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Risk Assessment Matrix

Wellard Integrated Live Export Facility

Report Number 23919.80896



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1. Risk Assessment Methodology

Based on the initial literature review, site visit and design of the new site, a risk assessment for the site has been undertaken. The analysis of risk was undertaken in line with ISO 31000:2009 Risk Management – Principles and Guidelines.

1.1 Risk Management Framework

The framework outlined in ISO 31000 was used in the assessment process for this development.

- 1. Establishment of context
- 2. Risk identification
- 3. Risk analysis
- 4. Risk evaluation
- 5. Risk treatment
- 6. Monitoring and review
- 7. Communication and consultation.

1.2 Context

The development of the Integrated Live Export Facility (ILEF) is defined as intensive animal husbandry under the Northern Territory Planning Scheme 2015. This development is of modest size with 1,814 SCU equivalents for Stage 1. In respect for beef cattle facilities (saleyards, feedlots, etc) this facility is relatively small.

Best practice design has been applied to this facility. The site is well selected and amenable to the development within the extents of its physical environment. It is rural type development undertaken in Rural Zoning.

Wellard endeavours to construct and operate this facility to meet industry standards and to improve the operation standards of similar facilities in the Northern Territory.

The objective of this Risk Assessment is to ensure significant environmental risks are identified and evaluated such that appropriate risk treatment can be implemented to mitigate these risks.

1.3 Risk Identification

Risk Identification involves identifying sources of risk, areas of impact, events and their causes and their potential consequences. The following provides a summary of the risks identified in this assessment.

- Dust generation and nuisance
- Traffic Impacts
- Odour generation and nuisance
- Soil Contamination
- Soil Erosion
- Contamination of Ground and Surface Water
- Noise
- Increase in weeds, pest and insects
- Amenity
- Fire

Table 3 lists out in more detail the events, the impacts and the management measures to be implemented to mitigate these risks.

1.4 Risk Analysis

The model used assumes the risk of an impact to be a function of two factors – the likelihood of occurrence and severity of the consequence. These are assessed on a rating scale of 1 - 5. Table 1 gives an explanation of each of these ratings and Table 2 shows the Risk Matrix.

Likelihood		Consequence	
5	Event is expected to occur	1	Minor injury.
Voru likolu	in most circumstances	Nagligible	No medical treatment required. E.g. cuts and bruises.
(almost		Negligible	• Low pollution.
certain)			No observable effects on plants, animals or waterbodies. No requirements to inform authorities.
4	Event will probably occur	2	Significant injury.
Likely	in most circumstances	Minor	Medical treatment required, but recovery is likely. E.g. burns, broken bones, severe bruises, cuts.
			Minor pollution.
			Minor effects on plants and animals. Visible discharge observed offsite. Required to inform authorities. May involve a clean-up.
3	Event should occur at	3	• Serious injury.
Possible	some time	Moderate	Moderate permanent effects from injury or exposure. E.g.: serious burns, serious internal and/or head injuries.
			Moderate pollution.
			Moderate effects on plants and animals. Measurable change in condition of environment. Physical impact on the public. Required to report to authorities. Extensive clean-up may be required
2	Event could occur at	4	• Single fatality.
Unlikely	some stage	Significant	Severe permanent injury, paralysis, brain damage, life threatening exposure to a health risk.
			• Major release.
			Major effects on plants and animals. Substantial clean- up costs. Personal and business prosecution possible.
1	Event may only occur in	5	• A multiple fatality.
Very unlikely	exceptional circumstances	Severe	Significant irreversible exposure to a health risk that affects greater than 10 people.
			• Extreme event.
			Permanent effects on the environment. Significant ongoing community complaint. Potential loss of licence to operate. Prosecution of company and directors possible

Table 1	Explanation of	of risk a	assessment	ratings
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1.5 Risk Evaluation

The use of the likely hood and consequence table above allows the risk rating to be calculated to determine those risks of highest priority or concern and allows treatment and mitigation measures to be implemented.

The risk rating is calculated by multiplying the likelihood against the consequences as shown in the Risk Matrix below. High risk equals 16 to 25. High Risks activities should cease immediately until further control measures to mitigate the risk are introduced.

Medium risk equals 9 to 15. Medium Risks should only be tolerated for the short-term and then only whilst further control measures to mitigate the risk are being planned and introduced, within a defined time period. Note: Medium risks can be an organisations greatest risk, due to the fact that they can be tolerated in the short-term.

Low risk equals 1 to 8. Low Risks are largely acceptable, subject to reviews periodically, or after significant change.

				Consequence		
		1	2	3	4	5
	Likelihood	Negligible	Minor	Moderate	Significant	Severe
5	Very likely	Low	Medium	Medium	High	High
4	Likely	Low	Low	Medium	High	High
3	Possible	Low	Low	Medium	Medium	Medium
2	Unlikely	Low	Low	Low	Low	Medium
1	Very unlikely	Low	Low	Low	Low	Low

Table 2Risk matrix

1.6 Treatment and Mitigation Measures

The treatment and application of mitigation measures involves assessing the risk treatment, deciding whether the residual risk levels are tolerable; if not tolerable, generating a new risk treatment; and assessing the effectiveness of that treatment.

The following options were considered when assessing the risks:

- a) Avoidance of the risk (not undertaking the activity that gives rise to the risk);
- b) Taking or increasing the risk in order to pursue the opportunity;
- c) Removing the risk source;
- d) Changing the likely hood;
- e) Changing the consequence;
- f) Sharing the risk with another party or parties; and
- g) Retaining the risk by informed decision.

In undertaking the assessment of the risk associated with this development Wellard have redesigned the original proposal to reduce, remove and avoid some of the higher risk activities, have reduced or removed the risk source and in turn have changed the likely hood and consequences of some of the activities occurring.

1.7 Management

The management of risks for this site will be undertaken at the following levels:

- The design level;
- The operation level; and
- The management level.

The design level incorporates best management and design practices in line with industry standards and guidelines.

The operation level incorporates the running of the facility in accordance with the industry guidelines and standards and ensuring all staff are trained in the proper operation procedures and have a clear understanding to the management plans that are in place for each of the risks.

The management level is the use of management plans to ensure that the tasks and activities are undertaken in a particular way to minimise the risk associated with that activity. The management level also incorporated the responsibility of those managing the risk and ensuring that all personnel undertaking a task are aware to the measure that are required to be implemented to reduce the risk.

