

Surface Water Environmental Risk Assessment – DRM Aggregate Solutions Ltd

Hazard	Receptor	Pathway	Risk Management Techniques	Probability of exposure	Consequence	Overall Risk
Odour	Commercial properties Residential properties Industrial properties Public Sector	Airborne	Section 4.5 of EMS Odour monitoring undertaken daily, surface water runoff should not give rise to odour issues. Waste pre-acceptance and acceptance procedures, Section 3.1 and 3.2 of EMS	Potential comes from surface water runoff contaminated with malodorous waste discovered after acceptance and left for long period of time in still weather conditions (temperature inversion). Very low potential for odours from storage and processing of waste.	Nuisance - most likely for neighbouring commercial properties with probability reducing with distance from the site.	Very low if management techniques followed.
Noise and vibration	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland	Airborne	Section 4.9 of EMS Noise likely to be associated with pumping surface water runoff from the pump chamber to onsite storage for use in dust suppression. Pump will not be running continuously and will be dependent upon rainfall and weather conditions. Electric pump will be quiet and will not add significantly to noise generated at the site. Currently planning permission in place for a large earth bund to the north and west of the site.	Probable exposure from damaged and/or blocked pump causing increase in noise level. Low frequency of pumping.	Localised nuisance for onsite commercial property and possibly pedestrians walking past.	Very low if management techniques followed.
Pests	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland	Airborne, land	Section 4.7 of EMS Water unlikely to attract pests. Effectively a sealed system and so no easy access for pests.	Very low probability	Nuisance/ annoyance Spread of disease and potential adverse health impacts on vulnerable	Very low if management techniques followed.

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Dust	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland	Wind blown	Visual dust monitoring Section 4.4 of EMS Activity unlikely to generate dust due to wet nature of operations.	Dust could possibly reach the receptors. The nearest receptors likely to be affected are; Deciduous woodland, Haybridge and Ketley Brook if the wind was from the south and west respectively and of sufficient strength to entrain particulate matter. The probability of annoyance from dust will diminish with distance from the site. The adjacent commercial property owned by Telford & Wrekin (former HWRC) are at a greater risk. However low probability of exposure due to site been used for storage and is not occupied on a regular basis. Potential for dust to settle on deciduous woodland to the East and South West. Dust could possibly reach residential properties of Probability low of exposure due to crushing and screening activity infrequent (estimated at an average of one day per week).	Nuisance Dust on cars/ washing	Very low if management techniques followed.
Fire	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland	Airborne	Section 4.8 of EMS Water treatment and discharge activity should not give rise a fire risk.	Fire could potentially be a problem for neighbouring industrial unit (used for storage and not regularly occupied). Residential properties could be affected if the wind was blowing from the South and West.	Nuisance Deposits on cars/ washing.	Very low if management techniques followed.

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Fire water	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland Land/ local soils	Percolation through ground/ surface water	Section 2.7 & 4.8 of EMS Drainage from the site is collected via a sealed drainage system and drains to an oil interceptor. Waste types accepted should not present a high risk of flammability, waste pre-acceptance and inspection procedure (Section 3.1 and 3.2 of EMS). Therefore, volumes of any fire water should be relatively low i.e. no waste stockpiles to put out.	Low probability of exposure as volumes of any fire water generated would be relatively low.	Localised contamination of surface. If not cleaned up, then could lead to contaminated water drains. Potential for exposure to aquifer in bedrock from contaminated fire water run off left to percolate through the ground.	Low if management techniques followed.
Spillage – oil/ fuel from road vehicles and plant on site, adblue from road vehicles, waste from site escaping the boundary.	Groundwater/ surface water Land/ local soils	Percolation through ground/ surface water sewer drains on Northcott Road	Fuel/ liquids stored in banded containers (Section 2.6 EMS), additionally fuel stored in secure container. Main processing site has impermeable surface surrounded by concrete bund wall, oil interceptor and catch drains at site entrance. All runoff/ liquids drain towards the grids near the site entrance which drain into an oil interceptor. Road vehicles serviced regularly, tested and MOT. Plant inspected prior to use for leaks/ defects. Water stored onsite, spillage of water would not lead to a potential for pollution as water will have already been through primary settlement. EMS section 2.7.3, penstock valve in place to stop water outfall in the event of spillage on site.	Low probability of spillage. Spillage most likely during loading of vehicles. Or from damaged road vehicles, mobile plant (hydraulic leaks).	Spillage of waste sticking to road vehicles and tracking off site and been deposited on the public road. Hydraulic leaks flowing into oil interceptor prior to discharging into existing outfall. Land beneath site contaminated from previous land uses. Clay layer above bedrock (aquifer). Liquid flowing into Ketley Brook (unlikely due to concrete bund). There are no surface water sewers or foul sewers located near the site.	Low if management techniques followed.

