

Environmental Risk Assessment

Facility:	Waste Operation: Bespoke Catalytic Converter Centre
Location:	Northern Refine Ltd, Unit 11, Victoria Road, Adwick Le Street, Doncaster, DN6 7AZ
Location of environmentally sensitive sites (km / m):	Less than 500m (see below)
Risk assessment carried out by:	Lauren Stanger
Date:	24-Aug-22

Data and information				Judgement				Action (by permitting)	
Receptor	Source	Harm	Pathway	Probability of exposure	Consequence	Magnitude of risk	Justification for magnitude	Risk management	Residual risk
What is at risk? What do I wish to protect?	What is the agent or process with potential to cause harm?	What are the harmful consequences if things go wrong?	How might the receptor come into contact with the source?	How likely is this contact?	How severe will the consequences be if this occurs?	What is the overall magnitude of the risk?	On what did I base my judgement?	How can I best manage the risk to reduce the magnitude?	What is the magnitude of the risk after management? (This residual risk will be controlled by Compliance Assessment).
Local human population	Releases of particulate matter (dusts) and micro-organisms (bioaerosols).	Harm to human health - respiratory irritation and illness.	Air transport then inhalation.	Low	High	Low	The wastes received are solid CAT wastes with no dust or potential to degrade meaning that the risk of dust being produced is solely in relation to waste processing movements on the concrete yard surface.	The environmental Management System and Dust & Emissions Management Plan contains procedures for managing dust and mud. Compliance with the plan will effectively mitigate any risk remainign.	Low
Local human population	As above	Nuisance - dust on cars, clothing etc.	Air transport then deposition	Very low	Low	Low	Local residents comprise of employees in various industrial operations and residents. However as detailed above, there are no pollution pathways which exist to create nuisance.	As above	Low
Local human population, livestock and wildlife.	Litter	Nuisance, loss of amenity and harm to animal health	Air transport then deposition	Very low	Low	Low	Local residents comprise of employees in various industrial operations and residents. The waste type is solid CATs which are not easily windblown.	No general wastes are accepted on site and the risk from litter is therefore negligible. In windy periods litter will be contained by the building.	Low
Local human population	Waste, litter and mud on local roads	Nuisance, loss of amenity, road traffic accidents.	Vehicles entering and leaving site.	Very low	Low	Low	Road safety and local residents mainly comprise of employees in various industrial operations and residents.	As above. In addition, dust management operations makes it highly unlikely that mud/dust will be carried out onto the Highway. However a sweeper will be employed to keep site access roads free from dust/mud as conditions dictate.	Low

Local human population	Odour	Nuisance, loss of amenity	Air transport then inhalation.	Very low	Low	Low	Permitted waste types do not include mixed household and commercial wastes, food waste, sludges or liquids which are likely to give rise to odour. Permitted wastes are not odourous and do not have the potential to become odourous.	Permitted wastes are non-odourous and the risk of odour is therefore considered to be negligible.	Low
Local human population	Noise and vibration	Nuisance, loss of amenity, loss of sleep.	Noise through the air and vibration through the ground.	Low	Low	Low	Local residents mainly comprise of employees in various industrial operations and residents. The Environmental Management System contains procedures to manage noise emanating from site operations. The activities carried out on site are generally low audible volume activities.	Ensure site operations remain fully in accordance with the EMS. Operations will only be carried out within the allowed operating hours.	Low
Local human population	Scavenging animals and scavenging birds	Harm to human health - from waste carried off site and faeces. Nuisance and loss of amenity.	Air transport and over land	Very low	Low	Low	Permitted wastes do not have the potential to attract scavenging animals	Management of pests is controlled by the Environmental Mangement System. The use of a specialist pest control sub-contractor if scavenging animals are detected will also mitigate the risk.	Very low
Local human population	Pests (e.g. flies)	Harm to human health, nuisance, loss of amenity	Air transport and over land	Very low	Medium	Low	Permitted wastes do not have the potential to attract pests.	As above	Low
Local human population and local environment	Flooding of site	If waste is washed off site it may contaminate buildings / gardens / natural habitats downstream.	Flood waters	Medium	Medium	Low	Permitted waste types are heavy and are very unlikely to leave site in a flood event. Hazardous components, e.g. ceramic CATs are processed immediately upon arrival to site. All operations occur indoors at all times.	Operations of the site in accordance with the EMS mitigates any risk that remains.	Low

