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, waste types accepted should not give rise to odour issues. Waste pre-acceptance and acceptance procedures, Section 3.1 and 3.2 of EMS	Potential comes from 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.	Low if management techniques followed.
Noise and vibration	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland	Airborne	Noise Impact Assessment, Noise and Vibration Management Plan. Section 4.9 of EMS Noise most likely from crushing/ screening operations and reversing of vehicles and plant/ machinery on the site. Waste to be stored in stockpiles which will act as a buffer to reduce noise levels off site. Currently planning permission in place for a large earth bund to the north and west of the site. Crushing and screening will take place adhoc on a campaign basis. It is anticipated that these activities will average only 1 day per week. Crushing operations are limited to 08.15 to 17.30 Monday to Friday only (See EMS Section 1.4). Noise from road vehicles, plant/ machinery intermittent. Max speed limit on site 10mph. Road vehicles are serviced and MOT in place. Plant/ machinery maintained and regularly serviced.	Probable exposure from damaged exhaust causing increase in noise level from vehicles travelling to and from the site. Probable exposure from crushing operations. Noise survey undertaken as part of the planning application process. Low frequency of crushing/ screening – anticipated that max equivalent to one day per week.	Localised nuisance for commercial properties with possible effects for birds/ wildlife that use the deciduous woodland to the East. Measurements taken at residential properties (Ketley Brook, Haybridge) and Telford College of Arts & Technology show levels align with those of BS823	Low if management techniques followed.

Hazard	Receptor	Pathway	Risk Management Techniques	Probability of exposure	Consequence	Overall Risk
Dust	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland	Wind blown	Dust and Emissions Management Plan. Visual dust monitoring Section 4.4 of EMS Stocks of waste kept low (<4m), material stored in stockpiles, water spray to be used to damp down site. Brush attachment for skid steer to be used to clean road surfaces. Covering of stockpiles with heavy gauge tarpaulin. Crusher drop heights kept to a minimum; crusher fitted with dust suppression system. Crushing estimated to take place one day per week.	Dust could possibly reach the receptors highlighted in Table 1 below, if inert stocks were excessive, crushing with no dust suppression; wind direction and wind speed was of sufficient strength to entrain particulate matter. 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 no longer in use and now classed as 'white land' in Telford and Wrekin Local Plan. Previous planning permission for a temporary traveller site has expired and was never implemented. 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 - residential Dust on cars/ washing Research by DETR concluded that 'The issue of dust on ecological receptors is largely confined to the associated chemical effect of dust, and particularly the effect of acidic or alkaline dust influencing vegetation through soil'. The waste types accepted and that are likely to generate dusts are mainly inert i.e. concrete, rubble, soils.	Low if management techniques followed.
Pests	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland	Airborne, land	No food source for pests. Putrescible /food waste not accepted. Section 4.7 of EMS	Very low probability as waste types accepted do not provide an attraction for pests.	Nuisance/ annoyance Spread of disease and potential adverse health impacts on vulnerable Possible effects for birds/ wildlife that use the deciduous woodland to the East.	Very low if management techniques followed.

Hazard	Receptor	Pathway	Risk Management Techniques	Probability of exposure	Consequence	Overall Risk
Spillage – oil/ fuel from road vehicles and plant on site, adblue from road vehicles, waste from site escaping the boundary.	Groundwater (the superficial deposits are classed as a Secondary A aquifer and the solid bedrock is classed as a principal aquifer)/ surface water Land/ local soils	Percolation through ground/ surface water	Fuel/ liquids stored in bunded 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 at near the site entrance which drain into an oil interceptor prior to discharging to existing outfall. Proposed surface water system has a penstock valve to allow all discharges to be stopped in the event of a major spill. Road vehicles serviced regularly, tested and MOT. Plant inspected prior to use for leaks/ defects. Spill kits and spillage procedure (EMS Section 4.1). TWC Desk Study and Contamination Report highlights a significant thickness of cohesive glacial clay between the made ground under the site and the aquifers.	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.
Fire	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland	Airborne	Section 4.8 of EMS 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).	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. Possible effects for deciduous woodland and birds/ wildlife that use the woodland to the East.	Low if management techniques followed.

