



# Pollution Incident Response Management Plan

## Grafton Regional Saleyard Treatment Plant and System

Clarence Valley Council  
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GRAFTON, NSW 2460

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## 1. Introduction

This plan has been developed to document the processes required to prepare for and respond to pollution incidents at the Grafton Regional Saleyard Treatment Plant and associated holding pond (EPA Licence No. 573) and ensure that hazards to the environment, human health and safety are minimised, if not eliminated. It has been prepared in accordance with the requirements of the Protection of the Environment Operations Act 1997 and Protection of the Environment Operations (General) Regulation 2009.

### 1.1 Scope

This Pollution Incident Response Management Plan applies to the Grafton Regional Saleyard treatment plant and associated holding pond (EPA Licence No. 3419). For site plans, refer to Section 7.1.

## 2. Pollution Incident Response Management Plan

The treatment plant at the Grafton Regional Saleyard is a facility for treating run off from the saleyard prior to discharge into to main sewer. Run off across the yard becomes contaminated with cattle faeces deposited when cattle are present in the yard. Run off is collected in the holding pond prior to passing on to the treatment plant and subsequent discharge in to the sewer. The yards are dry brushed after sales in order to reduce the amount of cattle droppings present in run-off.

Storm water contaminated with cattle faeces can, if inadvertently discharged, result in contamination of the environment.

### 2.1 Potential Incidents

The potential hazards to the environment include:

- Sewage overflow (raw or partially treated) – potentially caused by:
  - Overflow of the storage pond
  - Overflow of the Dosing and Aeration Tank
  - A leak in the Aeration tank or Effluent tank
  - Lead in a pump or associated pipework
  - Treatment plant blockage

No chemicals are currently stored or used within the treatment plant.

A detailed assessment of risks is provided in Section 7.4. For detail on actions to reduce risks see Section 2.5 Pre-emptive Measures and Section 7.5 Action Plans to minimise harm.

### 2.2 Incident Response

This section details the response requirements in the event of an incident. In all situations:

**The business hours emergency number for CVC is (02) 6643 0200**

**The after hours emergency number for CVC is (02) 6626 6858**

During working hours, these calls are taken by staff on the CVC switchboard. If the call is after hours, the call is redirected to a call centre in Lismore, who informs appropriate personnel of issues and incidents. CVC operates a rostered on-call system, ensuring that an experienced operator is on-call at all times.

The call centre will contact the on-call operator. The on-call the operator may also receive alarms from pump stations or the STP via the telemetry system. The telemetry system utilises the SMS mobile phone network to advise of critical alarms. The on-call operator also has access to other qualified staff to assist in an after hours repair or emergency. SOP's are in place to cover an after hours emergency.

### 2.2.1 Human health or Safety Incident

If there is immediate threat to Human health or Safety, call triple zero “000” (“112” if using a mobile) and implement the following process:

1. Undertake reporting in accordance with the procedures listed in the **CVC WHS Hazard / Incident Reporting Guidelines**
2. If required, evacuate the site
3. Contact Operations Engineer (**0419 206 427**) and/or Manager Water Cycle (**0428 112 982**)
4. Report the incident to Human Resources WHS Unit (**0427 569 899**)

### 2.2.2 Pollution incident

During a pollution incident which involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, Clarence Valley Council must notify the following authorities immediately:

1. Immediate supervisor
2. EPA Environment Line (written report to be provided within 7 days) **131 555**
3. NSW Health **1300 555 555 (Pager 149377)**
4. Work Cover **131050**
5. CVC Environmental Health Officer **(02) 6643 0200**
6. Fire & Rescue **000**

Clarence Valley Council are also to consider contacting the following as soon as practical:

1. The staff member’s Supervisor and Manager
2. Affected neighbours
3. Fisheries **1800 043 536**
4. Chemical supplier **Refer to the MSDS**

For details of other contacts that might be required see Section 7.5

In all situations where there is damage and/or loss to private property or a member of the public due to an incident related to this plan contact:

- Council’s Governance Coordinator, or **(02) 6641 7203**
- Council’s Insurance & Risk Officer **(02) 6641 7205**

All communications with emergency response agencies due to incidents that apply to this plan must be made through either the **Manager Open Spaces & Facilities** or **Holiday Parks & Saleyards Officer**.

The incident response required depends on the type of incident that has occurred. The following is a list of Council documents to be implemented in the event of a related incident:

- **CVC – Water Cycle Standard Operating Procedures – Pollution Incidents**
- **CVC – Clean Up Oil Spillages (SWMS 088)**
- **CVC – Incident Reporting (SWMS 064)**

## 2.3 Community notification

Impacts on the community due to sewage distribution and treatment incidents are variable and depend on location, volumes of spills or other factors. Communication methods will be used on a case by case basis and in all situations Clarence Valley Council will attempt to provide early warning to directly affected premises (either upstream or downstream depending on tidal impacts where relevant) by phone call or site visit. Early warning is to include details of what the incident is, how those affected can prepare and respond, and provide important advice such as avoiding contact and use of affected waterways.

