



LICENCE NUMBER: L8540/2011/1
LICENCE FILE NUMBER: 2011/002681
APPLICATION DATE: 23 March 2011
EXPIRY DATE: 1 July 2017

PREMISES DETAILS

LICENSEE AND OCCUPIER

Wellard Feeds Pty Ltd
Lot 3 Northam Pithara Rd
Wongan Hills WA 6603
ACN: 009248195

PREMISES

Wellard Feed Pty Ltd
Lot 3 on Deposited Plan 24872
Northam-Pithara Rd
LAKE NINAN, WA 6603

PRESCRIBED PREMISES CATEGORY

Table 1: Prescribed Premises Category

Category number*	Category Description*	Category Production or Design Capacity*	Premises Production or Design Capacity#	Premises Fee Component**
23	Animal feed manufacturing: premises (other than premises within category 15 or 16) on which animal food is manufactured or processed.	1,000 or more tonnes per year.	65,000 tonnes per year.	More than 10,000 but not more than 100,000 tonnes per year.

* From Schedule 1 of the Environmental Protection Regulations 1987

From application

** From Schedule 4 of the Environmental Protection Regulations 1987

This Environmental Assessment Report (EAR) has been drafted for the purposes of detailing information on the management and mitigation of emissions and discharges from the prescribed premises. The objective of the EAR is to provide a risk assessment of emissions and discharges, and information on the management of other activities occurring onsite which are not related to the control of emissions and discharges from the prescribed premises activity. This does not restrict DEC to assessing only those emissions and discharges generated from the activities that cause the premises to become prescribed premises.

Basis of Assessment

The Wellard Feeds Pty Ltd (Wellard Feeds), which has been assessed as “prescribed premises” category number 23, under Schedule 1 of the Environmental Protection Regulations 1987, as detailed in Table 1 above.

Wellard Feeds use straw and grain to produce ruminant pellet feed for live export ships and for use in export depots.



1.0 BACKGROUND

1.1 GENERAL COMPANY DESCRIPTION

The Wellard Group purchased the feed mill from Australian Feeds in 1990. The feed mill had been operating since 1989. No complaints have been received for this site over more than 20 years. Wellard Feeds conducted an internal company review in 2011 and approached DEC regarding the need to licence the premise.

The Wellard Group supply live sheep and cattle to the Middle East and Asia. They have a fleet of vessels for the live animal trade. This premises supplies feed for the vessels and feedlots where animals are waiting for export.

1.2 LOCATION OF PREMISES

The premises is located in the Shire of Wongan-Ballidu, approximately 3.5 kilometres (km) south of the town of Wongan Hills in cleared farmland. The closest residential dwelling is located 200 metres (m) north-east of the premises; his house is only periodically occupied by the neighbouring farmer who provides the Wellard Feeds with their raw materials. The next nearest residence is 3 km from the mill. There is only one neighbour and Wellard feed maintains a good relationship with this neighbour.

Soils across the site consist of clay and loam.

The closest surface water body is located at Lake Ninan approximately 8km west.

The depth and quality of groundwater beneath the site is unknown.

1.3 PROCESS DESCRIPTION

The mill is of United States design. Machinery has been up-graded from light duty to heavy duty plant. The plant is automated with a Programmable Logic Controller (PLC). Current production is only ruminant feed in the form of feed pellets. .

FEED STOCKS

- Straw is stored on-site in the open in stacks six to eight bales high with a maximum capacity of 30,000 tonnes (t);
- Grain is stored in two 1,000t silos and two 500t silos with a maximum capacity of 3,000t;
- The hay shed holds 3,000t of grain in a modified storage bin.
- Lupins are stored in a shed that is concrete walled and floored with a capacity of 4,500t.

PRODUCT STORAGE

The finished product (pellets) is stored in a concrete floor and lined shed adjacent to the mill building with a total capacity of 6,000t. Product produced by the mill is exported in bulk by road.

PROCESS

The boiler is fired by three 1500 litre (L) propane gas tanks (licensed with Department of Mines and Petroleum). Diesel is stored in two bunded above-ground storage tanks: one 2,000L and the other 1,500L. Hydrated lime is delivered in bulk and pneumatically transferred into a sealed tank.



Water is supplied to the site from Water Corporation's distribution scheme and two 90,000L water storage tanks.

The mill employs 12 part-time and full-time local people and sources all of its raw material from the Wongan-Ballidu and surrounding shires. It also employs local contractors.