1.8 Monitoring and Review

In order to ensure a risk is being suitably treated or mitigated, monitoring and review is required this may be periodic or *ad hoc*. The key risks will have monitoring requirements within the management plans. Each of the procedures will have a review process under taken as part of the monitoring to determine if the level of risk is still significant or if there need to be a change in the way the risk is managed. The monitoring requirements for each of the risks identified in Table 3 are detailed in the Environmental Management Plan.

1.9 Definitions

Risk management definitions as defined by standard ISO 31000:2009 Risk Management – Principles and Guidelines.

Risk Source (Hazard) – An element which alone or in combination has the intrinsic potential to give rise to risk.

Risk – Effect of uncertainty on objectives. Risk is often characterized by reference to potential events and consequences, or a combination of these.

Consequence – Outcome of an event affecting objectives.

Impact - a marked effect or influence

Regulatory boundary (permitted operations) – The extant of the ILEF operations as permitted under the Development Application PA2015/0296

2. Risk Assessments

Based on the initial literature, site visit and design of the updated facility, a risk assessment for the site has been undertaken as per the methodology explained above.

Table 3 Risk assessment of the ILEF (L = likelihood; C = Consequence)

		Before	e Manag	ement Measures		After Man	agement Me	asures	
Activity/Aspect/Hazard	Potential impacts	L	С	Risk	Management measures	Residual L	Residual C	Residual risk	Issue no. (Table 4)
Construction									
Vegetation clearance causing irreversible damage to Cultural and European Heritage.	Financial impacts to Wellard through fines, legal costs, etc. Damage to Wellard company profile and social licence. Loss of cultural values, knowledge and history.	1	2	LOW	No known cultural or European heritage sites have been found on government databases.	1	2	LOW	17
Vegetation clearing causing fauna deaths.	Financial impacts to Wellard through fines legal costs, etc. Damage to Wellard company profile and social licence. Loss of biodiversity value, species, etc.	5	2	LOW	Fauna spotter catchers will be onsite to relocate wildlife.	5	1	LOW	13
Vegetation clearing causing nuisance noise.	Public nuisance, complaints. And hold ups. Negative impacts to fauna roosting, feeding, sleeping etc.	5	3	MED	Construction will only be carried out between 6am-6pm Monday to Saturday and between 9am-6pm on Sunday/public holiday. Residents will be notified of the construction timetable and kept up to date as work progresses, particularly as work changes from one set of machines and processes to another. All equipment will be fitted with efficient silencers, in accordance to the Motor Vehicles Act 1949.	5	2	MED	6
					All equipment will be maintained to reduce noise emissions.				
Vegetation clearing causing dust.	Public nuisance, complaints. And hold ups. Negative impacts to fauna roosting, feeding, sleeping etc.	5	3	MED	Water will be applied to the ground prior to clearance.	4	3	MED	4
Vegetation clearing causing sediment runoff and erosion.	Sedimentation in streams, loss of stream habitats, damage to vegetation and fauna habitat due to erosion. Damage to neighbouring properties.	4	2	MED	Erosion and Sediment Control Plan will be enacted. Minimal work will be carried out in the wet season.	4	1	LOW	8
Vegetation clearing causing degradation of water quality downstream of site.	Sedimentation in streams, loss of stream habitats, damage to vegetation and fauna habitat due to erosion. Fauna kills due to poor water quality.	4	2	MED	Erosion and Sediment Control Plan will be enacted. Minimal work will be carried out in the wet season.	2	2	LOW	3

		Before	e Manag	ement Measures		After Man	agement Me	asures	
Activity/Aspect/Hazard	Potential impacts	L	С	Risk	Management measures	Residual L	Residual C	Residual risk	Issue no. (Table 4)
Vegetation clearing causing increased traffic on roads.	Public nuisance, complaints and hold ups.	5	3	MED	Traffic will access the site via the road already used by AA Co. Meat Processing Facility.	5	2	MED	12
					For safety, a stop sign will be placed at the exit grate of the ILEF, giving AA Co. vehicles right of way on the main access road.				
					All loads hauled on the public road network will be made to comply with road regulations.				
Earthworks and construction	Sedimentation in streams, loss of stream	4	3	MED	Erosion and Sediment Control Plan will be enacted.	4	2	LOW	8
of infrastructure causing sediment runoff and erosion.	habitats, damage to vegetation and fauna habitat due to erosion. Damage to neighbouring properties.				Minimal work will be carried out in the wet season.				
Earthworks and construction	Sedimentation in streams, loss of stream	4	3	MED	Erosion and Sediment Control Plan will be enacted.	3	2	LOW	3
of infrastructure causing degradation of water quality downstream of site.	habitats, damage to vegetation and fauna habitat due to erosion. Fauna kills due to poor water quality.				Minimal work will be carried out in the wet season.				
Earthworks and construction of infrastructure causing	Public nuisance, complaints and hold ups. Negative impacts to fauna roosting, feeding,	4	2	LOW	The use of shielded directional lights (facing downwards) Lighting will be on a timer system.	3	2	LOW	15
light pollution.	sleeping etc.				Construction will only be carried out between 6am-6pm Monday to Saturday and between 9am-6pm on Sunday/public holiday.				
Earthworks and construction of infrastructure causing the spread of weeds.	Loss of native species, loss of habitat damage to waterways, spread of nationally significant weeds, damage to surrounding agriculture.	4	3	MED	Vehicles and machinery will be cleaned prior to entering the site and before entering their next site.	2	3	LOW	10
Earthworks and construction of infrastructure nuisance	Public nuisance, complaints and hold ups. Negative impacts to fauna roosting, feeding,	5	3	MED	Construction will only be carried out between 6am-6pm Monday to Saturday and between 9am-6pm on Sunday/public holiday.	5	2	MED	6
noise.	sleeping etc.				Residents will be notified of the construction timetable and kept up to date as work progresses, particularly as work changes from one set of machines and processes to another.				
					All equipment will be fitted with efficient silencers, in accordance to the Motor Vehicles Act 1949.				
					All equipment will be maintained to reduce noise emissions.				
Earthworks and construction of infrastructure causing dust.	Public nuisance, complaints and hold ups.	5	3	MED	Water will be applied to the ground prior to clearance.	4	3	MED	4

