implement the required drainage as part of the RSSP-WTS facility will encroach into the existing Copthall Site Office area and will disturb the existing drainage in place there. As a result, the proposed drainage extent covers modifications to the Copthall Site Office existing drainage network and becomes part of the overall systems drainage strategy for the area.

5.3.3 The construction of the RSSP-WTS facility will require the construction of new hard impermeable surfacing across the extent of the majority of the site, in order to be suitable to accommodate the required vehicular and mechanical loads. The construction of new concrete hard impermeable surfacing will generate more surface runoff during the temporary operation of the site. The implemented drainage network will ensure that generated surface water runoff is conveyed and controlled in an effective manner.

5.3.4 The arisings bin storage areas will have roof cladding to prevent rainwater runoff from mixing with treatment lime and arisings, which would otherwise enter the proposed drainage network as slurry. There is opportunity for traces of lime and arisings to be assimilated into runoff during the transportation of materials between treatment and storage zones. Additionally, the concrete apron where the lime silos are located may be an area where accidental spillages of lime may occur, which could create potentially contaminated runoff. The area surrounding the TBM arisings storage bins, concrete treatment apron and perimeter haul road is considered to be a critical area of drainage interception, in order to intercept runoff in these hardstanding areas and collect this runoff into a centralised drainage system.

5.3.5 Contaminated runoff with silt and concrete/lime may contribute to high silt levels and pH, which would require treatment before discharge. Any contaminated runoff will be pumped at a restricted flow rate of 20l/s into the proposed siltbusters to treat pH, remove silt, and attenuate runoff. Treated water from siltbusters will then pass into the proposed downstream drainage network which discharges into the proposed attenuation pond to the south.

5.3.6 To the south of Copthall Covert (forested area), the land is designated as a temporary stockpiling area, during the operation of the RSSP-WTS facility, and the construction of the adjacent RSSP mounds. This area is outside of the SSP-WTS facility permitted area boundary. Storage for TBM materials used in engineering fill (non-waste), topsoil storage, and the Mobile Plant Deployment (Treatment Pad 1) occur in this area.

5.3.7 All stockpiles are to have a silt fence installed to prevent silty runoff to the south. A 400mm high earth bund is proposed to intercept field runoff from the existing grassed area/proposed storage area and to prevent it from entering the attenuation pond, proposed filter drains, and overloading the proposed pump operations. The intercepted runoff at the bund is likely to cause channel flows along the proposed bunds. To prevent direct impact of the channel flows

on the watercourse, a series of cut-off bunds have been proposed along the bunds. The channel flows will then enter a 2m long swale before entering the discharge point.

5.3.8 A haul road connects the RSSP-WTS facility to the RSSP. Filter drains are proposed along the haul road to capture surface runoff from these haul roads.

5.3.9 The attenuation pond will collect treated runoff from RSSP-WTS. The restricted flow rate from the proposed attenuation pond into the discharge point (watercourse) is 16 l/s. The attenuation pond will have capacity for temporary and permanent storage, with the permanent water stored proposed to be used for construction activities such as dust suppression. The proposed outfall from the pond will comprise a 2m swale which will connect to the existing watercourse (discharge point), which is a tributary of the River Pinn.

5.4 Maintenance

5.4.1 Fortnightly and monthly visual inspections of the site (infrastructure and environmental) are undertaken. These are recorded through the operators Targeted Risk Management (TRM) process. Any areas requiring remediation works will be carried out as soon as reasonably practicable.

5.5 Provision of site identification board

General

5.5.1 A notice board will be erected at the site entrance. The notice board will be constructed from durable materials and will display the following details:

- Name and address of the waste transfer station.
- Statement that the site is permitted by the Environment Agency and the permit reference number.
- Name, address, and telephone number of the permit holder.
- The Environment Agency's national numbers for general enquiries and emergencies.
- The emergency contact and telephone number of the permit holder.
- Operating times.

Maintenance

5.5.2 The notice board will be inspected regularly and checked for integrity and accuracy of the information. Repairs/alterations will be carried out as soon as possible after any defect is noted.

