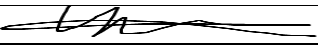




H1 Risk Assessment

Report compiled by:	Gareth Danter-Hill	Environmental Focus Ltd
Customer:		S L Recycling Ltd
Requirement:	H1 assessment	Variation application
Date of Submission:	October 2021	
Signature:		Gareth Danter-Hill
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This document has been prepared in good faith with care and diligence, based on information provided by the client or known to be available at the time. The document fully satisfies the agreed work profile.

Site location and background Information

Located on the perimeter of an industrial estate within the village of New Inn, the Site lies c.3km directly south-east of the town of Pontypool, Torfaen in South Wales. To the east and west of the Site, the land is largely occupied by residential properties with intervening belts of trees and fields. Beyond these in the wider landscape, the land-use is dominated by rural pastures and agricultural land.

Along the southern boundary and orientated parallel to the west of the Site is the A4042. A railway line is further to the west running in a north to south direction. The nearest residential properties are on the eastern side of the Afon Lwyd valley circa 60m east of the Site whilst the closest sensitive receptor are other industrial units and businesses on the adjacent Pontyfelin Industrial Estate to the north of the Site's boundary. Please refer to the submitted site plans for location etc in relation to the wider environment.

Household, commercial and industrial wastes for recovery or disposal off-Site are manually sorted, separated and bulked up with all bulking of non-hazardous wastes is carried out internally within the waste and wood processing building and the cardboard and plastic processing hall as appropriate.

Metal recycling involves the sorting, separation, grading, shearing, shredding, baling, compacting, granulating of cables and cutting (using only hand-held equipment) of ferrous metals or alloys and non-ferrous metals for recovery. This application wishes to add the external shredding of metal wastes to the list of permitted activities. Storage and recovery of waste motor vehicles also takes place on Site in a designated bay with treatment comprising of depollution and dismantling only.

End of Life Vehicles are received via the weighbridge, where they are inspected for quality and contamination prior to transferal to designated depollution bays within the Site. These bays are fitted with interceptor drainage systems to eliminate the possibility of water contamination. The motor vehicles are manually depolluted.

Wood wastes listed, are stored securely in the designated bay shown on the site layout where it is sorted and separated for recovery. No waste is stored for longer than three months, with the typical turnover less than two weeks.

The H1 Risk Assessment includes full consideration of any impacts from the Site on a Site of Importance for Nature Conservation (SINC), that being a belt of trees bordering the eastern boundary of the Site, in addition to a further parcel of trees on the opposite side of Pont-Y-Felin Road c. 30m to the east. In addition, there is a Site of Special Scientific Interest (SSSI), the Llandegfedd Reservoir, located 1497m to the north-east of the Site.

This H1 Assessment considers the sources of the risks, the receptors and the possible pathways from source to receptor. Abatement techniques, should they be required, are considered as is the probability of exposure, the consequences and the overall risk posed.

Hazard	Receptor	Pathway	Risk Management	Exposure Probability	Consequence	Overall Risk
Odour						
Odour from waste delivery, off-loading, storage and processing.	<p>The A4042, Pont-y-felin Avenue and Pont-y-felin Road encircle the Site.</p> <p>The Afon-Lwyd flows to the east of the Site and mainland railway runs to the west at a distance of 30 m and 340 m respectively.</p> <p>The closest area to the north and west of the Site is heavily industrialised with a wide range of automotive, manufacturing and chemical industries present, including engineering (D J J Precision Engineering and TW Engineering) and printing solutions (Zenith Media).</p> <p>The nearest residential properties are located just over 60 m (Redrow Homes - Coed Y Felin) to the east and 350 m to the west of the Site at the nearest point.</p> <p>A SSSI, the Llandegfedd Reservoir</p>	Air	<p>An Odour Management Plan has been previously prepared and submitted for the Site. Reference should be made to report which details mitigation measures in place on the Site.</p> <p>Waste types accepted at the Site that have the potential to be odorous are contained within a fully enclosed building with fast action roller shutter door entry/exit points. Wastes are processed on a first in first out basis to ensure rapid turnaround times.</p> <p>The Site boundary is inspected at least two times on a daily basis for odour, at the sniff test locations shown in the Odour Management Plan. Any significant odour detected or complaints received at the Site about odour are monitored and logged in accordance with the Environmental Management System (EMS) procedures in place. Mitigation measures will be implemented, as appropriate, to ensure a high level of control.</p> <p>The shredding of metal process applied for within this variation application will not increase any odour emissions from the site.</p>	Unlikely as any potentially odorous waste types are stored internally and storage duration times are in accordance with guidance and regulations.	Odour annoyance to anyone living or working close to the Site.	Not significant