		Befor	e Manag	gement Measures		After Man	agement Me	asures	
Activity/Aspect/Hazard	Potential impacts	L	С	Risk	Management measures	Residual L	Residual C	Residual risk	Issue no. (Table 4)
Earthworks and construction of infrastructure increasing waste creation and uncontrolled waste leaving site.	Damage to waterways through waste moving off site, decrease in aesthetic values and public complaints. Financial impacts to Wellard through fines, legal costs, etc. Damage to Wellard company profile and social licence. Increase in landfill space required, indirect impacts due to larger landfill. Health issues with employees, public, visitors, wildlife and surrounding livestock.	5	4	HIGH	Maintain a clean construction site, with a construction environmental/workplace health and safety plan. Follow Solid and Liquid Waste Management Plan.	5	2	MED	2, 1
Traffic management									
Transporting livestock to site increasing odour.	Public nuisance and complaints.	4	1	LOW	All vehicles will be maintained to reduce secondary issues such as noise, smoke and vibration.	4	1	LOW	5
					All compost loads will be covered to reduce spills.				
Transporting livestock to site increasing traffic on local	Public nuisance, complaints. And hold ups.	5	2	MED	Traffic will access the site via the road already used by AA Co. Meat Processing Facility.	5	1	LOW	12
roads.					For safety, a stop sign will be placed at the exit grate of the ILEF, giving AA Co. vehicles right of way on the main access road.				
					All loads hauled on the public road network will be made to comply with road regulations.				
Transporting livestock to site	Public nuisance and complaints.	5	3	MED	The only unsealed road to be used is the internal property road.	4	2	LOW	4
increasing dust.					Watering unsealed internal property roads as required during dry spells.				
					100m of the main access road will be sealed per year.				
Transporting livestock to site	Public nuisance and complaints. Negative	5	2	LOW	Trucks and machinery will not be left idling when not in use.	5	1	LOW	6
increasing noise.	impacts to fauna roosting, feeding, sleeping etc.				All equipment will be fitted with efficient silencers, in accordance to the Motor Vehicles Act 1949.				
					All equipment will be maintained to reduce noise emissions.				
					Noisier activities will be undertaken in the late morning and early afternoon when most people are at work.				
Transporting livestock to site spreading pests, weeds and vermin.	Loss of native species, loss of habitat damage to waterways, spread of nationally significant weeds, damage to surrounding agriculture.	4	2	LOW	Pest and Weed Management Plans will be implemented to reduce spread of these organisms.	3	2	LOW	9

		Befor	e Manag	ement Measures		After Management Measures			
Activity/Aspect/Hazard	Potential impacts	L	С	Risk	Management measures	Residual L	Residual C	Residual risk	Issue no. (Table 4)
Transporting livestock to site increasing greenhouse gas emissions.	Emissions impacting on flora and fauna. Meteorological impacts. Financial impacts to Wellard. Damage to company profile.	5	1	LOW	Trucks and machinery will not be left idling when not in use. All equipment will be maintained to reduce emissions.	5	1	LOW	4
Pre-export quarantine and feedlot management									
Keeping livestock onsite causing loss of amenity.	Public complaints. Damage to company profile.	5	1	LOW	Ensuring cattle numbers do not exceed licence conditions and proper management and regular maintenance of pens.	4	1	LOW	15
					A tree line will be planted along borders and the buffer zone will protect the nearest sensitive receptor.				
Keeping livestock onsite causing odour.	Public nuisance and complaints.	5	2	MED	A tree line will be planted along borders and the buffer zone will protect the nearest sensitive receptor.	4	2	LOW	5
					Weather, including wind speed and direction, will be monitored.				
					Maintenance rations and low dietary starch rations for livestock will reduce nutrient 'bypass' and reduce GHG emissions.				
Keeping livestock onsite causing dust.	Public nuisance and complaints. Negative impacts to vegetation.	5	2	MED	Management of pen stocking densities so that pens are not too wet, nor dry.	4	2	LOW	4
					Dust suppression sprays in the pens can be turned on in the event of a fire or dry, dusty pens.				
					Monitoring program is carried out to identify whether dust is an issue and where it comes from.				
Keeping livestock onsite	Public nuisance and complaints. Negative	4	1	LOW	Trucks will not be left idling when not in use.	4	1	LOW	6
causing noise.	impacts to fauna roosting, feeding, sleeping etc.				All equipment will be maintained to reduce noise emissions.				
Keeping livestock onsite spreading pests, weeds and vermin.	Loss of native species, loss of habitat damage to waterways, spread of nationally significant weeds, damage to surrounding agriculture.	4	2	LOW	Enact Pest, Biting Insect and Weed Management Plans.	3	2	LOW	9
Keeping livestock onsite increasing Greenhouse gas emissions.	Emissions impacting on flora and fauna. Meteorological impacts. Financial impacts to Wellard. Damage to company profile.	5	1	LOW	Maintenance rations and low dietary starch rations for livestock will reduce nutrient 'bypass' and reduce GHG emissions.	5	1	LOW	4
Keeping livestock onsite creating biohazardous waste.	Health issues with employees, public, visitors, wildlife and surrounding livestock.	5	4	HIGH	Clinical and biohazardous waste to be contained and removed from site by certified agent.	4	2	LOW	2
					Maintain pen hygiene and isolate ill animals.				
					Follow solid and liquid waste management plan.				

		Befor	e Manag	ement Measures		After Man	agement Me	asures	
Activity/Aspect/Hazard	Potential impacts	L	С	Risk	Management measures	Residual L	Residual C	Residual risk	Issue no. (Table 4)
Over extraction of bore water.	Lower water table, surrounding landholders lose water supply, negative impacts on groundwater dependent ecosystems.	4	5	MED	Bore water usage will be monitored via a meter, and recorded weekly. Water quality monitoring program will be enacted.	2	5	MED	3
Improper/irregular pen cleaning causing an increase in weeds, pests and vermin.	Spread of pests, spread of disease, loss of native species, loss of habitat damage to waterways, spread of nationally significant weeds, damage to surrounding agriculture.	5	2	MED	Enact weed and pest management plans. Staff trained on proper cleaning practices. Pen maintenance routines and registers kept. Trucks entering and leaving the property will be checked for potential hitchhiking pest species (can be undertaken as part of the wash-down procedure).	2	2	LOW	9
Improper/irregular pen cleaning causing disease.	Health issues with employees, public, visitors, flora and fauna and surrounding livestock	5	3	MED	Staff trained on proper cleaning practices. Pen maintenance routines and registers kept. Livestock isolation and hospital pens for disease.	2	3	LOW	2
Improper/irregular pen cleaning causing health implications to local flora and fauna.	Poor health of local flora and fauna.	4	3	MED	Staff trained on proper cleaning practices. Pen maintenance routines and registers kept. Enact Pest and Weed Management Plans. Enact Liquid and Solid Waste Management Plan.	2	3	LOW	2
Improper/irregular pen cleaning causing odour.	Public nuisance and complaints.	5	2	MED	Pens are maintained at a (dry) manure depth of 50mm or less and cleaned at minimum every 13 weeks. Enact Odour Management Plan.	3	2	LOW	5
Pest population in the ILEF.	Poor health of local flora and fauna.	3	2	LOW	Proper management and regular maintenance of pens. All cattle transported to the site are back-lined with an insecticide to meet quarantine requirements and eliminate undesirable pests.	2	2	LOW	9
					Bait stations will be placed out, checked on a weekly basis and replaced as required. Monitoring programs are carried out to identify any pests onsite				
					and any control programs are undertaken as necessary; The pest register is maintained and acted upon:				
					Trucks entering and leaving the property will be checked for potential hitchhiking pest species (can be undertaken as part of the wash-down procedure).				
					Compost piles will be monitored for presence of vermin, temperature and moisture.				
Pest population in the ILEF.	Poor health of livestock.	2	2	LOW	As above	1	2	LOW	9