5.6 Site security

General

5.6.1 Access to the RSSP-WTS facility will be via the main entrance to the Copthall South Office. Access to the Copthall South Offices is restricted using fencing to prevent vehicular access and discourage casual visitors.

5.6.2 Any damage to boundary fencing that exposes members of the public to significant risk or that allows unauthorised vehicular or pedestrian access to the site will be made good with a temporary repair until a permanent repair can be made.

5.6.3 A note will be made in the Site Diary of when the inspections are carried out and a record will be made of any damage discovered and the remedial action taken.

5.6.4 The site entrance gates, and perimeter fencing are of sufficient height (2.4m) to prevent easy access. The gates will be kept locked at all times when not in use, using a close-shackle padlock. The site will be checked daily to ensure gates and buildings are secure and locked when not in use. The site gates will be managed by security staff who will ensure no unauthorised access.

5.6.5 All mobile plant will be parked securely when not in use.

Buildings

5.6.6 Doors will be made of substantial material and preferably metal lined.

5.6.7 Door keys will never be left on top of the lintel, under stones or in other "concealed" places.

5.6.8 Windows will be fitted with toughened glass and be covered with bars or lockable steel shutters for protection during periods of closure.

Property

5.6.9 Keys giving access to the SCSJV property will only be kept by persons authorised to do so by the Site Supervisor.

5.6.10 A key register will be compiled and maintained for all properties.

5.6.11 Key-holders will be notified to the local police station and this information kept up to date.

5.6.12 Wherever possible, one person should be made responsible for locking up and where applicable setting the burglar alarm.

Vehicles and mobile plant

5.6.13 All vehicles and mobile plant are to be locked when not in use. Windows will be of toughened glass or protected by screens at night.

5.6.14 A record of serial numbers should be maintained for all mobile plant. Spare parts will be kept in a secure store and records maintained.

5.6.15 Clamping is desirable for cars, vans, and trucks left on site overnight.

Documents

5.6.16 There will be only one key-holder to the safe and the key-holder must keep the key on their person.

5.6.17 When not in use all confidential papers must be kept in a locked drawer.

5.6.18 There must be no delay in reporting the theft of any confidential documents.

Visitors

5.6.19 Unauthorised persons are not allowed on SCSJV premises.

5.6.20 Visitors must call at the site office, identify themselves and state the nature of their business. Unless the caller is known they MUST NOT be allowed to find their destination unaccompanied.

5.6.21 Individuals will not be allowed to go onto the site to remove material(s) unless authorised in writing.

5.6.22 Once authorised waste is unloaded in the licensed area it becomes the property of the SCSJV and unauthorised removal is therefore theft.

Report of thefts

5.6.23 Supervisors must immediately inform their Site Supervisor or nominee and security of any occurrence of:

- Breaking and entering of SCSJV premises;
- vandalism;
- theft from SCSJV premises;
- any act or suspected act of dishonesty;
- stock or cash deficiencies.

5.6.24 Where an outside element is suspected the police will be called without delay.

6 Environmental Nuisance Control

6.1 Introduction

6.1.1 The environmental nuisance control measures described below should also be read in conjunction with the Management Systems and Procedures (1MC04-SCJ_SDH-EV-PRO-SS05_SL07-000004) and separate Dust and Emissions Management Plan (1MC04-SCJ_SDH-EV-PLN-SS05_SL07-000013) and Noise and Vibration Monitoring Plan (1MC04-SCJ_SDH-EV-PLN-SS05_SL07-000015).

6.2 Dust control procedures

6.2.1 Dusts, fibres, and particulates are found in wastes with a fines content and soils. They are generated during periods of dry weather in combination with windy conditions.

6.2.2 The focus of the dust management strategy is to control dust generation and movement at source. The sources of potential dust and particulates generated by the waste transfer station are summarised below:

- Vehicles entering and/or leaving the site with uncovered loads, mud on wheels, and tracking dust on to or off the site;
- Offloading of material into the holding bays from the conveyor or vehicles;
- Loading of materials on to dump trucks and off-loading onto spoil mounds;
- Dust re-suspension from vehicular movement along internal haul roads and placement areas;
- Filling and storage of lime in silos
- Wind whipping of dust from spoil mounds or waste stored in bays;
- Site surfaces; and
- Particulate emissions from the exhaust of vehicles/plant/machinery on site.