	is located 1497m to the north-east of the Site's boundary.					
Odour from recovered materials, prior to off-Site dispatch.	See above.	Air	See above.	Unlikely (see above).	Odour annoyance to anyone living or working close to the Site.	Not significant
Odour from cardboard and plastic storage building.	See above. Residential and commercial properties. Statutory and non-statutory designated sites	Air	The cardboard and plastic processing building is enclosed. These waste types are not inherently odorous.	Unlikely (see above).	Odour annoyance to anyone living or working close to the Site.	Not significant
Noise and Vibration						
Engine noise from vehicles entering and exiting the Site, including reversing beepers.	See above	Noise via atmosphere and vibration through ground.	<p>To minimise noise emissions, all vehicles, plant and machinery operated at the Site are maintained in accordance with the manufacturer's specification. Plant and vehicles are switched off when not in use and no activity are carried out beyond the permitted hours of working as specified under the planning consent and detailed in the EMS.</p> <p>A Noise Impact Assessment (NIA) for Site operations has been carried out and indicates that the overall impact is low.</p> <p>Routine maintenance of treatment plant and equipment is carried out to minimise noise emissions.</p> <p>In the event of any noise complaints from local residents and other businesses, details will be logged in accordance with the EMS. Mitigation measures and advice given in the NIA on good practice for the</p>	Unlikely due to the mitigation measures in place.	Noise annoyance to anyone living or working close to the Site (excluding operators or employees).	Not significant

		control of Site noise sources will be implemented, as appropriate, to ensure a high level of control.				
Noise from waste processing activities	See above.	Air	A Noise Impact Assessment has been prepared for the Site (report reference: 21.5852_NIA3_NRW) and has identified noise sources from the on-Site plant and vehicles i.e. shredder, grab, shear and HGV loaded with car bales. The continuous monitoring carried out at two of the nearest sound sensitive receptors (residential housing estates located c.65m to the east and c.360m to the west of the Site) concluded that activities on Site generate a low noise impact and that the noise climate in the vicinity of the Site is controlled by road and rail movements. In view of the NIA conclusions, it is extremely unlikely that the SSSI located 1497m from the Sites boundary will be impacted by noise and that residential areas will not be impacted to an extent beyond 'normal' levels.	See attached report	Noise nuisance to local receptors-see attached report	Not significant
Fugitive Emissions-air						
Dust from waste processing activities	See above.	Air transport, inhalation and/or deposition	<p>A Dust Management Plan (DMP), report reference SLR_DMP, is currently in place on the Site and recommendations within the plan will be adhered to should there be any complaints or obvious dust emissions noted during daily Site inspections.</p> <p>The facility has a purpose-built enclosed building for the waste processing of potentially dust-generating material as defined in the DMP, to ensure fugitive dust do not become airborne. Should any dust escape, a hose or water bowser will be used on Site to dampen down surfaces to minimise any dust emission.</p>	Unlikely due to mitigation measures in place.	Potential harm to human health – respiratory irritation and illness.	Low, as probability of exposure is low.

The external metal shedder has the potential to emit dust when operating. However, the continuous monitoring of the machine operator will maintain the adequate internal suppression while the machine is being used. Spot checks will also be undertaken throughout operational hours by the site supervisor and TCM for the site. If dust is noted at any time, and appears to be leaving the site boundary, the additional suppression systems used routinely on site will be diverted to the shedder. This will be particularly important in warmer weather.