		Before	e Manag	ement Measures		After Man	agement Me	asures	
Activity/Aspect/Hazard	Potential impacts	L	С	Risk	Management measures	Residual L	Residual C	Residual risk	Issue no. (Table 4)
Pest population in the ILEF.	Loss of feed.	2	2	LOW	As Above	1	2	LOW	9
Mass death causing odour.	Public nuisance and complaints.	5	3	MED	All carcases will be sold off, taken to the carcases composting site or disposed of as soon as possible (depends on cause of death). Carcases to be composted will be covered with composting bedding materials	4	2	LOW	5
Mass death increasing pest and vermin population.	Spread of pests, spread of disease, loss of native species, loss of habitat damage to waterways, spread of nationally significant weeds, damage to surrounding agriculture.	5	2	MED	Burial pile to be monitored for pests and vermin daily. Pest Management Plan to be enacted.	4	2	LOW	9
Mass death causing a spread of disease.	Health issues with employees, public, visitors, flora and fauna and surrounding livestock.	2	4	LOW	Isolate sick animals and Enact Emergency Management Plan.	1	4	LOW	2, 16
Surface runoff/spills of effluent to surface water causing contamination. Leaching of effluent to groundwater causing contamination.	Contamination of surface water, loss of stream habitats, damage to vegetation and fauna habitat. Fauna kills due to poor water quality. Contamination of ground water, surrounding landholders lose water supply, negative impacts on groundwater dependent ecosystems.	2	5	MED MED	 Bunding of chemical, compost manure pad and pens will prevent nutrient runoff. Earthen mound and drainage channels along boundaries will catch any extra runoff. Hardy Creek will be monitored monthly for the first year, then monitoring regime will be revised based on results. Pens, compost manure pad, wastewater ponds and drainage areas are lined with compacted clay to reduce leaching into the groundwater system. The irrigation block will be closely monitored to ensure it is not irrigated while saturated. 	1	5	LOW	1
					Irrigation block will be planted with species that have high nutrient uptake rates. A shallow aquifer bore and deep aquifer bore will be monitored for the first year, and then monitoring regimes will be revised based on results.				
Solid waste management									
Collecting and stockpiling manure for compost causing odour.	Public nuisance and complaints.	5	1	MED	Compost pile must be turned regularly. All compost will be removed (sold) off site prior to the wet season to reduce odour and pests. Compost manure pad will be monitored for fires, pests and	3	1	LOW	5, 2

		Befor	e Manag	ement Measures		After Man	agement Me	asures	
Activity/Aspect/Hazard	Potential impacts	L	С	Risk	Management measures	Residual L	Residual C	Residual risk	Issue no. (Table 4)
Collecting and stockpiling manure for compost causing dust.	Public nuisance and complaints. Negative impacts to vegetation.	5	2	MED	Wind conditions will be monitored prior to compost turning and pen cleaning to reduce offsite impacts. Compost, pens and internal roads will be watered to reduce dust.	4	2	LOW	4
Collecting and stockpiling manure for compost causing noise.	Public nuisance and complaints. Negative impacts to fauna roosting, feeding, sleeping etc.	4	1	LOW	All equipment will be fitted with efficient silencers, in accordance to the Motor Vehicles Act 1949. All equipment will be maintained to reduce noise emissions. Noisier activities will be undertaken in the late morning and early afternoon when most people are at work. Trucks and machinery will not left idling when not in use.	4	1	LOW	6
Collecting and stockpiling manure for compost increasing pest and vermin populations.	Spread of pests, spread of disease, loss of native species, loss of habitat damage to waterways, spread of nationally significant weeds, damage to surrounding agriculture.	5	2	MED	All compost will be removed (sold) off site prior to the wet season to reduce odour and pests. Compost manure pad will be monitored for fires, pests and vermin.	3	2	LOW	9
Collecting and stockpiling manure for compost causing spontaneous combustion and fire.	Damage to infrastructure, increase in greenhouse gas emissions. Public nuisance and complaints.	2	4	LOW	Monitoring of compost moisture and temperature levels to reduce odour and dust. Application of water to compost heap if moisture levels are low. All compost will be removed (sold) off site prior to the wet season to reduce odour and pests. Compost manure pad will be monitored for fires, pests and vermin.	1	4	LOW	2 Addressed in Emergency management plan
Turning compost causing odour.	Public nuisance and complaints.	4	2	LOW	Compost moisture and temperature levels are monitored and kept at optimal levels to reduce dust and odour. Buffer zone and tree line will protect nearest sensitive receptor. Compost/manure will be removed offsite prior to wet season.	4	2	LOW	2, 5
Turning compost causing dust.	Public nuisance and complaints. Negative impacts to vegetation.	5	3	LOW	Compost moisture and temperature levels are monitored and kept at optimal levels to reduce dust and odour. Compost manure pad will be watered when moisture levels are low to reduce dust and maintain optimal composting conditions. Wind conditions will be monitored and turning will not be carried out when windy.	4	2	LOW	4