6.2.3 The following measures will be implemented and maintained throughout the operational life of the site, the objective of which will be to prevent and minimise the release of airborne dusts, fibres and particulates arising from the permitted waste management operations in such quantities or concentrations that are likely to cause pollution of the environment, harm to human health or negatively impact on local amenity.

6.3 Dust and emissions control measures during transportation of materials by conveyor

6.3.1 Waste TBM arisings will be delivered to the RSSP-WTS facility via a two-way conveyor system, which will be enclosed along its length of travel within the extent of the permit boundary. Incoming wastes will be received via vehicular transport in the event that the conveyor system is not functioning.

6.3.2 The conveyor belt system will have a suitable belt cleaning system (scrapers/brushes and watering) to prevent the build-up of dry friable materials on the conveyor. Additionally, further measures including a mist spray system will be fitted to the conveyor exit to avoid fugitive dust emissions from the waste materials becoming airborne beyond the conveyor discharge point.

6.3.3 The conveyor system will be regularly inspected and maintained in accordance with the manufacturer's instructions to ensure the belt cleaning and dust suppression systems are working effectively and efficiently.

6.3.4 Drop heights from the conveyor to stockpiles will be kept to the reasonably practicable minimum.

6.3.5 The waste material storage area (muck bin storage area will) will comprise walls on western, northern, and eastern facades to roof level and the 7,850m2 area will be roofed.

6.3.6 The TBM arisings inherently are not dry, and may be required to be limed to manage their consistency. They will not have been stored for long periods of time prior to arrival, and not prone to releasing dust.

6.4 Dust and emissions control measures during road transportation of waste

6.4.1 All road vehicle movements to the site will be prebooked, and allocated delivery sequencing to prevent queuing of vehicles at the site entrance on Harvil Road, or feeder roads.

6.4.2 Waste material road haulage vehicles will only be permitted to enter the site if sheeted.

6.4.3 All incoming HGVs will be required to have sheeted loads, in order to avoid the spillage of material or creation of dust outside the site.

6.4.4 Vehicles transporting materials will not be overloaded as they will only be from a HS2 site and strictly controlled by the originating on-site team (West Ruislip Portal).

6.4.5 A noticeboard summarising the site rules for visiting drivers is displayed in a prominent position at the site entrance and office area / entry to the RSSP-WTS facility. Copies of the site rules will be available for issue to visiting drivers.

6.4.6 The number of handling operations for materials will be kept to the minimum reasonably practicable.

6.4.7 All HGVs will meet Euro VI minimum emission standard and all LDVs will be Euro 6 diesel, or Euro 4 Petrol.

6.4.8 Vehicles and plant will be switched off and secured when not in use.

6.4.9 All road vehicles will be maintained in accordance with the manufacturer's instructions and hold a current MOT.

6.4.10 On site speed limit for any vehicle will be 5mph. Speed limit signage will be displayed at the site entrance and around the haul route and enforced by on-site traffic marshals.

6.4.11 The entrance / egress from / to Harvil Road is concrete impermeable slab. As such the surface will not generate dust itself. The cleanliness of surface will be maintained through regular use of a road sweeper. The road sweeper will be available and deployed as required during all operational hours of the site. A supervised wheel wash is available at all times at the site entrance.

6.4.12 All waste haulage vehicles will be checked by the site entrance/exit Traffic Marshall and sent (and resent if necessary) through the wheel wash for further cleaning prior to the site egress at Harvil Road. A visual inspection of haul routes will be undertaken at regular intervals during the day and recorded. Any shortfalls in 'housekeeping' will be identified and rectified promptly. Similarly, repairs will be arranged and implemented, See Appendix A2, Visual Inspection Sheet.

6.4.13 Daily cleaning and suppression of dust on haul routes and tipping / loading areas will be carried out using a road sweeper (7t or larger) and / or large capacity vehicle pulled (HGV), or driven, water bowser.

6.4.14 The frequency of cleaning during the day will be proportionate for the purposes of suppressing dust emissions and preventing friable deposits on haul routes.

