

Environmental Risk Assessment

The existing assessment of environmental risks for accidents, odour, noise, and fugitive emissions has been reviewed accounting for the change proposed by the permit variation. The addition of waste coded as 20 03 01 - mixed municipal waste, has necessitated the need for the following two assessment to be amended

- Odour risk assessment and management plan; and
- Fugitive risk assessment and management plan

To acknowledge the review process, it is confirmed that the previously accepted Accidents risk assessment and management plan, and Noise and vibration risk assessment and management plan are unchanged as a consequence of the change proposed.

Odour Risk Assessment

What do you do that can harm and what could be harmed			Management of the risk	Assessing the risk		
Hazard	Receptor	Pathway	Risk management	Probability of exposure	Consequence	What is the overall risk?
Odour emissions from the fuel reception hall and fuel delivery vehicles on site	Immediate area. The nearest residential receptors to the ERF are currently located ca. 100m	Air - winds generally blow from the west - northwest.	<p>Digestate and depending on the source, other organic wastes may have the potential to give rise to odours.</p> <p>Municipal waste and RDF will have a similar odour profile dependant on the proportion of organic waste present.</p> <p>The following odour control measures are applied:</p> <p>Air from the reception hall and bunker is drawn into the furnace for combustion during operation of the facility therefore destroying any potentially odorous compounds.</p> <p>High standards of housekeeping will be maintained to ensure waste kept within the bunker area. Any waste which is accidentally deposited outside of the bunker is cleared up immediately.</p> <p>Crane operators are trained to ensure that the fuels in the bunker are well mixed and that incoming fuel is not being left within the bunker for excessive periods.</p> <p>Any odour detected on site will be reported immediately to the Operations Manager or EHS Manager. If odours are detected, investigations will be undertaken to determine the cause and appropriate mitigation measures implemented.</p>	Low	Minor odour annoyance which may have a greater impact in the summer when temperatures are higher, and people are outdoors and more likely to be exposed to odour.	Not significant due to management systems in place.

What do you do that can harm and what could be harmed			Management of the risk	Assessing the risk		
Hazard	Receptor	Pathway	Risk management	Probability of exposure	Consequence	What is the overall risk?
Odorous emissions may occur during periods of planned shutdown	Immediate area.	Air - winds generally blow from the west-northwest.	<p>The facility has four lines and the potential for full plant outage is very small as at least one line will ordinarily be operational. This therefore provides a positive air flow from the bunker and reception hall and means of managing the odorous air.</p> <p>Deliveries of waste leading up to the planned shutdown will be reduced to ensure that the quantities of waste within the bunker during the shutdown are kept to a managed appropriately and account for the ramp up of operations post shutdown.</p>	Low	Minor odour annoyance which may have a greater impact in the summer when temperatures are higher, and people are outdoors and more likely to be exposed to odour.	Not significant due to management systems in place.
Odorous emissions may occur during periods of unplanned shutdown	The nearest residential receptors to the ERF are currently located ca. 100m	Air - winds generally blow from the west-northwest.	<p>The facility has four lines and the potential for full plant outage is very small as at least one line will ordinarily be operational. This therefore provides a positive air flow from the bunker and reception hall and means of managing the odorous air.</p> <p>It is very unlikely that all lines will be subject to an unplanned shutdown at the same time. Therefore, potentially odorous air within the waste bunker will continue to be used as combustion air providing treatment air from the waste reception building.</p>	Low	Minor odour annoyance which may have a greater impact in the summer when temperatures are higher, and people are outdoors and more likely to be exposed to odour.	Not significant due to management systems in place.

What do you do that can harm and what could be harmed			Management of the risk	Assessing the risk		
Hazard	Receptor	Pathway	Risk management	Probability of exposure	Consequence	What is the overall risk?
Odorous emissions attributed to delivery vehicles on site	The nearest residential receptors to the ERF are currently located ca. 100m	Air - winds generally blow from the west-northwest.	<p>All deliveries of waste, whether via road or rail, are dealt with in an appropriate manner to avoid vehicles / containers remaining on site as stated in the sites procedures for the receipt of waste.</p> <p>Emptied rail containers are returned as soon as practicable.</p>	Low	Minor odour annoyance which may have a greater impact in the summer when temperatures are higher, and people are outdoors and more likely to be exposed to odour.	Not significant due to management systems in place.

Fugitive Emissions Risk Assessment and Management Plan

What do you do that can harm and what could be harmed			Management of the risk	Assessing the risk		
Hazard	Receptor	Pathway	Risk management	Probability of exposure	Consequence	What is the overall risk?
Birds, vermin and insects attracted to site	Residential properties and commercial premises	Land and Air	<p>The storage of waste within the waste bunker is managed to control the likelihood of anaerobic conditions developing and potential odours. The waste bunker is enclosed and ready access for birds adequately controlled.</p> <p>To reduce the risk of pest infestations waste management procedures implemented limit the amount of waste and the length of time it is stored prior to treatment. Good housekeeping practices are followed to discourage the attraction of vermin and pests.</p> <p>An independent pest contractor is employed to control and minimise the potential of birds, vermin, or pests.</p> <p>In the unlikely event that birds, vermin, or pests are identified on site, a specialist pest control contractor will be employed to implement corrective measures to control their presence on site.</p>	Low	Nuisance to human and commercial receptors	Not significant due to management systems in place