		Befor	e Manag	gement Measures		After Man	agement Me	asures	
Activity/Aspect/Hazard	Potential impacts	L	С	Risk	Management measures	Residual L	Residual C	Residual risk	Issue no. (Table 4)
Turning compost causing noise.	Public nuisance and complaints. Negative impacts to fauna roosting, feeding, sleeping etc.	5	2	LOW	All equipment will be fitted with efficient silencers, in accordance to the Motor Vehicles Act 1949. All equipment will be maintained to reduce noise emissions. Noisier activities will be undertaken in the late morning and early afternoon when most people are at work. Trucks and machinery will not be left idling when not in use.	4	2	LOW	6
Application of compost to irrigation area causing dust.	Public nuisance and complaints. Negative impacts to vegetation.	5	2	LOW	Compost moisture and temperature levels are monitored and kept at optimal levels to reduce dust and odour. Buffer zone and tree line will protect nearest sensitive receptor from noise. Wind conditions will be monitored and compost will not be moved when windy.	4	2	LOW	4
Application of compost to irrigation area causing noise.	Public nuisance and complaints. Negative impacts to fauna roosting, feeding, sleeping etc.	4	2	LOW	All equipment will be fitted with efficient silencers, in accordance to the Motor Vehicles Act 1949. All equipment will be maintained to reduce noise emissions. Noisier activities will be undertaken in the late morning and early afternoon when most people are at work. Trucks and machinery will not be left idling when not in use.	3	2	LOW	6
Application of compost to irrigation area soil contamination.	Contamination of surface water, loss of stream habitats, damage to vegetation and fauna habitat. Fauna kills due to poor water quality.	2	3	LOW	Soil monitoring and testing will be carried out under the Solid and Liquid Waste Management Plan to ensure that pasture is removing nutrients from soil.	1	3	LOW	8
Transportation of compost offsite causing odour.	Public nuisance and complaints.	4	1	LOW	All compost loads will be covered to reduce dust and odour nuisance. All vehicles will be maintained to reduce secondary issues such as noise, smoke and vibration.	3	1	LOW	5
Transporting compost offsite increasing traffic on local roads.	Public nuisance, complaints and hold ups.	4	2	LOW	Traffic will access the site via the road already used by AA Co. meat processing.For safety, a stop sign will be placed at the exit grate of the ILEF, giving AA Co. vehicles right of way on the main access road.All loads hauled on the public road network will be made to comply with road regulations.	4	2	LOW	12

		Befor	e Manag	ement Measures		After Man	agement Me	asures	
Activity/Aspect/Hazard	Potential impacts	L	С	Risk	Management measures	Residual L	Residual C	Residual risk	Issue no. (Table 4)
Transportation of compost offsite causing dust.	Public nuisance and complaints. Negative impacts to vegetation.	4	2	LOW	All compost loads will be covered to reduce dust and odour nuisance.	4	1	LOW	4
					The only unsealed road to be used is the internal property road.				
					Unsealed internal property roads will be watered as required during dry spells.				
					100m of the main access road will be sealed per year.				
Transportation of compost	Public nuisance and complaints. Negative	5	1	LOW	Trucks and machinery will not be left idling when not in use.	5	1	LOW	6
offsite causing noise.	impacts to fauna roosting, feeding, sleeping etc.				All equipment will be fitted with efficient silencers, in accordance to the Motor Vehicles Act 1949.				
					All equipment will be maintained to reduce noise emissions.				
					Noisier activities will be undertaken in the late morning and early afternoon when most people are at work.				
Transporting compost offsite increasing pest and vermin populations.	Spread of pests, spread of disease, loss of native species, loss of habitat damage to waterways, spread of nationally significant weeds, damage to surrounding agriculture.	4	2	LOW	Pest and Weed Management Plans will be implemented to reduce spread of these organisms.	2	2	LOW	9
Transporting compost offsite	Emissions impacting on flora and fauna.	5	1	LOW	Trucks and machinery will not be left idling when not in use.	5	1	LOW	4
increasing greenhouse gas emissions.	Meteorological impacts. Financial impacts to Wellard. Damage to company profile.				All equipment will be maintained to reduce emissions.				
Wastewater management									
Collecting wastewater in the wastewater pond causing odour.	Public nuisance and complaints.	3	2	LOW	Wastewater pond has powerful pump that is able to transfer water to wet weather pond or irrigation block if odours are produced and the pond needs to be cleaned.	3	1	LOW	5
					Lime can be added to wastewater to reduce odours and make it inhabitable for mosquito breeding.				
Increase in biting insect population.	Health issues associated with biting insects to humans and fauna.	4	3	MED	Vegetation around pond will be slashed regularly to reduce mosquito food source.	2	3	LOW	9
					Lime can be added to wastewater to reduce odours and make it inhabitable for mosquito breeding.				
					Ponds will be monitored weekly for biting insects.				
					Larvacide can be applied in a biting insect emergency.				

		Befor	e Manag	ement Measures		After Man	agement Me	asures	
Activity/Aspect/Hazard	Potential impacts	L	С	Risk	Management measures	Residual L	Residual C	Residual risk	Issue no. (Table 4)
Surface runoff/spills of effluent to surface water causing contamination.	Contamination of surface water, loss of stream habitats, damage to vegetation and fauna habitat. Fauna kills due to poor water quality.	2	5	MED	Wastewater holding ponds are adequate in size and are able to be dewatered quickly to irrigation area should they become too full. Facilities are located above the 1 in 100 year flooding levels. Earthen mound and drainage channels along boundaries will catch any extra runoff. Hardy Creek will be monitored monthly for the first year, then the monitoring regime will be revised based on results.	1	5	LOW	1
Leaching of effluent to groundwater causing contamination.	Contamination of ground water, surrounding landholders lose water supply, negative impacts on groundwater dependent ecosystems.	2	5	MED	Dams are lined with compacted clay or HDPE and then covered with sand. The irrigation block will be closely monitored to ensure it is not irrigated while saturated. Irrigation block will be planted with species that have high nutrient uptake rates. A shallow aquifer bore and deep aquifer bore will be monitored for the first year, and then the monitoring regime will be revised based on results.	1	5	LOW	1
Biting insect breeding.	Health issues associated with biting insects to humans and fauna.	4	3	MED	Vegetation around pond will be slashed regularly to reduce food source. Ponds will be lined so that vegetation cannot grow within the pond. Lime can be added to wastewater to make it inhabitable for breeding. Cattle will be back-lined with an insecticide to kill insects and staff should wear insect repellent to reduce blood source available to biting insects and stop the spread of disease.	2	3	LOW	9
Transportation of diesel to site for water pump causing odour.	Public nuisance and complaints.	3	1	LOW	The container will be double-bunded. Loading of container will be undertaken by experienced individuals. Spill kits will be available within easy access of all diesel storage areas.	3	1	LOW	5