6.5 Dust and emissions control measures during the transfer of waste

6.5.1 The RSSP-facility will receive materials via an onward conveyor system (or by road). The materials will be temporarily stored on site in the designated treatment area, prior to onward transfer of the material as a waste. The waste will be clayey with a cohesive nature, with an estimated moisture content between 30-40%, and it is expected that much of this material will not in itself create significant dust arising. However, dust can arise from the physical operations associated with the transfer of waste.

6.5.2 The waste material storage area will comprise walls on western, northern, and eastern facades to roof level and the area will be roofed. Materials stored within the arisings bins will not be placed so that the height of the materials in the bins exceeds 3.3m, as to ensure that there is at least 0.5m between the top of the bin wall facades (3.8m height) and the top level of the arisings.

6.5.3 Materials exiting the RSSP-WTS facility for placement as reinstatement material at RSSP will be transported via internal haul road. Materials exiting the facility for onward transport and

placement as Copthall Backfill will be transferred off-site via a returning mechanism on the conveyor system (or by haul road if the conveyor system is unavailable).

6.5.4 Drop heights from vehicles/NRMM involved in the transfer of materials on the site will be kept to the reasonably practicable minimum.

6.5.5 Vehicles/NRMM transporting materials within the site will not be overloaded.

6.5.6 Movement of vehicles / NRMM around the site will be kept to the minimum reasonable for the effective and efficient operation of the site.

6.5.7 The number of handling operations of stockpiled waste materials will be kept to the minimum reasonably practicable.

6.5.8 Daily cleaning and suppression of dust in the muck storage bin area will be supplemented using a road sweeper (7t or larger) and / or large capacity vehicle pulled (HGV), or driven, water bowser.

6.5.9 The number of handling operations of stockpiled waste materials will be kept to the minimum reasonably practicable.

6.5.10 A visual inspection of operations within the muck storage bin area will be undertaken at regular intervals during the day and recorded. Any shortfalls in 'housekeeping' and effectiveness of dust suppression will be identified and rectified promptly.

6.5.11 On site speed limit for any vehicle/NRMM will be 5mph. Speed limit signage will be displayed at the site entrance and around the haul route and enforced by on-site traffic marshals.

6.5.12 The entrance / egress of the site and haul road that circles the waste material storage area (muck storage bins) will comprise an impermeable concrete slab.

6.5.13 The haul road routed south to the placement area will comprise course granular compacted materials.

6.5.14 A visual inspection of haul routes ('housekeeping' and repair) will be undertaken at regular intervals during the day and recorded. Any shortfalls in 'housekeeping' will be identified and rectified promptly. Similarly, repairs will be arranged and implemented.

6.5.15 Daily cleaning and suppression of dust on haul routes will be carried out using a road sweeper (7t or larger) and / or large capacity vehicle pulled (HGV), or driven, water bowser.

6.5.16 Manual jet washes (estimated inventory of 2-6, dependant on requirement for vehicles to access public highway) and sweeping facilities will be available on site for cleaning of small/limited areas where access for larger road sweeper and vehicular water bowsers is limited / prevented.

6.5.17 The frequency of cleaning during the day will be suitable for the purposes of suppressing dust emissions and preventing friable deposits on haul routes.

6.5.18 All HGV road vehicles and NRMM leaving the site will use the automated wheel-wash facility. All vehicle wheels will be subsequently checked and if necessary be resent through the wheel wash for further cleaning prior to the site egress at Harvil Road.

6.6 Dust emissions from loading and storage of lime in silos and dosing of TBM arisings

6.6.1 Lime will only be stored on site within the designated silos.

6.6.2 Dust emissions from unloading road tankers shall be minimised by venting to the silo filter using a delivery tanker fitted with an on-board, truck-mounted relief valve and filtration system, and by connecting transfer lines first to the delivery inlet point and then to the tanker discharge point, and by ensuring delivery is at a rate which does not pressurise the silo.

6.6.3 Bulk lime tanker transfer lines will be securely connected to the silo delivery inlet point first, and then the tanker discharge point before the delivery commences. Materials will be delivered at a controlled rate, and the rate adjusted to prevent pressurisation of the silo.