The process is essentially a dry process. There is some water generated from the boiler blowdown that is directed to an underground sump. The overflow is directed to internal drainage in winter. During dry periods water is retained on-site for re-use. During winter stormwater drains from the bitumen area and hardstand into the adjacent railway reserve.

Organic solids such as weather damaged straw is periodically removed and used as mulch on local properties on salt affected land. Household waste and bailer string are deposited at the Shire of Wongan-Ballidu waste depot.

Dust is captured along the straw and grain grinding lines via commercial dust extraction units. Captured dust is then returned to the production line for re-incorporation into the pellet feed.

Figure 1 and 2 displays the process flowchart and site plan for the premises.

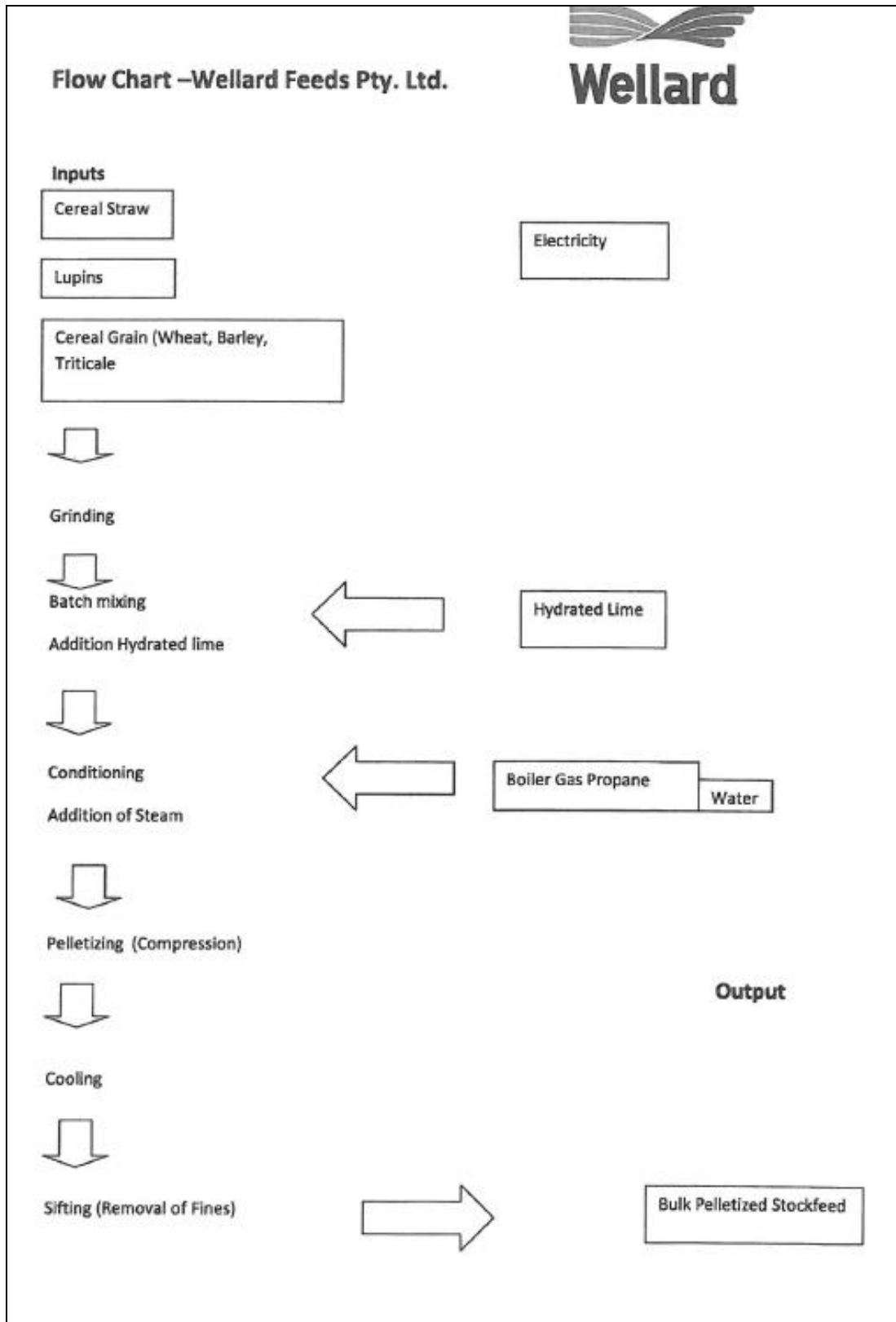


Figure 1: process flowchart

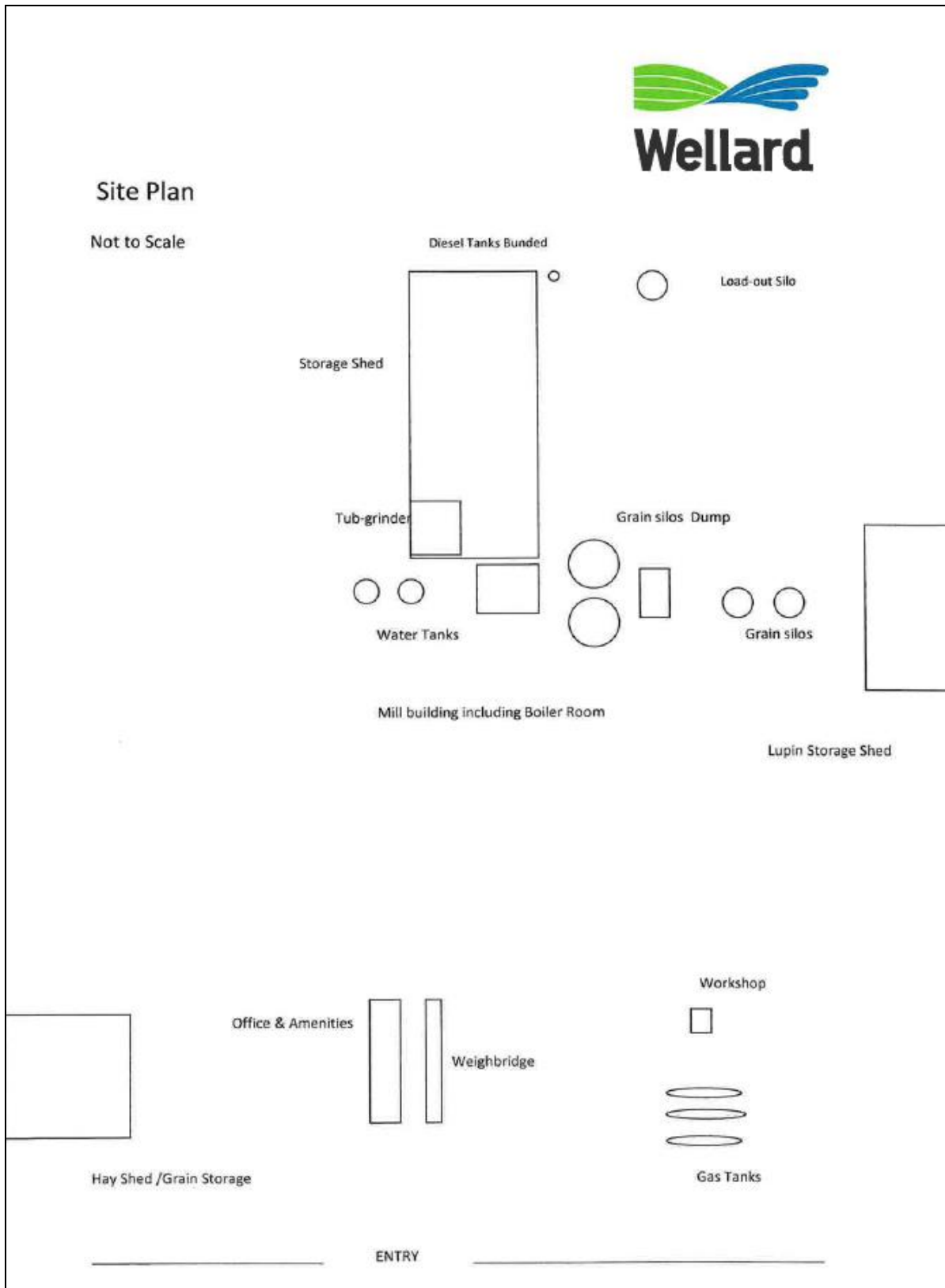


Figure 2: Site layout



1.4 REGULATORY CONTEXT

1.4.1 Part IV *Environmental Protection Act 1986*, Environmental Impact Assessment

This side does not require assessment by the EPA.