		Befor	e Manag	ement Measures		After Man	agement Me	asures	
Activity/Aspect/Hazard	Potential impacts	L	C	Risk	Management measures	Residual L	Residual C	Residual risk	Issue no. (Table 4)
Transportation of diesel to site for water pump causing increased traffic on local roads.	Increased traffic on local roads.	4	2	LOW	Traffic will access the site via the road already used by AA Co. meat processing.For safety, a stop sign will be placed at the exit grate of the ILEF, giving AA Co. vehicles right of way on the main access road.All loads hauled on the public road network will be made to comply with road regulations.	4	2	LOW	12
Transportation of diesel to site for water pump causing dust.	Public nuisance and complaints. Negative impacts to vegetation.	4	2	LOW	The only unsealed road to be used is the internal property road. Unsealed internal property roads will be watered as required during dry spells. 100m of the main access road will be sealed per year.	4	1	LOW	4
Transportation of diesel to site for water pump causing noise.	Public nuisance and complaints. Negative impacts to fauna roosting, feeding, sleeping etc.	5	1	LOW	Trucks and machinery will not be left idling when not in use. All equipment will be fitted with efficient silencers, in accordance to the Motor Vehicles Act 1949. All equipment will be maintained to reduce noise emissions. Noisier activities will be undertaken in the late morning and early afternoon when most people are at work.	5	1	LOW	6
Transportation of diesel to site for water pump causing spreading pests, weeds and vermin.	Spread of pests, spread of disease, loss of native species, loss of habitat damage to waterways, spread of nationally significant weeds, damage to surrounding agriculture.	4	2	LOW	The Weed Management Plan will be enacted. The truck wash station will be used to reduce spread of weeds.	2	2	LOW	9, 10
Transportation of diesel to site for water pump causing greenhouse gas emissions.	Emissions impacting on flora and fauna. Meteorological impacts. Financial impacts to Wellard. Damage to company profile.	5	1	LOW	Trucks and machinery will not be left idling when not in use. All equipment will be maintained to reduce emissions.	5	1	LOW	4
Diesel spill contaminating surface water.	Contamination of surface water, loss of stream habitats, damage to vegetation and fauna habitat. Fauna kills due to poor water quality.	2	5	MED	The container will be double-bunded. Loading of container will be undertaken by experienced individuals. Spill kits will be available within easy access of all diesel storage areas.	1	5	LOW	14
Diesel spill contaminating ground water.	Contamination of ground water, surrounding landholders lose water supply, negative impacts on groundwater dependent ecosystems.	1	5	MED	As above	1	5	LOW	14
Diesel spill contaminating soil.	Loss of vegetation, fauna deaths, Financial impacts to remediate.	2	5	MED	As above	1	5	LOW	14

		Before	e Manag	ement Measures		After Man	agement Me	asures	
Activity/Aspect/Hazard	Potential impacts	L	С	Risk	Management measures	Residual L	Residual C	Residual risk	Issue no. (Table 4)
Lime spill contaminating surface water.	Contamination of surface water, loss of stream habitats, damage to vegetation and fauna habitat. Fauna kills due to poor water quality.	2	3	LOW	The container will be double-bunded. Loading of container will be undertaken by experienced individuals. Spill kits available onsite.	1	3	LOW	14
Lime spill contaminating ground water.	Contamination of ground water, surrounding landholders lose water supply, negative impacts on groundwater dependent ecosystems.	2	3	LOW	As above	1	3	LOW	14
Lime spill contaminating soil.	Loss of vegetation, fauna deaths, Financial impacts to remediate.	2	3	LOW	As above	1	3	LOW	14
Cleaning of ponds with front end loader causing noise.	Public nuisance and complaints. Negative impacts to fauna roosting, feeding, sleeping etc.	4	1	LOW	Trucks and machinery will not be left idling when not in use. All equipment will be fitted with efficient silencers, in accordance to the Motor Vehicles Act 1949. All equipment will be maintained to reduce noise emissions. Noisier activities will be undertaken in the late morning and early afternoon when most people are at work.	3	1	LOW	6
Applying effluent to pasture areas causing accumulation of nutrients in soils.	Loss of vegetation, fauna deaths, Financial impacts to remediate.	3	2	LOW	Suitable crop selection and crop rotation. Effluent application at sustainable nutrient loading rates. Effluent application will be based upon appropriate hydraulic loading rates and an irrigation management plan will be enacted. Irrigation rates and timing will need to be managed to ensure that runoff during irrigation does not occur. Effluent will be applied using a low pressure spray method (lateral moving irrigator), so that no runoff or waterlogging should occur. Minimum biannual monitoring of nutrients status of effluent and solids reuse areas. Monitor irrigation application especially periodically check direction of irrigator. Monthly monitoring of two groundwater bores for the first year, then annually. Stubble retention and suitable tillage practices for erosion.	2	2	LOW	1
Applying effluent to pasture areas causing soil waterlogging.	Loss of vegetation, fauna deaths, Financial impacts to remediate, erosion.	4	2	LOW	As above	3	2	LOW	1

		Before	e Manag	ement Measures		After Man	agement Me	asures	
Activity/Aspect/Hazard	Potential impacts	L	С	Risk	Management measures	Residual L	Residual C	Residual risk	Issue no. (Table 4)
Applying effluent to pasture areas causing odour.	Public nuisance and complaints.	3	2	LOW	As above	2	2	LOW	5
Applying effluent to pasture areas causing surface runoff.	Contamination of surface water, loss of stream habitats, damage to vegetation and fauna habitat. Fauna kills due to poor water quality.	3	2	LOW	As above	2	2	LOW	1
Applying effluent to pasture areas causing groundwater contamination.	Contamination of ground water, surrounding landholders lose water supply, negative impacts on groundwater dependent ecosystems.	2	5	MED	As above	1	5	LOW	1
Applying effluent to pasture areas causing salinity.	Loss of vegetation, financial impacts to remediate.	2	3	LOW	As above	1	3	LOW	1
Applying effluent to pasture areas causing soil erosion.	Sedimentation in streams, loss of stream habitats, damage to vegetation and fauna habitat due to erosion. Damage to neighbouring properties.	3	2	LOW	As above	2	2	LOW	1
Pasture and feedmill management									
Harvesting pasture by baling causing dust.	Public nuisance and complaints. Negative impacts to vegetation.	5	2	MED	Hay baling activities will be consistent with industry practice as occurs in all rural zones undertaking this type of activity Baling will not be undertaken when wind speed is high.	5	2	MED	4
Harvesting pasture by baling causing noise.	Public nuisance and complaints. Negative impacts to fauna roosting, feeding, sleeping etc.	5	1	LOW	Trucks and machinery will not be left idling when not in use. All equipment will be fitted with efficient silencers, in accordance to the Motor Vehicles Act 1949.	5	1	LOW	6
					Noisier activities will be undertaken in the late morning and early afternoon when most people are at work.				