6.6.4 Silos shall not be overfilled or over pressurised and there shall be an overfilling and over pressure warning alarm.

6.6.5 Deliveries will automatically stop where overfilling or over-pressurisation is identified.

6.6.6 Displaced air from pneumatic transfer shall pass through filtration prior to emission to air.

6.6.7 The filter systems will be regularly inspected and cleaned to prevent blockages and accumulation of powder in the filter system.

6.6.8 Lime dosing and thorough mixing of TBM arisings will be carried out within the dedicated pugmills.

6.7 Non-Road Mobile Machinery (NRMM) Mobile Plant and Equipment

6.7.1 All relevant NRMM (with a power rating between 37-560kW will meet a minimum emission standard Stage IV*. (*IIIA for constant speed engines of any power i.e., generators). NRMM meeting emission standard Euro Stage V or using alternative low/zero emission technology (e.g., hydrogen or electric) will be preferred depending on market availability.

6.7.2 All NRMM will be operated in accordance with the manufacturer's written recommendations. All NRMM will use ultra-low-sulphur diesel or Hydrogenated Vegetable Oil (HVO). All NRMM will be switched off when not in use and not left idling.

6.7.3 Site speeds will be controlled to minimise possible dust entrainment (5mph). Appropriate instruction will be issued to all vehicle drivers.

6.7.4 SCSJV will compliance-check the emission standard of each machine and register it with HS2 prior to the machinery being deployed to site.

6.8 Dust and emissions control management procedures

6.8.1 The Site Supervisor, or their nominee, will exercise day-to-day control on site at all times. The Site Supervisor will have particular responsibility for ensuring full compliance with the conditions attached to the DEMP. Specifically, the Site Supervisor will assume control, either personally or by delegation to suitably trained and responsible staff, of:

- Vehicle movements;
- All loading, tipping, and materials handling operations;
- Operation of dust suppression measures; and
- Inspection, cleaning and maintenance of all plant and equipment.

6.8.2 SCSJV operates an externally audited Environmental Management System (EMS) which is certified to ISO 14001.

6.8.3 Staff at all levels will receive the necessary training EMS and instruction in their duties relating to the control of all operations and the potential sources of dust emissions. Particular emphasis will be given to dealing with plant malfunctions and abnormal conditions. Site staff will inform the Site Supervisor whenever visible dust emissions are observed or appear likely to occur, as a result of any site operation.

6.8.4 The continuing effectiveness of this dust management scheme will be reviewed regularly in the context of monitoring results.

6.9 Dust, fibres, and particulates monitoring

6.9.1 Monitoring and reporting will be undertaken in line with the overarching requirements set out in the Dust and Emissions Management Plan (1MC04-SCJ_SDH-EV-PLN-SS05_SL07-000013).

6.9.2 Visual inspections of the facility and access roads will be undertaken by the Site Supervisor or their nominee at least twice during each working day (start of day and mid-day as a minimum). The findings of each visual inspection will be recorded on the Visual Inspection Sheet, see Appendix A2. Any shortfalls in 'housekeeping' and effectiveness of dust suppression will be identified and rectified promptly. The outcome of any identified shortfalls in housekeeping and dust suppression will comprise, but not limited to, any of the following actions:

- Additional dust suppression (water) cannon(s) (dust cannons) being deployed
- Increased dust suppression
- Additional road sweeper circuit(s) / deployment

- Additional water bowser circuit(s) / deployment
- Manual jet wash being deployed
- Manual sweeping undertaken
- Surface repairs arranged / undertaken
- Repair / maintenance of dust suppression equipment; and/or

6.9.3 Operation / activity being stopped. One dust monitor is currently installed at the western site boundary of the site towards the nearest sensitive residential premises (approx. 100m to the west of the storage bins area and immediately north of the topsoil storage area).

6.9.4 The monitor forms part of a network of air quality and dust monitors around HS2 SCSJV sites in both the local area and along the wider HS2 route in London. The Air Quality Specialist who manages the monitoring network will liaise closely with the RSSP WTS Site Supervisor and site Environment Manager on monitored data and site dust management practices in general.

