Generic risk assessment for standard rules set number SR2008No9 v3.0

Standard Facility:	Waste Operation: Asbestos Waste Transfer Station
Location:	Applies to all potential locations.
Location of environmentally sensitive sites (km / m):	On or immediately adjacent to the site (see below)
Risk assessment carried out by:	Environment Agency
Date:	16-Mar-10

The scope of the permit and associated rules set is defined by the following risk criteria:

Parameter 1	Permitted activities - The storage of asbestos waste (D15, D14)
Parameter 2	Permitted waste types - Asbestos
Parameter 3	Quantity of waste accepted at the facility; less than 3,650 tonnes per annum, (not more than 10 tonnes per day of asbestos).
Parameter 4	The quantity of asbestos stored at the facility shall not be more than 10 tonnes
Parameter 4	Asbestos waste shall be double-bagged and stored within secure lockable containers.
Parameter 5	Asbestos waste shall be stored on an impermeable surface with sealed drainage.
Parameter 6	The only point source discharges to controlled waters or groundwater, are surface water from the roofs of buildings and from areas of the facility not used for the storage of wastes.
Parameter 9	The activities shall not be carried out on or immediately adjacent to a European Site (candidate or Special Area of Conservation, proposed or Special Protection Area or Ramsar site) or a Site of Special Scientific Interest (SSSI).
Abbreviations:	SR - standard rule
	SR (asbestos) - Asbestos is the only permitted hazardous waste and there are several standard rules to manage the risk: quantity received shall not exceed 10 tonnes per day; quantity stored shall not exceed 10 tonnes; there shall be no treatment; storage conditions shall be double bagged....within clearly identified, segregated, secure, lockable containers on an impermeable surface with a sealed drainage system.

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	Airborne asbestos fibres	Respiratory illness i.e. lung cancer and mesothelioma	Air transport then inhalation	Low	High	**Medium**	Potential for exposure is low because of separate health and safety controls to protect employees.	SR (asbestos)	Low

Local human population	Releases of particulate matter (dusts)	Nuisance - dust on cars, clothing etc.	Air transport then deposition	Low	Low	**Low**	The only permitted waste types are asbestos (see above) so the only source of dust is ancillary activities such as vehicle movements. The potential for exposure is low for anyone living or working close to the site (apart from the operator and employees)	SR - emissions of substances not controlled by emission limits.... SR (if required) - emissions management plan.	Very low
Local human population, livestock and wildlife	Litter	Nuisance, loss of amenity and harm to animal health	Air transport then deposition	Medium	Medium	**Medium**	Local residents often sensitive to litter.	As above. Appropriate measures could include clearing litter arising from the activities from affected areas outside the site.	Very low
Local human population	Waste, litter and mud on local roads	Nuisance, loss of amenity, road traffic accidents	Vehicles entering and leaving site	Medium	Medium	**Medium**	Road safety, local residents often sensitive to mud on roads.	As above. Appropriate measures could include clearing waste, litter and mud arising from the activities from affected areas outside the site.	Low
Local human population	Odour	Nuisance, loss of amenity	Air transport then inhalation	Low	Low	**Low**	Local residents often sensitive to odour, however asbestos wastes unlikely to cause odour.	SR - emissions shall be free from odour…. SR (if required) - odour management plan.	Very Low
Local human population	Noise and vibration	Nuisance, loss of amenity, loss of sleep	Noise through the air and vibration through the ground.	Medium	Medium	**Medium**	Local residents often sensitive to noise and vibration	SR - emissions shall be free from noise and vibration..... SR (if required) - noise and vibration management plan.	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	Low	Low	**Low**	The only permitted waste types are asbestos and will not attract scavenging animals and birds	SR - emissions of substances not controlled by emission limits (including those from scavenging animals, scavenging birds and other pests) shall not cause pollution….	Very Low
Local human population	Pests (e.g. flies)	Harm to human health, nuisance, loss of amenity	Air transport and over land	Low	Low	**Low**	The only permitted waste types are asbestos and will not attract insect pests.	As above	Very Low
Local human population and local environment	Flooding of site	If wastes are washed off site it may contaminate buildings / gardens / natural habitats downstream	Flood waters	Low	Low	**Low**	The only permitted waste types are asbestos so a low risk is estimated.	SR - management system (will include flood risk management). Hazardous waste washed off site restricted by SR (asbestos).	Very low
Local human population and / or livestock gaining unauthorised access to the waste operation	All on-site hazards: wastes; machinery and vehicles.	Bodily injury	Direct physical contact	Medium	Medium	**Medium**	The only permitted waste types are asbestos.	SR - activities shall be managed and operated in accordance with a management system (will include site security measures to prevent unauthorised access). Access to hazardous waste restricted by SR (asbestos).	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.	Medium	Low	**Low**	The only permitted waste types are asbestos so there are no sludges or liquids and little flammable material therefore only a low magnitude risk is estimated.	As above. SR - management system (will include fire and spillages). Spread of fire to hazardous waste restricted by SR (asbestos).	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	Medium	Low	**Low**	As above	As above. Permitted activities do not include the burning of waste.	Low

All surface waters close to and downstream of site.	Spillage of liquids, 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.	Low	Medium	**Low**	There is low potential for contaminated rain water run-off from stored asbestos wastes.	SR - All liquids shall be provided with secondary containment.... (applies to non-wastes such as fuels). Run-off restricted by SR on emissions of substances not controlled by emission limits with appropriate measures: .... storage & treatment on an impermeable surface with sealed drainage.	Very 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	Low	Low	**Low**	There is low potential for contaminated rain water run-off from stored asbestos wastes and harm is likely to be temporary and reversible.	As above	Very 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.	Low	Medium	**Low**	Watercourse must have medium / high flow for abstraction to be permitted, which will dilute any contaminated run-off.	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.	Low	Medium	**Low**	There is low potential for contaminated rain water run-off from stored asbestos wastes.	As above	Very Low
Local human population	Contaminated waters used for recreational purposes	Harm to human health - skin damage or gastro-intestinal illness.	Direct contact or ingestion	Low	Medium	**Low**	Unlikely to occur, but might restrict recreational use.	SR - emissions of substances not controlled by emission limits.... SR (if required) - emissions management plan.	Low

Protected sites - European sites and SSSIs	Any	Harm to protected site through toxic contamination, nutrient enrichment, smothering, disturbance, predation etc.	Any	Low	Medium	**Low**	Waste operations May cause harm to and deterioration of nature conservation sites.	SR - emissions of substances not controlled by emission limits…. SR - activities shall not be carried out on or immediately adjacent to a European Site or SSSI. (Distance criteria as agreed with Natural England/Countryside Council for Wales).	Low

Notes: Red triangle indicates comment containing supporting information
Yellow columns contain drop down menus that allow automatic evaluation of risk in green column