		Befor	e Manag	ement Measures		After Man	agement Me	asures	
Activity/Aspect/Hazard	Potential impacts	L	С	Risk	Management measures	Residual L	Residual C	Residual risk	Issue no. (Table 4)
Harvesting pasture by baling causing fire.	Damage to infrastructure, loss of habitat, increase in greenhouse gas emissions. Public nuisance and complaints.	2	4	LOW	The hay sheds have a separation distance to prevent spread and additional damage from fires. Mains water supply is connected to the existing house for firefighting purposes. Machinery available to create a fire break, to slow/stop the spread of fire is available onsite. Dust suppression sprays in the pens can be turned on in the event of a fire. In addition, if there are nearby bushfires or planned burn offs fuel load on the property can be reduced.	2	3	LOW	Addressed in Emergency management plan
Processing feed causing dust.	Public nuisance and complaints. Negative impacts to vegetation.	5	1	LOW	Buffer zone will protect nearest sensitive receptors	5	1	LOW	4
Processing feed causing noise.	Public nuisance and complaints. Negative impacts to fauna roosting, feeding, sleeping etc.	4	1	LOW	Trucks and machinery will not be left idling when not in use. All equipment will be fitted with efficient silencers, in accordance to the Motor Vehicles Act 1949. All equipment will be maintained to reduce noise emissions. Noisier activities will be undertaken in the late morning and early afternoon when most people are at work.	4	1	LOW	6
Feed wastage/spoilage increasing pests and vermin.	Spread of pests, spread of disease, loss of native species, loss of habitat damage to waterways, spread of nationally significant weeds, damage to surrounding agriculture.	3	2	LOW	Good hygiene practices – regular cleaning. Ensure that conveyors, silos and bins are sealed. Enact Pest Management Plan.	2	2	LOW	9
Feed wastage/spoilage increasing odour.	Public nuisance and complaints.	2	1	LOW	As above.	1	1	LOW	5
Vehicle movements (feed truck running feed up and down lanes) causing dust.	Public nuisance and complaints. Negative impacts to vegetation.	4	2	LOW	Watering unsealed on-farm roads as required during dry spells 100m of main access road will be sealed per year. All vehicles will be maintained to reduce secondary issues such as noise, smoke and vibration. Buffer zone will protect nearest sensitive receptors.	4	1	LOW	4

		Befor	e Manag	ement Measures		After Man	agement Me	asures	
Activity/Aspect/Hazard	Potential impacts	L	С	Risk	Management measures	Residual L	Residual C	Residual risk	Issue no. (Table 4)
Vehicle movements (feed truck running feed up and down lanes) causing noise.	Public nuisance and complaints. Negative impacts to fauna roosting, feeding, sleeping etc.	4	2	LOW	Trucks and machinery will not be left idling when not in use. All equipment will be fitted with efficient silencers, in accordance to the Motor Vehicles Act 1949. All equipment will be maintained to reduce noise emissions. Noisier activities will be undertaken in the late morning and early afternoon when most people are at work.	4	1	LOW	6
Vehicle movements (feed truck running feed up and down lanes) causing greenhouse gas emissions.	Emissions impacting on flora and fauna. Meteorological impacts. Financial impacts to Wellard. Damage to company profile.	5	1	LOW	Trucks and machinery will not be left idling when not in use. All equipment will be maintained to reduce emissions.	5	1	LOW	4
Weed and pest management									
Preparing herbicide (e.g. mixing herbicide and water/surfactants) contaminating surface water.	Contamination of surface water, loss of stream habitats, damage to vegetation and fauna habitat. Fauna kills due to poor water quality.	3	3	MED	Herbicide preparation will take place in a concreted area with bunding to ensure that spills do not contaminate porous and sensitive areas. Only staff trained on chemical handling or accredited contractors will carry this out. Chemicals stored away in a bunded lockable storage area. Spill kits will be available onsite.	1	3	LOW	10, 14
Preparing herbicide (e.g. mixing herbicide and water/surfactants) contaminating soil.	Loss of vegetation, fauna deaths, Financial impacts to remediate.	3	3	MED	As above.	1	3	LOW	10, 14
Applying herbicide to weeds causing contaminated surface water.	Contamination of surface water, loss of stream habitats, damage to vegetation and fauna habitat. Fauna kills due to poor water quality.	2	2	LOW	Use of a buffer zone alongside crops Use of herbicide application nozzles with larger droplet sizes should reduce off target damage/contamination. Weather conditions also need to be taken into account when spraying – herbicide will not be applied on windy or rainy days. Restricted to staff trained in herbicide application or accredited contractors. Herbicide will be applied as described on the label. Spill kits will be available onsite.	1	2	LOW	10, 14

		Befor	e Manag	ement Measures		After Man	agement Mea	asures	
Activity/Aspect/Hazard	Potential impacts	L	С	Risk	Management measures	Residual L	Residual C	Residual risk	Issue no. (Table 4)
Applying herbicide to weeds causing damage to off target plants.	Loss of vegetation, fauna deaths.	2	3	LOW	Use of a buffer zone alongside crops Use of herbicide application nozzles with larger droplet sizes should reduce off target damage/contamination. Weather conditions also need to be taken into account when spraying – herbicide will not be applied on windy or rainy days. Restricted to staff trained in herbicide application or accredited contractors.	1	3	LOW	10, 14
Emergency management									
Bore failure resulting in livestock deaths.	Damage to waterways through waste moving off site, decrease in aesthetic values and public complaints. Financial impacts to Wellard through fines, legal costs, etc. Damage to Wellard company profile and social licence. Increase in landfill space required, indirect impacts due to larger landfill. Health issues with employees, public, visitors, wildlife and surrounding livestock.	2	3	LOW	A 3ML (3 day supply) tank will be established next to the bore to provide emergency store of water. The freshwater supply turkey's nest (10 ML capacity) will be maintained at 4ML (4 day emergency supply) Find water trucking services that can bring water in for emergencies.	1	3	LOW	Addressed in Emergency management plan
Livestock disease resulting livestock deaths.	Damage to waterways through waste moving off site, decrease in aesthetic values and public complaints. Financial impacts to Wellard through fines, legal costs, etc. Damage to Wellard company profile and social licence. Increase in landfill space required, indirect impacts due to larger landfill. Health issues with employees, public, visitors, wildlife and surrounding livestock.	2	3	LOW	Regular pen cleaning. All cattle transported to the site are back-lined with an insecticide for flies and mosquitoes. Ill livestock are kept in isolation pens to reduce spread of disease or transmissible infections. Follow Disease/Quarantine Guidelines under emergency Management Plan.	1	3	LOW	Addressed in Emergency management plan