1.4.2 Part V *Environmental Protection Act 1986*, Environmental Management

This facility has been assessed as a 'prescribed premises' under categories 23 listed in Schedule 1 of the Environmental Protection Regulations 1987. Based on this information a licence is required to operate the facility.

A number of Environmental Protection Regulations may apply to activities to be undertaken on site. These regulations may include:

- Environmental Protection (Unauthorised Discharge) Regulations 2004
- Environmental Protection (Noise) Regulations 1997

1.4.3 Other decision making authority's (DMA's) Legislation which applies

The Department of Mines and Petroleum administer the following applicable acts/regulations in relation to the storage of fuel on-site:

- Dangerous Goods Safety Act 2004;
- and Dangerous Goods Safety (Storage and Handling of Non-Explosives) Regulations 2007

1.4.4 Local Government Authority

The premise is located in the Shire of Wongan-Ballidu. The Shire supports the ongoing operation of the mill.

1.4.5 *Rights in Water Irrigation Act 1914*

The property owner does not require a Groundwater Licence.

2.0 STAKEHOLDER AND COMMUNITY CONSULTATION

SUBMISSIONS RECEIVED DURING 21 DAY PUBLIC COMMENT PERIOD

The Application for Licence details for this facility were advertised in the West Australian newspaper on 23 May 2011 a means of advising stakeholders and to seek public comments. No submissions were received.

3.0 EMISSIONS AND DISCHARGES RISK ASSESSMENT

DEC considers that conditions should focus on regulating emissions and discharges of significance. Where appropriate, emissions and discharges which are not significant should be managed and regulated by other legislative tools or management mechanisms.

The following section assesses the environmental risk of potential emissions from Wellard Feeds. In order to determine the site's appropriate environmental regulation, an emissions and discharges risk assessment was conducted of the Wellard Feeds premises using the environmental risk matrix outlined in Appendix A. The results of this are summarised in Table 2.



Table 2: Risk assessment and regulatory response summary table.

Risk factor	Significance of emissions	Socio-Political Context of Each Regulated Emission	Risk Assessment	DEC Regulation (EP Act - Part V)	EAR Reference	Other management (legislation, tools, agencies)
Air emissions (point source)	The burn rate and emissions from the boiler system are unknown, however they are not expected to be significant	Low Nearest occupied house is 3 km away	E - No regulation	LIC – no condition	N/A	General provisions of the <i>Environmental Protection Act 1986</i> .
Dust emissions	Operation: Emission Significance 1. Dust control systems are incorporated in the straw and grain grinding lines. Captured dust is re-directed back into the production of feed pellets. A dust assessment is currently being undertaken to validate controls. Roads around the plant for heavy traffic are sealed.	Low. Nearest occupied house is 3 km away.	D - EIPs, other management mechanisms/licence conditions (monitoring/reporting)/other regulatory tools	LIC – standard dust control condition.	N/A	General provisions of the <i>Environmental Protection Act 1986</i> . Environmental Protection (Unauthorised Discharge) Regulations 2004.
Odour emissions	Operation: Emission Significance 1. Manufacturing process does not emit odours.	Low. Nearest occupied house is 3 km away	E - No regulation, other management mechanisms	LIC–no condition.	N/A	General provisions of the <i>Environmental Protection Act 1986</i> .
Noise emissions	Operation: Emission Significance 1. Machinery noise is limited to plant and surrounds. As there is a house periodically occupied 300 m away the noise levels should be verified in the licence as a condition. At present, this house is only rarely used by the owner.	Low. Nearest occupied house is 3 km away	D - EIPs, other management mechanisms/licence conditions (monitoring/reporting)/ other regulatory tools	LIC– include condition to verify noise emissions	N/A	General provisions of the <i>Environmental Protection Act 1986</i> . Environmental Protection (Noise) Regulations 1997.
Light emissions	Operation: Emission Significance 2. 24 hour operation required lighting at night.	Low. Nearest occupied house is 3 km away	E- No regulation, other management mechanisms	LIC– no conditions.	N/A	General provisions of the <i>Environmental Protection Act 1986</i> .