6.9.5 The dust monitor dedicated to monitoring PM10 levels from operations at RSSP-WTS is an Osiris Airborne Particulate Monitors (automatic real-time monitors) (MCERTS Indicative Sira MC 090157/01).

6.10 Exceedance of dust trigger levels and Action Plan

6.10.1 The Osiris Airborne Particulate Monitor provides real time access to data and allows alerts (by text or email) to be sent to designated recipients when levels approach or exceed predetermined thresholds. A trigger action level of at 75µg/m3 (over a 5-minute average) has been adopted for the site. Any exceedance, or potential exceedance, of the dust threshold will trigger an alert and subsequent investigation.

6.10.2 Recipients of trigger alerts will include the RSSP-WTS Site Supervisor, Environmental Manager/Advisor, Air Quality Specialist and, HS2 Air Quality Team.

6.10.3 On receipt of an alert the following process will be followed:

- the Site Supervisor (or a delegated representative) will investigate current and recent activities on site, as quickly as reasonably practicable, to ascertain if any visible dust is emanating from the site or if any activities are occurring on site that are not in line with the dust control measures; any identified causes of potential fugitive dust will be rectified and actions recorded in the site Trigger Exceedance Log, see Appendix A2 in the DEMP. The response to any identified potential fugitive dust emissions will comprise, but not limited to, any of the following actions:
- Operation/ activity being stopped
- Additional dust suppression (water) cannon(s) being deployed

- Increased dust suppression
- Additional road sweeper circuit(s) / deployment
- Additional water bowser circuit(s) / deployment
- Manual jet wash being deployed; and / or
- Manual sweeping undertaken.

6.10.4 The site Environment Manager/ Advisor will help coordinate the investigation of any exceedances, the site team will consider the immediate cause of any exceedance and implement suitable control measures as detailed above. The AQ Specialist will provide monitoring data and interpretation to support the investigation.

6.10.5 If the source of the incident cannot be identified as originating from the site operations, operations of other nearby sites and other activities will be investigated for potential causes of the trigger. If the source of the trigger is not related to the site operations, the outcome of any investigation and associated actions will be recorded

6.11 Dust complaints procedure

6.11.1 HS2 operate the HS2 Public Help Desk 24 hours per day, 7 days a week, to manage all complaints, handle enquiries and co-ordinate incident response relating to RSSP-WTS and other HS2 sites. The SCSJV Community Engagement Team maintain a 24/7 contact with the helpdesk and are available to answer any queries or liaise with site supervisors for investigation and resolution of complaints.

The local community has been, and continues to be, kept informed of the complaint routes and process, among other matters, for a number of years through the following communication routes:

- Regular engagement events in the local area;
- regular newsletters;
- information sheets about planned works before they start; and
- up-to-date information on our local community websites, called Commonplace.

6.11.2 Site security are briefed to direct those coming to the site to make a complaint to call the hotline if this happens. The HS2 Helpdesk is the point of contact for community members, and they are encouraged to contact the Helpdesk to outline their concerns. This ensures that their concerns are logged and passed on to the correct team for investigation and response. Information is not collected on the gate to ensure responses and enquiries are dealt with efficiently and effectively whilst ensuring all personal information is handled appropriately.

6.11.3 The local engagement team at RSSP-WTS follow the below process to deal with enquiries and complaints:

- Enquiries or complaints received via Helpdesk
- Community Engagement representative contacts (mainly by phone) the Site Supervisor to notify them of the complaints/ enquiries with a follow up email(s) to the Site Supervisor and other relevant colleagues such as Environment Manager or Air Quality Specialist where required
- Investigation is carried out
- Site Supervisor / relevant colleagues update the Community Engagement representative.
- Community Engagement Representative updates the community member via phone / email to close out the enquiry or complaint.
- Community Engagement representative updates the HS2 Helpdesk with formal notes and close out response.

6.12 Odour control

6.12.1 The types of waste to be processed or disposed of at the site are not likely to give rise to unacceptable odours, consequently odour management, monitoring and action plans are not considered necessary.

