

C578-BPA-EMMP: Land off Woodland View, Wroughton, SN4 9AE: Emissions Monitoring & Mitigation Plan for Bespoke Deposit for Recovery Permit

Medium	Principal Sources	Monitoring Location	Type of Monitoring	Threshold Proposed	Justification	Methodology	Frequency	Mitigation Measures to Maintain Emission Below Threshold
Noise	Earth moving plant	<i>All site boundary monitoring points</i> (refer DWG-BPA-EML)	Quantitative	75 dB LAeq TWA (Action Value)	DoE Advisory Leaflet (AL) 72 BS4142	Portable noise meter at site boundary	Daily or more frequent if nuisance noise observed through qualitative daily assessment	No noise outside agreed working hours (8-6). Modern and well maintained plant. Any generators housed in acoustically lined containers as far as practical. Locate noisy equipment away from site boundaries if practical. Action Value Recorded; A breach in the action value will result in noise generating activities being reassessed to establish whether more suitable abatement measures are available (e.g. relocating perimeter stockpiles to buffer noise). Supplementary noise monitoring carried out at location of exceedance or complaints received.
Dust (including wind-blown materials)	Plant movement along haul routes, also uncovered stockpiles and ground surfaces.	<i>All site boundary monitoring points</i>	Qualitative (1-4) 1 – Not noticeable 2 – Slight dust 3 – Moderate dust 4 – Significant dust	Trigger = 3 Action = 4	Unacceptable condition	Qualitative Visual assessment	Daily	Damping down of haul roads. Shaping and sealing of stockpiles to orient with prevailing wind direction. Mobile misting units. Planning work activities based on wind conditions e.g. avoid placement of dry soils in high winds.
		<i>Selected site boundary monitoring points</i>	Quantitative	>200µg/m³ 15-minute TWA PM10 (trigger level – additional monitoring at EMP) >250µg/m³ 15-minute TWA PM10 (action level – mitigation and review of work methods)	IAQM Guidance 2012	Portable PM10 dust monitor	Daily during soil movements, or more frequent if nuisance dust is observed through the visual assessment above	Trigger Value Recorded; Additional monitoring at EMP Use of enhanced dust suppression measures where necessary to control fugitive dust emissions (e.g. 'dust fighter' or jet wash/bowser). Reassessment of activities to establish whether an alternative available. Action Value Recorded; If action value is breached the works causing the production of fugitive dust will cease and an alternative working methodology sought.
Asbestos fibres	Liberation of microscopic asbestos fibres during soil movement/reuse (same principal sources as dust)	<i>Selected site boundary monitoring points</i>	Quantitative	0.01 fibres/ml ⁻¹	Lowest quantification HSG248 and MDHS39-/4	UKAS accredited method	One mon visit per week for first 2 weeks of reuse of any soils containing asbestos fibres, for reassurance purposes. Reducing to one mon visit per fortnight thereafter.	Refer to Dust mitigation measures. Ensuring soils damp and not generating dust. Localised suppression for small volume picking activities. Airborne fibre monitoring to confirm safe working conditions and for reassurance purposes due to offsite residents.
Vibration	Backfilling and compaction operations	Selected site boundary monitoring points	Quantitative	Amber trigger level (5 - 10mm/s PPV) Red action level (>10mm/s PPV)	BS5228-2 Vibration on Construction Sites and previous Soilfix project experience	Portable vibration monitor	Daily during first 2 weeks of placement and compaction of soils within 30m of offsite residential properties (to east and north of DfR site), for reassurance purposes.	Use of modern well-maintained plant and equipment. Keep activities away from site boundary locations as much as reasonably practicable – some activities may be unavoidable Trigger Value Controls Vibration; Carry out monitoring at the receptor or as close to receptor as practicable, if monitoring being carried out on the boundary. Should trigger levels still exceed at receptor explore ways of reducing vibration levels including location of works or creating buffer zone between source and receptor or reviewing the use of roller 'vibro' function. Continued briefings to operational team with regards to managing vibration on site. Action Value Controls Vibration; STOP WORKS IMMEDIATELY and assess and amend working methodology and/ or intensity of works. Continue to monitor at receptor or as close to receptor as practicable.

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Odours	Residual (post-treatment) organic / putrescible content of soils	<i>All site boundary monitoring points</i>	Qualitative (1-4) 1 - Not noticeable 2 – Slight odour 3 – Moderate odour 4 – Strong odour	Trigger = 2-3 (or complaint received) Action = 3-4	EA H4 Guidance. Prevent nuisance to site neighbours	Odour rating by olfactory assessment as per EA H4 Guidance	Daily during soil movements	Trigger Value Recorded; Repeat and more frequent olfactory monitoring. Amend working method and increase odour suppression measures (e.g. odour neutralisation foggers) Action Value Recorded; Cease odour emitting works immediately. Deploy increased odour suppression equipment or dosage and/or change working method. Supplementary olfactory monitoring at site boundary and selected receptor locations if action value is consistently exceeded or complaints received.
Silt/Sediment Runoff / Infiltration to ground	Plant movement along haul routes, also uncovered stockpiles and ground surfaces.	<i>Site boundaries/ drainage ditches/ reed bed inlet / reed bed outlet compliance point</i>	Qualitative	Visible silt/sediment runoff running offsite/ into drainage ditches	Unacceptable condition	Visual inspection	Daily	Seal stockpiles. Compact and seal placed soil before end of each working day. Keep haul routes clear using road cleaning if necessary. Silt prevention (i.e. shallow interception trenches) and mitigation (silt trap fencing) at sensitive site boundaries if required. Additional cutoff drains are to be installed during site enabling works to intercept runoff and divert it to the reed bed treatment to north. Compliance water sampling to be carried out at the reed bed treatment outlet on a fortnightly basis for the first 2 months of DfR operations, then reducing to a monthly frequency. Samples analysed as per the existing EA Discharge Permit which includes compliance thresholds.