

Risk Assessment_01

Risk Assessment Catalytic Recycling UK

The risk - Source	Pathway	Receptor	Distance & Direction	Potential Harm	Likelihood	Reason	Risk Level
Dust	Dust travels through the air.	Residents & Staff	1 M Adjacent to site (Next door) North Residents across the road 5M West	-General worsening of air quality -Nuisance and harm to human health -Loss of amenity	Likelihood of the hazard affecting the receptor as low -Overall severity of potential consequences as low -Overall risk rating as low -DEMP – EMS_07 in place	-Permitted quantities of waste are small, less than 10 tonnes a day. -Activities take part inside a building in a dedicated room with full dust air extraction. -Staff have full PPE and full-face mask respirator. -Regular housekeeping on site. -Window insulated	Low Low Low Low Low
Odour	Odour travels through the air.	Residents & Staff	1 M Adjacent to site (Next door) North Residents across the road 5M West	-Nuisance -Loss of amenity	-Likelihood of the hazard affecting the receptor as very low -Overall severity of potential consequences as very low -Overall risk rating as very low	-The only wastes accepted are Catalytic Convertors, which are very unlikely to degrade and generate odours.	Very low
Noise and Vibration	Noise and vibration travel through the air.	Residents & Staff	1 M Adjacent to site (Next door) North Residents across the road 5M West	-Nuisance -Loss of amenity	-Likelihood of the hazard affecting the receptor as low -Overall severity of potential consequences as low	-Permitted quantities of waste are small, less than 10 tonnes a day. -Permitted activities have been noise and vibration assessment. The assessment passed. -Noise pads on the floor to reduce vibration	Low Low Low

					-Overall risk rating as low	-Staff have full PPE. -Window insulated	Low Low
Litter	Litter travels through the air.	Residents	1 M Adjacent to site (Next door) North Residents across the road 5M West	-Nuisance -Loss of amenity	-Likelihood of the hazard affecting the receptor as very low/ low -Overall severity of potential consequences as very low/ low -Overall risk rating as very low/ low	- The permitted activities are expected to pose a very low risk of generating windblown litter, given that catalytic converters are composed of heavy metal materials	Very low/ Low
Waste and Mud on Road	Vehicle movements can cause waste and mud on local roads.	Residents Traffic/ members of the public	1 M Adjacent to site (Next door) North Residents across the road 5M West Road users of B6019 Pinxton Rd	-Nuisance -Loss of amenity	-Likelihood of the hazard affecting the receptor as very low/ low -Overall severity of potential consequences as very low/ low -Overall risk rating as very low/ low	-The waste type is limited to specified metals which will not generate mud. - The concrete surface of the site significantly minimizes the risk of mud being tracked.	Very low/ Low Very low/ Low
Pest and scavengers	Pests such as flies or scavengers can travel through the air or over land.	Residents	1 M Adjacent to site (Next door) North Residents across the road 5M West	-Nuisance -Loss of amenity	-Likelihood of the hazard affecting the receptor as very low/ low -Overall severity of potential consequences as very low/ low -Overall risk rating as very low/ low	- Only catalytic convertors can be accepted on site, which do not degrade quickly and are unlikely to attract flies or scavengers.	Very low/ Low

Flooding of the site	Flood waters can flood the site	The site & residents	1 M Adjacent to site (Next door) North Residents across the road 5M West	-Waste including liquid hazardous wastes may be washed off site during a flood, which could contaminate neighbouring and downstream premises	-Likelihood of the hazard affecting the receptor as low -Overall severity of potential consequences as low -Overall risk rating as low	- Permitted quantities of waste are small, less than 10 tonnes a day.	Low
						-Activities take place inside a building.	Low
						-The hazardous waste stored on site is restricted to catalytic converters	Low
						-The site is located in a low-risk surface water zone.	Low
						-The site is located in a very low risk zone for risk to rivers and seas.	Very low
						-All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures.	Low
						-The permitted facility is not within 200 metres of a European site, Ramsar, Site of Special Scientific Interest, or Marine Conservation Zone.	Low
						-The permitted facility is not located in a groundwater source protection zone 1 or 2. Where a source protection zone has not been defined then not within 100 metres of any well, spring or borehole used for the supply of water for human consumption (including private water supplies)	Low
						-Climate change adaptation plan completed.	Low
						-Site surface impermeable & surface drains on site	Low