Hazard	Receptor	Pathway	Risk Management Techniques	Probability of exposure	Consequence	Overall Risk
Fire water	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland Land/ local soils Groundwater (the superficial deposits are classed as a Secondary A aquifer and the solid bedrock is classed as a principal aquifer)	Percolation through ground/ surface water	Section 2.7 & 4.8 of EMS Drainage from the site is collected via a drainage system and drains to an oil interceptor prior to discharging to an existing outfall. The proposed surface water system has a penstock valve fitted to prevent off site flow. TWC Desk Study and Contamination Report highlights a significant thickness of cohesive glacial clay between the made ground under the site and the aquifers. 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. Possible effects for deciduous woodland and birds/ wildlife that use the woodland to the East.	Low if management techniques followed.
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.
Receipt of waste	Commercial properties Residential properties Industrial properties Public Sector	Airborne Percolation/ drains	Waste pre-acceptance and acceptance procedures, Section 3.1 and 3.2 of EMS	Waste will be accepted daily. Only hazard will be from non-conforming wastes.	Discharge of contaminated water/ liquid to existing outfall.	Low if management techniques followed.

Hazard	Receptor	Pathway	Risk Management Techniques	Probability of exposure	Consequence	Overall Risk
Storage of waste	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland Land/ local soils	Airborne Percolation/ drains	Section 2.7, 2.8 and 3.3 of EMS Waste pre-acceptance procedure. Wastes stored on concrete pad/ tarmac/ hardstanding. Main waste reception and processing area has sealed drainage system.	Low probability of waste material leaving the site. Storage in itself should not pose an environmental issue. See Dust above and section 4.4 of the EMS.	Any free liquids would be collected in the sealed drainage system in the main processing area and pass through the silt trap and oil interceptor prior to discharging into existing outfall.	Low if management techniques followed.
Overfilling of vessels	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland Land/ local soils Groundwater (the superficial deposits are classed as a Secondary A aquifer and the solid bedrock is classed as a principal aquifer)	Airborne Percolation/ drains	Fuel storage tank is double bunded and stored in a secure container. Spill kit available in the yard. Overfilling of mobile plant. Fuel handle has cut off. See section 4.1 of EMS Drainage from the site is collected via a drainage system and drains to an oil interceptor prior to discharging to an existing outfall. The proposed surface water system has a penstock valve fitted to prevent off site flow.	Will only occur when delivery of fuel to the site and when fuelling mobile plant.	Any free liquids would be collected in the sealed drainage system in the main processing area and pass through the silt trap and oil interceptor prior to discharging into existing outfall.	Low if management techniques followed.
Failure of containment	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland Land/ local soils Groundwater (the superficial deposits are classed as a Secondary A aquifer and the solid bedrock is classed as a principal aquifer)	Airborne Percolation/ drains	Section 2., 2.7, 3.1, 3.2, 4.1of EMS Drainage from the site is collected via a drainage system and drains to an oil interceptor prior to discharging to an existing outfall. The proposed surface water system has a penstock valve fitted to prevent off site flow.	Greatest risk will be from the failure of hydraulic hoses on mobile plant.	Any free liquids would be collected in the sealed drainage system in the main processing area and pass through the silt trap and oil interceptor prior to discharging into existing outfall.	Low if management techniques followed.