6.13 Control of mud and debris

6.13.1 Mud and debris may be carried out of the site boundary onto public roads by the wheels of vehicles leaving the site. The problem of mud and debris is most likely to occur during and after heavy rain.

6.13.2 Road vehicles will use a wheel wash at the Copthall Site Office prior to leaving HS2 owned premises, which will prevent mud leaving the site. The wheel wash supervisors will inspect incoming vehicles as well, as this is the single access point, in the event that additional vehicles are arriving by road to bring TBM arisings in the absence of the conveyor.

6.13.3 The site entrance and access road (including the Copthall Site Office) will be inspected daily to check whether it is clean and tidy. A road sweeper or a tractor and brush will sweep the site entrance and the access road if the daily inspection indicates it is necessary.

6.13.4 Road cleaning will be undertaken within 2 hours of an inspection indicating that mud levels are unacceptable. If road cleaning cannot be undertaken within 2 hours, the Site Supervisor will review the situation and movement of vehicles on or off the site will be restricted, as necessary.

6.13.5 Additional inspections will be included as necessary in response to comments from the general public or during and following periods of particularly heavy rainfall.

6.14 Litter control

6.14.1 With the source of waste being solely from Phase One of HS2, litter is not expected to be an issue on the site. Notwithstanding this, the following measures will be implemented and maintained throughout the operational life of the site, the objective of which will be to prevent any litter escaping from the confines of the site:

- Vehicles exporting waste will remain sheeted until the vehicle reaches the waste reception area, or, if the nature of the waste or windy conditions could give rise to windblown litter, until the vehicle reaches the unloading point (RSSP).
- Loose litter on the access roads or at the site entrance will be collected daily.
- Inspections of the site as a whole will be carried out weekly and any litter discovered will be collected and transported to a disposal facility that is authorised to receive such waste.

6.14.2 In the event that litter does escape from the site in windy conditions, it will be collected as soon as practicable, and not later than the middle of the following day.

6.15 Pest/vermin control

6.15.1 The types of waste to be accepted at the site present a very low risk of attracting pests or vermin. Notwithstanding this, the following measures will be implemented and maintained throughout the operational life of the site, the objective of which will be to prevent pest infestations arising on the site.

6.15.2 The Site Supervisor or their nominee will inspect operational areas of the site for pest infestations on a daily basis. A record of the inspections and their findings will be kept in the Site Diary. A specialist contractor will be employed to control pests if required. If remedial action is required, a note of any treatment supplied will be made in the Site Diary.

6.16 Noise control

Refer to Noise and Vibration Monitoring Plan (1MC04-SCJ_SDH-EV-PLN-SS05_SL07-000015).

6.17 Potentially polluting spillages and leaks

6.17.1 Potentially polluting wastes will not be accepted at the site, but there is a potential for leaks and spillages from the transfer of waste (plant and vehicles). A bunded reinforced concrete base will enable containment and clean-up of any spillages in a controlled manner without risk to the environment.

6.17.2 The loading point for waste will be provided with a reinforced concrete slab and bunded on three sides to contain any accidental spillage.

6.17.3 Spill kits are available across the site, and all operatives are trained in their use. Any fuel spilled on non-concreted surfaces (from vehicle leak / failure) will be dug out (using a digger), contained (in a skip or bin) and removed for disposal. Haul roads will be repaired if necessary (supplies of suitable aggregates are kept on site for haul road repairs).

6.17.4 All vehicles and plant are well maintained to reduce the likelihood of this occurring.

6.17.5 No fuel or oil will be stored within the permit boundary, rather any plant machinery will be refuelled at the existing premises within the Copthall South Office.

6.18 Fires on site

6.18.1 No wastes will be burned on site.

6.18.2 The types of waste which will be accepted at the site are not likely to give rise to fires or heating, therefore no specific control measures or action plan are required.

6.18.3 Office and accommodation areas will have the necessary firefighting equipment to fight fires.

6.18.4 All mobile plant will carry a fire extinguisher and will be inspected and maintained in accordance with the plant maintenance schedule to mitigate any potential fires.

6.18.5 In the unlikely event that a fire does occur that cannot be safely dealt with using the on-site equipment, the local fire service will be called.

