

CWML 3 – Environmental Risk Assessment Crown Waste Management Limited - Hartshill Quarry Nuneaton Road, Nuneaton CV10 0RT.

As part of an application for an environmental permit Operators must assess the risk to the environment and human health from the activities they seek to permit.

This Environmental Risk Assessment has been undertaken in accordance with the online Environment Agency Guidance for undertaking environmental risk assessments.

Environmental risks relevant to the proposed activities are:

- Emissions to Air;
- Emissions to Water;
- Emissions to Land;
- Odour;
- Noise;
- Litter;
- Pests;
- Vandalism;
- Fire; and
- Incompatible Feedstock.

For each of the above environmental criteria the approach to the assessment has followed the following four stage process:

- Identify the risks;
- Assess the risks (assuming those control measures proposed are in place);
- Choose appropriate further measures to control these (if required); and
- Present the assessment.

Hazard	Receptor	Pathway	Risk Management Techniques	Probability of Exposure	Consequences	Overall Risk (following mitigation)
Point Source Releases to Air	Atmosphere	Airborne	<ul style="list-style-type: none"> There will be no point source emissions to air from the facility. 	Low: offsite receptor impact	Air Pollution	VERY LOW due to the proposed processes on site
Emissions to water	Groundwater / Geology / Surface Water	Water borne	<ul style="list-style-type: none"> There are no point source emissions to surface waters. All washing activities will take place on an impermeable surface forming part of a sealed drainage system. The concrete pad will also feature a geo textile membrane to prevent migration of liquids to the groundwater. There will be no hazardous wastes delivered to site. The wash plant is located on an impermeable concrete pad which drains to a sealed sump. The pad will be constructed on top of geo-membrane. This provides the sealed drainage system. Road sweepings will be stored on a sealed concrete pad. Spill kits will be strategically located around site. These are subject to regular checks in the planned preventative maintenance system. 	Low: all runoff is controlled on site, therefore the probability of exposure is low	Contamination	VERY LOW due to the proposed management techniques and drainage arrangement
Emissions to land	Groundwater / Geology	Spills / Leaks	<ul style="list-style-type: none"> The wash plant is located on an impermeable concrete pad as part of a sealed drainage system. The concrete pad will also feature a geo textile membrane to prevent migration of liquids to the groundwater. There will be no point source emissions to land arising from the proposed facilities. Spill kits will be strategically located around site. These are subject to regular checks in the planned preventative maintenance system. Staff will be trained in how to deal with a spill. Minor spills to be cleaned up immediately using spill kits. Resultant materials to be placed in container for offsite disposal to appropriate facility. Immediate action to be taken in event of any major spills. Spillage to be cleared immediately and placed in containers for offsite disposal at an appropriate facility. EA to be informed. 	Low: spills / leaks could potentially contaminate the ground / groundwater- Underneath the site.	Contamination	VERY LOW due to the proposed risk management techniques
Noise and vibration Existing permitted activities including new wash plant	Local Residents and wildlife Closest residents located at 420m to the NW of the site boundary	Airborne / ground	<ul style="list-style-type: none"> The wash plant will be located behind the existing primary aggregates wash plant. Vehicle deliveries will only take place during daytime hours. On site, vehicles will be fitted with 'white noise' reversing alarms. No activities will take place at night Speed limits in place of 5mph to reduce noise generation on the access roads. Access roads to be kept in good order to prevent potholes that may give rise to noise incidents. 	Low – due to the mitigation methods taken, the operation sitting within the quarry below ground level. Sensitive receptors and all other mitigation measures described.	Nuisance in the form of noise and vibration	VERY LOW due to the management techniques, modern equipment, maintenance and quarry walls acting as noise barrier.