Llandegfedd Reservoir SSSI is located circa 1.5Km from the Site. Institute of Air Quality Management (IAQM) Guidance on the Assessment of Mineral Dust Impacts for Planning (May 2016) states that “it is commonly accepted that the greatest impacts will be within 100 m of an emission source, and this can include both large (>30 µm) and small dust particles.

The greatest potential for high rates of dust deposition and elevated PM10 concentrations occurs within this distance. Intermediate-sized particles (10 to 30µm) may travel up to 400 m, with occasional elevated levels of dust deposition and PM10 possible. Particles less than 10 µm have the potential to persist beyond 400 m but with minimal significance due to dispersion.

Due to the distance of the Site to the SSSI, any inadvertent dust emissions from the facility are highly unlikely to have any impact on the designated nature site.

Dust from vehicle movements and	See above	Air transport then	Vehicle movements have the potential to emit particulates particularly during prolonged dry	Although the nearest sensitive receptor is	Potential harm to human health -	Not significant, as
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waste and materials operations on the Site.	inhalation and/or deposition.	<p>periods e.g. summer months. Procedures to prevent dust emissions include the following: the Site entrance and access road comprise engineered tarmac surfaces, which are swept to prevent dust accumulation. Site vehicles are limited to speeds of ≤ 10 mph.</p> <p>The waste storage, processing and product storage areas comprise engineered impermeable surface.</p> <p>If on-Site conditions become dusty, a water bowser or hose will be used on the Site access road and the working areas, where required (see above). Should the adjacent public highway become muddy, a road sweeper will be hired as needed (this is considered unlikely as the Site surface comprises engineered surface).</p> <p>The Site boundary is inspected daily for any dust or particulates escaping the Site. In the event of any dust emissions or complaints received about dust or particulate emissions, details will be logged in accordance with the EMS. Mitigation measures will be implemented, as appropriate, in accordance with the DMP to ensure a high level of control.</p>	circa 60 m from the Site at the closest point and most airborne dust particles fall out of the airstream within 100m of travel, there is a belt of trees bordering the site that will serve as a barrier. The likelihood of dust impact is therefore low likelihood.	respiratory irritation and illness.	probability of exposure is low.
Fugitive emissions-water					
Flood water and contaminated surface water runoff.	Local surface waters and groundwater.	Direct run-off from Site to adjacent, uncontained areas and percolation into soil and groundwater.	<p>At its closest point, the Afon-Lwyd, which flows in a southerly direction, is located circa 40m to the east of the Site.</p> <p>The distance to the nearest surface water body would suggest that it is potentially at risk of cross contamination from shallow groundwater on-Site, or in the event of flood water accessing the Site.</p>	Unlikely	<p>Increased suspended solids, potential contaminants from small organic component of waste stream.</p> <p>Not significant</p>

The site is located with a flood zone 2, therefore a flood risk assessment has been prepared as part of a previous planning application.

Site drainage and run-off is contained on Site and falls to an engineered, lined lagoon for storage and reuse, as required (e.g. for dust suppression during dry and dusty conditions).

In accordance with the Planning Permission and Flood Risk Assessment, the site is drained via a Class 1 full retention interceptor.

As there is no pathway from the Site to designated nature sites, including the Llandegfedd Reservoir SSSI, there is no risk of risk of water emissions from the Site impacting the SSSI or other nature sites.

Any complaints received at the Site about surface water run-off will be monitored and logged in accordance with the EMS in place. Mitigation measures will be implemented, as appropriate, to ensure a high level of control.

Fugitive Emissions-mud and debris

Mud and debris being liberated beyond the Site boundary.	Neighbouring roads The A4042, Pont-y-felin Avenue and Pont-y-felin Road	Transferral of mud and debris from the Site on the under carriage and wheels of vehicles exiting the Site.	<p>The Site entrance and access road comprise engineered tarmac surfaces, which is swept or hosed down to prevent any mud and dust accumulation, as required. All Site vehicles are limited to speeds of ≤10 mph. The waste storage, recovery and product storage areas comprise engineered impermeable surface and sealed drainage system. This minimises any potential for mud and debris generation on Site surfaces.</p> <p>As part of the daily inspection regime, the Site is visually inspected for the presence of mud and</p>	Unlikely	Potential risk of vehicle accidents if mud accumulation occurs and is not treated.	Not significant
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debris. Should the adjacent public highway become muddy, a road sweeper will be deployed on an as and when required basis.