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Mud	Commercial properties Residential properties Industrial properties Public Sector	Airborne Percolation/ drains	Section 4.3 of EMS Running surface to be kept clean Main processing facility is fully concreted, tarmac, hard standing. Vehicles not to track through waste stocks	Mud only realistically possible in if excessive vehicle movements during wet conditions. Deposit on the A5223 which then has the potential to wash off into a surface water sewer drainage system.	Increase in suspended solids from surface water discharge which if enters surface water could cause localised impact on wildlife. Due to potential for very small volumes of mud produced consequences would be localised and minimal.	Low if management techniques followed.
Overfilling of vessels	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland Land/ local soils Groundwater	Airborne Percolation/ drains	Surface water storage will be in suitable container(s) such as IBC's and will be filled from the pump chamber. Any overfilling will result in the recycled surface water entering the drainage system and going through the process of settlement and oil interceptor prior to discharging into the existing outfall.	Will only occur when recirculating water for use back on site.	No additional consequence	Low if management techniques followed.
Failure of containment	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland Land/ local soils Groundwater	Airborne Percolation/ drains	Section 2., 2.7, 3.1, 3.2, 4.1 of EMS	Greatest risk will be from the failure of water holding tanks.	Free flowing liquid could enter the drainage system and pass through the oil interceptor prior to discharging to the existing surface water outfall.	Low if management techniques followed.
Failure of main services	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland	Airborne Percolation/ drains	Failure of electricity would affect the ability of the surface water collection system to pump water back onto site for reuse but would not impact any environmental controls required to reduce suspended solids and oil content.	Has the potential to happen although highly unlikely.	No effects on containment.	Low if management techniques followed.

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Emissions from the processing plant	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland Land/ local soils	Airborne Percolation/ drains	See Section 4.2 of the EMS Inspections carried out on plant and equipment and any defects noted are reported and repairs initiated. Routine preventative maintenance and cleaning carried out. Any leaks of fluid will be contained by the sealed drainage system and contained within the oil interceptor. Electricity use for pump chamber will create CO ₂ unless sourced from renewables.	Low probability of exposure Electricity demand will be low from the electric pump which will not be operating continuously. Potential for oils to enter the existing outfall if oil interceptor is not maintained properly. Potential for suspended solids to bypass the system if the primary settlement pit isn't maintained.	Free flowing liquid could enter the drainage system and pass through the oil interceptor prior to discharging to existing outfall. Existing outfall likely to drain into highways drain which in turn is likely to drain to surface water. Potential for environmental harm if the oil levels exceed EQS.	Low if management techniques followed.
Operator error	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland	Airborne Percolation/ drains	Section 1.6 of EMS Directors involved in the production process (hands on) and will observe staff activity.	Potential for human error – greatest risk would be from maintaining the oil interceptor and primary settlement pit.	Potential for excess surface water runoff to breach any consent limits. Existing outfall likely to drain into highways drain which in turn is likely to drain to surface water. Potential for environmental harm if the oil levels exceed EQS.	Low if management techniques followed.
Vandalism	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland Land/ local soils	Airborne Percolation/ drains	Section 2.3 of EMS	Potential for vandalism as near housing estates and another commercial unit.	Free flowing liquid could enter the drainage system and pass through the oil interceptor prior to discharging to existing outfall. Existing outfall likely to drain into highways drain which in turn is likely to drain to surface water. Potential for environmental harm if the oil levels exceed EQS.	Low if management techniques followed

Date of assessment: 28th July 2020

Date next assessment/ review due (max. 4 years): 27th July 2024

Assessor: Martin Womack

Signature: 