			<ul style="list-style-type: none"> • Where possible vehicles will be reloaded with recycled materials when leaving the site meaning less vehicle movements and reduced empty vehicle bodies which can produce noise. • The permitted area is surrounded by quarry walls acting as a noise barrier. • All loading and un-loading will take place within the quarry walls, therefore reducing noise leaving the site boundary. • Stockpiles of waste will always be lower than the quarry walls, therefore loading and unloading will be behind the bund. • A preventative maintenance system is implemented, which covers all plant and equipment, including the wash plant. This will ensure no deterioration of plant or equipment that would give rise to increases in noise generation. • All equipment has been designed to ensure that any noise does not present an issue to the employees at the site under the Control of Noise at Work Regulations. • All exhausts are fitted with silencers. • All vehicles and equipment will be switched off when not in use and not allowed to idle. • The site operates a complaints investigation procedure which involves efficient mitigation if a complaint is found to be substantiated. All complaints are recorded and reviewed regularly. • The distance between stockpiles of recycled materials and vehicles to be loaded is kept to minimum to reduce vehicle movement. • Sensitive receptors have been identified. • Prevailing South easterly wind and propagation of sound by refracting would mean receptors to the north east could potentially be worst affected by noise. The nearest receptor is a being a pet food manufacturer 445m to the north east. • Wash plant conveyors are adjustable to reduce the drop height of washed aggregates. Reduced drop height will reduce noise. • Training will be provided for all staff operating the site. This training will include noise mitigation measures. • In the event of an increase in noise complaints a noise impact assessment would be carried out. 			
Odour	Local Residents	Airborne	<ul style="list-style-type: none"> • Soils and inert wastes are not commonly odorous. • To prevent excessively odorous waste from arriving on site, the site has stringent waste acceptance procedures waste will be rejected by site should it be deemed malodorous. • Inspections will happen daily to inspect the site for odours. Any odorous waste will be prepared for removal off site immediately. • Sumps will be regularly cleaned and the site will emptied good housekeeping measures. • Any complaints will be actioned in accordance with the site complaints procedure and recorded in the site diary. 	Low: due to the activities being managed by odour management techniques	Nuisance	VERY LOW due to the proposed risk management technique

Dust	Local Residents	Airborne	<ul style="list-style-type: none"> All loaded incoming and exporting vehicles will be covered. Road sweepers will be made available to clean roads within the site and outside. Water Bowsers will be deployed in dry weather to dampen down. Crushers and screens have dust suppression installed. Washed aggregates contain significantly less dust resulting in less dust being blown from stockpiles. Any complaints will be actioned in accordance with the site complaints procedure and recorded in the site diary. Operations likely to generate dust will not be carried out in high winds. All operations will be in line with the Dust Management Plan. 	Low: due extensive dust suppression equipment and methods being employed	Nuisance	VERY LOW due to the proposed risk management techniques
Litter	Local Residents	Airborne & migration	<ul style="list-style-type: none"> All incoming and exporting waste vehicles will be covered. Feedstock containing litter would be deemed unsuitable and rejected. The site access and the B4111 Nuneaton Road shall be swept as necessary. The site shall be inspected daily by the site manager and any litter or accumulated debris shall be dealt with immediately. Any complaints will be actioned in accordance with the site complaints procedure and recorded in the site diary Litter will be picked on a weekly basis. 	Low: due to feedstock being assessed for litter	Nuisance	VERY LOW
Pest	Local Residents	Airborne and migration	<ul style="list-style-type: none"> The waste types do not attract pests. Should pests be identified, reasonable measures will be taken to use commercially available products and services to control pests. 	VERY Low risk of pets on site is possible	Nuisance	VERY LOW due to the proposed risk management techniques
Vandalism	Operator	The site could be subject to intentional vandalism and damage by intruders / trespassers who could cause damage or harm to the site or cause fires.	<ul style="list-style-type: none"> The site has a CCTV system. The site entrances are secured by lockable gates. Site is secure and the entire site is bounded by fencing. Unauthorised access is prohibited onsite. The site perimeter is inspected daily by operations staff to identify deterioration and damage and the need for repair. Fencing is maintained and repaired to ensure its continued integrity. If damage is sustained, repair will be made within the same working day. If this is not possible, suitable measures will be taken to prevent unauthorised access to the site and permanent repairs will be affected as soon as is practicable. All visitors to the site are required to register in the visitor's book and sign out again on exit, thereby minimising the risk of unauthorised visitors on the site. 	Low: the occurrence of vandalism taking place on site is highly unlikely	Nuisance, damage or fire	VERY LOW due to the proposed risk management techniques
Fire	Operator / Residential Properties	Windborne	<ul style="list-style-type: none"> The site will not accept flammable wastes. Wastes processed on the site are not combustible. A planned preventative maintenance system is in operation for all plant and equipment. This will reduce the likelihood of fire starting at this source. 	VERY Low: the occurrence of a fire taking place	Fire	VERY LOW Due to lack of combustible waste

Incompatible Feedstock	Operator / Residential Properties	If incorrect waste is accepted on site it could result in adverse emissions/ breaking of equipment	<ul style="list-style-type: none"> All wastes accepted onto site have been subject to 'pre-acceptance' in accordance with the sites Environmental Management System. Waste acceptance procedures are implemented, which control all incoming wastes. Any non-conforming waste will be quarantined and rejected from site in accordance with the sites Environmental Management System and waste acceptance procedures. 	Low: off-site receptor impacts	Nuisance /Adverse Emissions	VERY LOW due to the proposed risk management techniques
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