Accidental serious fire	Fire can cause smoke to travel through the air and contaminated water to run-off over land. Fires can also cause significant disruption to neighbouring receptors such as schools, transport infrastructure and neighbouring business premises.	Residents, businesses, traffic, members of the public, watercourse, local wildlife	Closest receptors	-Nuisance	-Likelihood of the hazard affecting the receptor as medium/high	- Nearby residents and the adjacent roadway could be impacted by smoke plumes. Actions for residents will be advised by the emergency services.	Medium/High
			1 M Adjacent to site (Next door) North	-Harm to human health			
			Residents across the road 5M West	-Loss of amenity	-Overall severity of potential consequences as medium	-Potential road blockages caused by fire service accessing the fire hydrant. Residents will be advised by the emergency services.	Medium/High
			Road users of B6019 Pinxton Rd – 2m South	-Deterioration of water and air quality		-The road located in front of the site is a main road – Pinxton Lane, the fire service may close this road to gain access to the fire hydrant and to prevent smoke inhalation to passersby. This closure may impact the transport infrastructure. If the road was closed, the emergency services will communicate to the wider community.	Medium/High
			Local wildlife – Kirkby Graves 11M- South	-Impact on commerce	- Overall risk rating as medium		
			FPP identifies all receptors affected within 1KM	-Impact on nature conservation sites		-The fire prevention plan provided includes measures to minimise the likelihood of a fire happening, aims for a fire to be extinguished within 4 hours and minimises the spread of fire within the site and to neighbouring sites.	Medium
						-Small quantities of waste stored on site.	Low
						-Catalytic convertors are not self-combustible.	Low
						-Regular maintenance of machinery on site.	Low
						-No operations take place within: 200 metres of a European site, Ramsar, Site of Special Scientific Interest or Marine Conservation Zone 100 metres of any well, spring or borehole used for the supply of water for human consumption (including private water supplies) a groundwater Source Protection Zone 1 or 2 combustible wastes must not be stored within 10 metres of a high voltage powerline,	Low

						or a boundary with a railway line or motorway -Concrete impermeable surface and sandbags can be used to block door and drains.	
Risk to Surface water	These risks relate to surface waters close to and downstream of the site.	Watercourse, local wildlife	Small un-named drains 133M - West 95m -South Small un-named brook leading to Maghole Brook – 500m Northwest River Erewash 570m South	-Run-off from the site across the ground -Surface water drains and ditches -Run-off through the soil	-Likelihood of the hazard affecting the receptor as low -Overall severity of potential consequences as medium -Overall risk rating as Medium/ low	-The permit does not authorise liquid wastes -Treatment takes place in a building with an impermeable surface -Outside surface is a concreted impermeable surface. Sandbags can be used to block the doors of the building to prevent water leaving the site and the drains can be blocked with sandbags or dam-it mats. -Site drains lead to a soakaway and not a river or stream.	Low Low Medium/ Low Medium/ Low

Explanation of terms

Receptor

The things at risk and that need protecting.

Receptors considered include: atmosphere, land, surface waters, groundwater, humans, wildlife and their habitats.

A single receptor may be at risk from several different sources and all must be addressed.

Distance & Direction

The affected receptors distance from the site boundary and the direction from site.

Source

The agent or process that has the potential to cause harm.

A contaminant or pollutant (a hazard) that has the potential to cause harm. For example, the activity or operation taking place for which a particular hazard may arise.

Harm

The harmful consequence to the receptor if the hazard is realised.

Pathways

The route or means by which a defined hazard may affect a receptor.

Source-pathway-receptor linkage

There has to be a link between the source, pathway and receptor for there to be a risk.

Likelihood of exposure

This is the likelihood of the receptors being exposed to the hazard. The meaning of the definitions are:

- high – exposure is probable – direct exposure is likely with no or few barriers between the hazard source and the receptor
- medium – exposure is fairly probable - feasible exposure is possible as the barriers to exposure are less controllable
- low – exposure is unlikely – several barriers exist between the hazard source and receptor to reduce exposure
- very low – exposure is very unlikely – effective, multiple barriers are in place to reduce exposure

Overall magnitude of potential consequence

This is the severity of the consequence if the hazard is realised and may cause actual or potential harm.

This will have a high, medium, low or very low rating using attributes and scaling to consider ‘harm’.

Risk rating

We work out the risk rating by combining the likelihood of exposure with the magnitude of the potential consequences.

We assign these ratings:

- high risk – requires additional assessment and active management
- medium risk – requires additional assessment and may need active management and, or monitoring (or both)
- low and very low risks will require a periodic review