		Before Management Measures		ement Measures		After Man	agement Me	asures	
Activity/Aspect/Hazard	Potential impacts	L	С	Risk	Management measures	Residual L	Residual C	Residual risk	Issue no. (Table 4)
Cyclone, Fire and/or Flooding resulting in livestock deaths.	Damage to waterways through waste moving off site, decrease in aesthetic values and public complaints. Financial impacts to Wellard through fines, legal costs, etc. Damage to Wellard company profile and social licence. Increase in landfill space required, indirect impacts due to larger landfill. Health issues with employees, public, visitors, wildlife and surrounding livestock.	3	3	MED	 For cyclones: All infrastructure onsite is cyclone rated. Weather warnings from the Bureau of Meteorology will be monitored. In the event of a cyclone, loose and sharp items will be secured, safety of the livestock will be ensured and, there will need to be enough supplies (e.g. Food, water, bedding) if flooding or isolation occur. Enact Biting Insects Management Plan. For flooding: All storage and drainage facilities are built to withstand a 1 in 100 year flood event. Drainage lines will be cleaned regularly. A check of weather warnings from the Bureau of Meteorology should be carried out every morning. There should be enough food supplies for the duration of the flood. Enact Biting Insects Management Plan. For fire: The hay sheds have a separation distance to prevent spread and additional damage from fires. Mains water supply is connected to the existing house for firefighting purposes. Machinery available to create a fire break, to slow/stop the spread of fire is available onsite. Dust suppression sprays in the pens can be turned on in the event of a fire. In addition, if there are nearby bushfires or planned burn offs fuel load on the property can be reduced. 	2	3	LOW	Addressed in Emergency management plan

		Befor	e Manag	ement Measures		After Man	agement Me	asures	
Activity/Aspect/Hazard	Potential impacts	L	С	Risk	Management measures	Residual L	Residual C	Residual risk	Issue no. (Table 4)
Cyclone, fire and or flooding resulting in loss of infrastructure.	Damage to waterways through waste moving off site, decrease in aesthetic values and public complaints. Financial impacts to Wellard. Damage to Wellard company profile and social licence. Increase in landfill space required, indirect impacts due to larger landfill. Health issues with employees, public, visitors, wildlife and surrounding livestock.	3	3	MED	As above	2	3	LOW	Addressed in Emergency management plan
Cyclone, fire and or flooding resulting in loss of life.	Damage to Wellard company profile and social licence. Financial impacts to Wellard.	2	5	MED	As above	1	5	LOW	Addressed in Emergency management plan
Social and economic effects									
Loss of amenity due to odour.	Public nuisance and complaints.	5	3	MED	Treed buffer line will reduce wind dispersal of odour. Enact Liquid and Solid Waste Management Plan.	4	2	LOW	7
Loss of amenity due to dust. Loss of amenity due to noise.	Public nuisance and complaints. Negative impacts to vegetation. Public nuisance and complaints. Negative impacts to fauna roosting, feeding, sleeping	5	3	MED	Treed buffer line will reduce wind dispersal of dust Watering unsealed on-farm roads as required during dry spells Enact Liquid and Solid Waste Management Plan to reduce compost dust. Management of pen stocking densities so that pens are not too wet, nor dry. Dust suppression sprays in the pens can be turned on in the event of a fire or dry, dusty pens. Trucks and machinery will not be left idling when not in use. All equipment will be fitted with efficient silencers, in	4	2	LOW	7 7
Loss of amenity due to lighting.	etc. Public nuisance and complaints. Negative impacts to fauna roosting, feeding, sleeping etc.	4	1	LOW	All equipment will be maintained to reduce noise emissions. Noisier activities will be undertaken in the late morning and early afternoon when most people are at work. Treed buffer line will reduce the visibility of the site from public areas. Directional lighting and a timer system will ensure that light	4	1	LOW	7

		Befor	e Manag	ement Measures		After Management Measures			
Activity/Aspect/Hazard	Potential impacts	L	С	Risk	Management measures	Residual L	Residual C	Residual risk	Issue no. (Table 4)
Loss of amenity due to aesthetics of the facility.	Damage to Wellard company profile and social licence. Public nuisance and complaints. Decrease in surrounding land values.	4	1	LOW	Treed buffer line will reduce the visibility of the site from public areas and private residences. Reducing the effects of odour, dust, noise, and reducing visibility will reduce the effects on neighbouring properties.	3	1	LOW	7
Cumulative effects									
Vegetation clearance impacting on flora and fauna communities.	Cumulative fauna/flora population decline.	5	1	MED	Fauna spotter catchers will be present onsite to relocate fauna	5	1	LOW	11
Groundwater water use.	Surrounding landholders lose water supply, negative impacts on groundwater dependent ecosystems.	2	5	MED	Bore water usage will be monitored via a meter, and recorded weekly. Water quality and standing water levels will be monitored onsite and downstream to determine effects on water table and whether further action is required.	1	5	LOW	11
Wastewater treatment and application.	Contamination of surface water, loss of stream habitats, damage to vegetation and fauna habitat. Fauna kills due to poor water quality.	2	5	MED	Enact Liquid and Solid Waste Management Plan and Water Quality Monitoring Program.	1	5	LOW	11

Table 4 summarises the risk assessment based on the highest, most conservative, risk rating (before management measures) for each issue in Table 3.

Issue No.	Issue	Risk / Prioritisation Score	Revised risk score after management
1	Liquid waste management	20	10
2	Solid waste management	20	10
3	Water quality & catchment protection	20	10
4	Air Quality (including dust)	20	12
5	Odour	15	8
6	Noise	15	10
7	Economic and social effects	15	10
8	Land capability and soil resources	12	8
9	Pest & insect control	12	8
10	Weed management	12	3
11	Cumulative impacts	12	5
12	Traffic & road impacts	15	10
13	Flora & fauna	10	6
14	Hazardous chemicals	10	5
16	Animal welfare	9	6
15	Lighting and community amenity	8	4
17	Heritage	2	2

Table 4 Summary of assessment (Red = High; Yellow = Medium; Green = Low)