Risk factor	Significance of emissions	Socio-Political Context of Each Regulated Emission	Risk Assessment	DEC Regulation (EP Act - Part V)	EAR Reference	Other management (legislation, tools, agencies)
Discharges to water	N/A No discharges to water. The closest surface water body is located at Lake Ninan approximately 8km west.	Low. Nearest occupied house is 3 km away	E - No regulation, other management mechanisms	LIC –no conditions.	N/A	Environmental Protection (Unauthorised Discharge) Regulations 2004.
Discharges to land	Operation: Emission Significance 1. Only discharge to land is stormwater and blowdown water that is discharged to internal drainage on-site. During occasional heavy rainfall this water may run onto adjacent railway reserve adjacent to the property on the northern boundary.	Low. Nearest occupied house is 3 km away.	E - No regulation, other management mechanisms	LIC – conditions to contain spillages and stormwater.	N/A	Environmental Protection (Unauthorised Discharge) Regulations 2004.
Solid / liquid wastes	Operation: Emission Significance 1. Small quantities of domestic waste from the crib room is removed to the Wongan Hills rubbish tip. Damaged straw is periodically removed to adjacent land for rehabilitation.	Low. Nearest occupied house is 3 km away.	E - No regulation, other management mechanisms	LIC –no conditions.	N/A	Environmental Protection (Unauthorised Discharge) Regulations 2004.
Hydrocarbon/ chemical storage	Operation: Emission Significance 2, DMP licences the propane tanks and diesel tanks are adequately bundled.	Low. Nearest occupied house is 3 km away.	D - EIPs, other management mechanisms/licence conditions (monitoring/reporting)/other regulatory tools	LIC – standard condition for hydrocarbon and chemical containment and spills	N/A	Dangerous Goods storage licence (DMP). Environmental Protection (Unauthorised Discharge) Regulations 2004.
Native vegetation clearing	N/A Cleared site.	N/A Nearest occupied house is 3 km away.	N/A	LIC – N/A	N/A	
Contaminated site identification	N/A The site has not been reported to DEC as a known or suspected contaminated site.	N/A Nearest occupied house is 3 km away.	N/A	LIC – N/A	N/A	<i>Contaminated Sites Act 2003.</i>



4.0 GENERAL SUMMARY AND COMMENTS

The Wellard Feeds Wongan Hills Mill is a low risk premises. The licence should be issued for 5 years.

OFFICER PREPARING REPORT

Margaret Redfern

Position: Licensing Officer
Wheatbelt Regional Office
Department of Environment and Conservation

12 April 2012

ENDORSEMENT

Alan Kietzmann

Position: Program Manager
Wheatbelt Regional Office
Department of Environment and Conservation

22 June 2012



APPENDIX A: EMISSIONS AND DISCHARGES RISK ASSESSMENT MATRIX

Table 3: Measures of Significance of Emissions

Emissions as a percentage of the relevant emission or ambient standard		Worst Case Operating Conditions (95 th Percentile)			
		>100%	50 – 100%	20 – 50%	<20%*
Normal Operating Conditions (50 th Percentil	>100%	5	N/A	N/A	N/A
	50 – 100%	4	3	N/A	N/A
	20 – 50%	4	3	2	N/A
	<20%*	3	3	2	1

*For reliable technology, this figure could increase to 30%

Table 4: Socio-Political Context of Each Regulated Emission

		Relative proximity of the interested party with regards to the emission				
		Immediately Adjacent	Adjacent	Nearby	Distant	Isolated
Level of Community Interest or Concern*	5	High	High	Medium High	Medium	Low
	4	High	High	Medium High	Medium	Low
	3	Medium High	Medium High	Medium	Low	No
	2	Low	Low	Low	Low	No
	1	No	No	No	No	No

Note: These examples are not exclusive and professional judgement is needed to evaluate each specific case

*This is determined by DEC using the DEC "Officer's Guide to Emissions and Discharges Risk Assessment" May 2006.

Table 5: Emissions Risk Reduction Matrix

		Significance of Emissions				
		5	4	3	2	1
Socio-Political Context	High	A	A	B	C	D
	Medium High	A	A	B	C	D
	Medium	A	B	B	D	E
	Low	A	B	C	D	E
	No	B	C	D	E	E

PRIORITY MATRIX ACTION DESCRIPTORS

A = Do not allow (fix)

B = licence condition (setting limits + EMPs - short timeframes)(setting targets optional)

C = licence condition (setting targets + EMPs - longer timeframes)

D= EIPs, other management mechanisms/licence conditions (monitoring/reporting)/other regulatory tools

E = No regulation, other management mechanisms

Note: The above matrix is taken from the DEC Officer's Guide to Emissions and Discharges Risk Assessment May 2006.