7 Site Records

7.1 Security and availability of records

Security of records

7.1.1 All records which are required to be made under the conditions of the permit and the environmental management system will be maintained and kept secure from loss, damage or deterioration as detailed below:

Written records

7.1.2 The following records and documents will be available for inspection at the site office:

- Visitors Book;
- Site Diary;
- Environmental Permit;
- Daily inspection reports;
- Site Operations Manual;
- Monitoring Plans;
- Management Systems and Procedures
- Maintenance records;
- Copies of all the Environment Agency visit or inspection reports;
- SCSJV Safety Policy;
- Emergency procedures;
- Daily intake forms;
- SCSJV Red and Blacklists (confidential documents, not available for inspection); and
- Waste transfer and acceptance documentation.

7.1.3 With the exception of the visitor book, all records will be kept electronically or in secure, lockable filing cabinets or cupboards when the office is unattended.

7.2 Availability of records

7.2.1 All records which are required to be made under the conditions of the environmental permit will be made available for immediate inspection when required by an authorised officer of the Environment Agency.

7.2.2 A noticeboard will be maintained in the office with up-to-date versions of the following prominently displayed:

- Method of working signed and dated by the Site Supervisor;
- Certificate of employer's liability insurance;
- Emergency telephone numbers;
- The Operator's conditions of acceptance of waste (printed copies will be available for issue should these be required), and
- The Operator's site safety rules for waste carriers/visitors. (Printed copies will be available for issue should they be required.

7.2.3 Records of wastes that are accepted at the site, records of waste that are rejected and despatched from site and site diary records will be kept for a minimum of six years. Environmental monitoring records will be kept until a certificate of completion is issued for the land.

7.3 Records of waste movements

7.3.1 A record will be kept of each load of waste transferred. This record will include the following details:

- The nature of the waste, i.e., Solid;
- Waste type, see Table 1;
- quantity, i.e., tonnes, number;
- date received;
- date accepted, if different from received; and
- origin of waste, in terms of place.

7.3.2 A summary record of the waste types transferred will be made and submitted to the Environment Agency in accordance with the permit. The format of the summary record will be agreed with the Agency.

7.4 Site Diary

7.4.1 A site diary will be maintained by the Site Supervisor and will be kept secure. The site diary will be available for inspection when required by an authorised officer of the Agency.

7.4.2 The diary will include a record of the following:

- unacceptable waste details;

- complaints received;
- operational functions (e.g., plant services);
- observations made during daily site inspections;
- any unusual circumstances;
- changes to procedures.

Daily inspection checklist

7.4.3 To assist in the completion of the diary, the Site Supervisor refers to the "daily inspection check list." The daily inspection may comprise of the following checks:

- That radios are working properly;
- all site plant is operating and maintained according to schedules;
- that the day's routine monitoring has been done;
- on any high environmental monitoring readings reported;
- that the spray system and water bowser are in use if dust suppression is necessary;
- inspection of any drains and or gullies for potential mud, silt, suspended solids;
- if litter is a problem;
- if any unacceptable waste has been delivered. If so, ensure segregation, removal, and reporting in site diary;
- potential pests etc;
- cleanliness of access road – mud on road, etc; (between entrance and office);
- cleanliness of site entrance – mud on road, etc;
- cleanliness of site office and surrounds;
- condition of signs and notice boards;
- damage to fences and gates;
- any fly tipping;
- odours at various points of the site, note to wind direction;
- standard of operation;
- vandalism of on-site equipment; and
- completion of the site diary.

7.5 Reporting environmental performance

7.5.1 The Operator will prepare a review of environmental monitoring data every year during the operational life of the site. The reports will be submitted to the Environment Agency at the frequency required in the permit, or as otherwise agreed with the Environment Agency.

7.5.2 The report will include the following information:

- An analysis and review of the environmental monitoring results recorded for the site;
- a review of the risk management systems provided for the site.

8 References

8.1.1 The following documents have been referred to in this document:

Reference	Title	Document Number
R1	Waste Classification, Guidance on the classification and assessment of Waste (Technical Guidance WM3) 1st Ed, v1.1	Waste classification technical guidance - GOV.UK (www.gov.uk)