Local human population and / or livestock after gaining unauthorised access to the waste operation	All on-site hazards: wastes; machinery and vehicles.	Bodily injury	Direct physical contact	Very low	Low	Low	Site machinery is fully enclosed in accordance with Hse requirements. Hazardous wastes are also enclosed (in sealed bags), so no accidental contact can be made with hazardous materials.	Activities shall be managed and operated in accordance with the Management System (which includes site security measures to prevent unauthorised access).	Low
Local human population and local environment.	Arson and / or vandalism causing the release of polluting materials to air (smoke or fumes), water or land.	Respiratory irritation, illness and nuisance to local population. Injury to staff, firefighters or arsonists/vandals. Pollution of water or land.	Air transport of smoke. Spillages and contaminated firewater by direct run-off from site and via surface water drains and ditches.	Low	Medium	Medium	Waste types are generally non flammable. Site security is comprehensive due to the valuable nature of the products and consists of a CCTV system and 24 hour site security patrols. The system is monitored by a 3rd party 24/7 and police would be alerted within minutes of an alarm activation	Activities shall be managed and operated in accordance with the Management System (which includes site security measures to prevent unauthorised access).	Low
Local human population and local environment	Accidental fire causing the release of polluting materials to air (smoke or fumes), water or land.	Respiratory irritation, illness and nuisance to local population. Injury to staff or firefighters. Pollution of water or land.	As above.	Low	Medium	Medium	Risk of accidental combustion of waste is very low. Fire is more likely in failure of electrical systems or accidental fire in the offices.	As above. Activities will be managed in accordance with the Fire Prevention Plan and Site Management Plan (which includes fire and spillages).	Low
All surface waters close to and downstream of site.	Spillage of liquids, acid, leachate from waste, contaminated rainwater run-off from waste e.g. containing suspended solids.	Acute effects: oxygen depletion, fish kill and algal blooms	Direct run-off from site across ground surface, via surface water drains, ditches etc.	Very low	Medium	Low	Permitted wastes do not include liquids. There would be no site run off contaminated with liquids from waste in the event of a spill reachign a drain.	A spillage control procedure also forms part of the Management System.	Low
All surface waters close to and downstream of site.	As above	Chronic effects: deterioration of water quality	As above. Indirect run-off via the soil layer	Very low	Low	Low	As above	As above	Low

Abstraction from watercourse downstream of facility (for agricultural or potable use).	As above	Acute effects, closure of abstraction intakes.	Direct run-off from site across ground surface, via surface water drains, ditches etc. then abstraction.	Very low	Low	Low	As above	As above.	Very low
Groundwater	As above	Chronic effects: contamination of groundwater, requiring treatment of water or closure of borehole.	Transport through soil/groundwater then extraction at borehole.	Very low	Low	Low	There is no potential for contaminated rainwater run-off or leachate from permitted waste types.	As above.	Very low
Local human population	Contaminated waters used for recreational purposes	Harm to human health - skin damage or gastrointestinal illness.	Direct contact or ingestion	Very low	Low	Low	There is no potential for contaminated rainwater run-off or leachate from permitted waste types.	As above, plus procedures in the Management System will effectively mitigate this risk.	Very low
Protected sites - European sites and SSSIs	Any	Harm to protected site through toxic contamination, nutrient enrichment, smothering, disturbance, predation etc.	Any	Very low	Very low	Very Low	There are no designated environmentally sensitive sites considered to be potentially at risk of impact from the site.	There are no SSSI nearby	Very low

Yellow columns contain drop down menus that allow automatic evaluation of risk in green column