Any complaints received at the Site about mud and debris will be monitored and logged in accordance with the EMS procedures in place. Mitigation measures will be implemented, as appropriate, to ensure a high level of control.

If the problem persists, a wheel wash (or similar) will be considered.

Pests and vermin

Pest and/or vermin infestation of waste loads.	Commercial building dwellings and roads identified above.	Airborne (flies and other insects, scavenging birds). Land (rodents and other vermin).	<p>Waste loads are not inherently attractive to pests and vermin and are not likely to provide a source of food. Wastes are processed on a first in first out basis to ensure a rapid turnaround of materials and the minimisation of storage times.</p> <p>In the unlikely event of infestations or any complaints received at the Site, details will be logged in accordance with the EMS procedures in place. Mitigation measures will be implemented, as appropriate, to ensure a high level of control.</p>	Very unlikely	Potential nuisance to anyone living or working close to the Site.	Not significant
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Litter

Litter deposits within waste loads or on Site.	Commercial building dwellings and roads identified above.	Airborne	<p>Waste loads that may contain litter or other materials that potentially become airborne will be unloaded, stored, bulked-up and reloaded within the confines of the waste transfer station/processing building and cardboard and plastic storage building, which are enclosed.</p> <p>In the event of litter escaping the Site it will be collected and appropriately disposed of as a matter</p>	Unlikely	Potential nuisance to anyone living or working close to the Site. Unsightly impact on adjacent areas.	Not significant
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of urgency. External yard areas of the Site are kept clean and litter picked should this become necessary.

In the event of litter complaints received at the Site, details will be logged in accordance with the EMS procedures in place. Mitigation measures will be implemented, as appropriate, to ensure a high level of control.

Litter fencing is also now in use around the perimeter of the site.

Fires

Fires on Site from plant and equipment. (Including arson and/or vandalism causing the release of polluting materials to air (smoke or fumes), water or land.	Staff, visitors, other personnel on Site, local human population, plant and equipment. Surface water courses, soils and groundwater.	Air transport of smoke. Spillages and uncontained firewater, e.g. by direct run-off from Site	<p>A detailed Fire Prevention Plan is in force for the Site (see SLR_FPMP).</p> <p>On Site plant and equipment are maintained on a regular basis to ensure they are working effectively to minimise the risk of fire. The complex is secured outside operational hours.</p> <p>Fire extinguishers are located in the Site Office and all Site staff are trained in the event of a fire using the fire-fighting equipment available. If deemed necessary, the fire brigade will be contacted and Natural Resources Wales informed.</p> <p>No materials are burnt on Site.</p>	Unlikely	Respiratory irritation, illness and nuisance to local population. Injury to staff, fire fighters or arsonists / vandals. Pollution of waters and soils.	Not significant
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Leaks and Spillages

Leak from the waste oil / diesel storage areas on Site (including overfilling, vandalism etc.)	Surface water courses, soils and groundwater.	Percolation through the ground.	<p>All on Site vehicles are inspected daily before operation to identify any leaks which will be dealt with accordingly.</p> <p>Absorbent material contained within spill kits are kept on Site and used to treat any spillages of</p>	Unlikely	Potential Contamination of local water courses and underlying groundwater.	Not significant
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potentially polluting liquids. All Site staff are trained in the relevant procedures on Site.

The operational procedures on Site form part of the Site's EMS.

To create this Environmental Risk Assessment, H1 software was used:

Waste type	Nature of waste	Hazard rating	R or D method	R or D code	R or D method impact score	Amount of waste per year (tonnes)
HCI	Non-Hazardous	2	Recycling	R3orR5	3	110000

HCI transfer and treatment. $2 \times 3 = 6 \times 110000 = 660,000$ total impact score

This Risk Assessment should be reviewed if it is no longer valid due to operational changes etc or it shall be review annually to ensure that it is still current and accurate.