Hazard	Receptor	Pathway	Risk Management Techniques	Probability of exposure	Consequence	Overall Risk
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. Odour Section see Section 4.5 of the EMS.	Low probability of exposure	Any free liquids would be collected in the sealed drainage system in the main processing area and pass through the silt trap and oil interceptor prior to discharging into existing outfall. Possible effects for deciduous woodland and birds/ wildlife that use the woodland to the East.	Low if management techniques followed.
Incompatible substances coming into contact	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland Land/ local soils	Airborne Percolation/ drains	Section 3.1 and 3.2 of the EMS	Very low probability due to the waste types accepted. Non-conforming wastes are more likely to be plastic, tree stumps rather than posing a chemical hazard or potential hazard.	Unwanted reaction between chemicals could give rise to odorous, noxious emissions affecting the immediate area.	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 not affect the process plant and equipment from operating and would not affect containment. Failure of gas – no gas services are on site. Failure of water would potentially prevent the crushing process but would not affect containment. Proposed reuse of grey water collected from surface water system.	Has the potential to happen although highly unlikely.	Potential loss of production increase in storage of waste waiting to be processed. No effects on containment.	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 not following the waste reception procedure. Operator error on spray bars of crusher would potentially affect dust emissions.	Nuisance Dust on cars/ washing	Low if management techniques followed.

Hazard	Receptor	Pathway	Risk Management Techniques	Probability of exposure	Consequence	Overall Risk
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.	Loss of containment for fuel diesel storage tank. However unlikely that that bunds and drainage system would also be compromised.	Low if management techniques followed

Receptor	*Distance (m)*	*Direction*	*Type*	*At Risk?*
T & W	0	SE	Industrial	Workers, Public, Contractors
Deciduos Woodland - Protected	23	E	Open Space	Workers, Public, Contractors
A5223	38	W	Road	Workers, Public, Contractors
Ketley Brook	51	E	Open Water	Workers, Public, Contractors
Railway Line	71	N	Industrial	Workers, Public, Contractors
Telford College of Arts & Technology	78	W	Public Sector	Workers, Public, Contractors
Residential Properties - Haybridge	110	N	Residential	Workers, Public, Contractors
Residential Properties - Ketley Brook	147	E	Residential	Workers, Public, Contractors
Car Wash, Filling Station	220	NW	Commercial	Workers, Public, Contractors
Residential Properties - Ketley Sands	233	SW	Residential	Workers, Public, Contractors
Residentail Properties - Arleston	274	SSW	Residential	Workers, Public, Contractors
Fire Station	314	W	Public Sector	Workers, Public, Contractors
Haybridge Industrial Etate	336	NW	Commercial	Workers, Public, Contractors
B5061	385	SE	Road	Workers, Public, Contractors
The Bridge School (primary & secondary)	385	NE	Public Sector	Workers, Public, Contractors
New Buck's Head Football Ground	500	W	Commercial	Workers, Public, Contractors
Pond (Works)	509	SE	Open Water	Workers, Public, Contractors
Works	530	SE	Industrial	Workers, Public, Contractors
Bridge Builder Public House	545	S	Commercial	Workers, Public, Contractors
Residential Properties - Wellington	601	W	Residential	Workers, Public, Contractors
Filling Station	607	S	Commercial	Workers, Public, Contractors
Wrekin Retail Park	665	S	Commercial	Workers, Public, Contractors
Field Drain	715	N	Open Water	Workers, Public, Contractors
Field Drain	730	NW	Open Water	Workers, Public, Contractors
Residential Properties - Ketley	777	E	Residential	Workers, Public, Contractors
Millbrook Primary School	785	NNW	Public Sector	Workers, Public, Contractors
Post Office	883	NE	Commercial	Workers, Public, Contractors
The Old Hall School	904	WNW	Public Sector	Workers, Public, Contractors
Residential Properties - Hadley	945	ENE	Residential	Workers, Public, Contractors
Sports Leisure Centre	982	NE	Commercial	Workers, Public, Contractors

Date of assessment: 15th March 2020

Date next assessment/ review due (max. 4 years): 15th March 2024

Assessor: Martin Womack

Signature: M. Womack