Where early warning is not possible Clarence Valley Council will provide notification and communication during and after an incident to advise those affected with information, advice and updates. Notification and communication methods will be determined on a case by case basis and the following methods may be used:

- Phone calls
- Media releases (radio/television/newspaper/internet/social media as required)
- Site visits/door knocking
- Letter drops
- Warning signs
- Other methods as the situation requires

In the event of a sewage spill into stormwater or waterway, Clarence Valley Council staff will go to prominent and/or high use areas of the affected waterway and erect signage. The signs are to warn water users of the contamination and advise them to avoid activities such as swimming, fishing, shell fish collection and boating until contamination has cleared. Additionally, if the event occurred or was occurring during dry weather, Clarence Valley Council staff are to attend popular sites and advise users directly.

Contaminated land is to be disinfected, ponded sewage pumped out and faecal coliforms are to be monitored until background levels are reached.

Regular communication and notification is to be provided until the incident and clean up of impacted site and affected areas has been complete (e.g. faecal coliforms have returned to background levels). Clarence Valley Council is to take signs down and advise the public that regular activities can be resumed by (as required):

- Phone calls
- Media releases (radio/television/newspaper/internet/social media as required)
- Letter drops
- Other methods as the situation requires

### **2.3.1 Incidents at the Sewage Treatment Plant**

The Grafton Regional Saleyard is located on Armidale Road in an industrial area approximately 3km from the centre of South Grafton. The nearest neighbour is the Motel 5 located about 150 metres south of the treatment plant. The fall of the land is such that a spillage or overflow from the treatment plant would not pose any threat to the motel or its guests.

On the other (West) side of Armidale Road is the site of the former Grafton abattoir, which is no longer in operation.

To the north of the treatment plant is a vacant paddock and a Liquid Petroleum Gas plant operated by Origin Energy. Behind the saleyard to the East is a transport company's premise. The ground here is significantly higher than the treatment plant and there is little possibility that this area would be affected by any incident at the Treatment Plant.

The main concern in the event of overflow from the Saleyard Treatment Plant is the potential for contamination of Musk Valley Creek, located to the West of the saleyard on the other side of Armidale Road. This Creek flows into Alipou Creek which in turn discharges into the Clarence River at a point approximately 150 metres to the East of Grafton Bridge.

If an incident occurred that had the potential to affect any community members or neighbours the processes listed for Community notification above would be implemented as required.

## 2.4 Incident Investigation

All emergencies must be investigated. For all other incidents, the manager (with guidance from review personnel) will decide whether an incident investigation will be conducted. When an incident investigation is required, the relevant manager is responsible for:

- Forming the investigation team.
- Co-ordinating the investigation.

Note: Council's WHS Unit has incident procedures and documentation which should be used when conducting the investigation.

A de-brief is to be conducted for all emergency incidents. However, the responsible Manager may also initiate de-briefs for other incidents and/or near misses where they feel it is appropriate.

## 2.5 Pre-emptive Measures

### 2.5.1 Physical and preventative measures

Management of the saleyard treatment plant is focussed on avoiding a pollution incident. Risk analysis indicates that the most likely pollution scenario is overflow of the holding pond in heavy rainfall.

Run off from the yard passes first into the holding pond before being pumped into the treatment plant itself. An automated system to bypass the pond after 20mm of rainfall was disabled because it was not capable of handling all variables. Bypass is now initiated manually in accordance with documented criteria. Preventative measures include:

- Regular inspections of the plant to ensure that no leakage is occurring.
- Ensuring the pond level is kept as low as possible to maximise capacity to accommodate heavy rainfall.
- Initiate manual bypass of the treatment plant when rainfall has exceeded 20mm and no cattle are in the yard.
- Monitor weather conditions and consider cancelling an upcoming sale if there is the possibility of prolonged heavy rainfall when cattle will be in the yard.
- An off site alarm has been installed to alert Council staff of a high pond level.

No chemicals are kept within the treatment plant. The use of Aluminium Sulphate as a flocculent was discontinued after it was found to be ineffective for the type of material being treated. Any liquid caused to overflow from the pond due to heavy rainfall would be significantly diluted, both by rain flowing into the pond itself and by rain falling upon any area likely to be contaminated by overflow.

In the event that these systems fail, Clarence Valley Council has portable bypass pumps and other containment options available.

Currently there is no provision for connection of emergency power. There is sufficient reserve storage capacity to cope with an extended power outage. In the event that this is not the case portable stand alone pumps will be deployed.

### 2.5.2 Preventative monitoring and maintenance

Clarence Valley Council uses monitoring and preventative maintenance to reduce the potential for incidents at the STP. Details of regular operational/maintenance activities are provided below;

**Table 1 – Preventative Maintenance Activity and Monitoring Frequency**

Activity	Frequency
<b>Sewage Treatment Plant</b>	
Operate the STP as per operation and maintenance procedures	Daily
Regular inspection of tanks, pumps and pipework	Daily
Monitor pond high level alarm	Daily
Remove sludge from holding pond	Annually or as required
Visual check of pumping operations	Weekly
Maintain Treatment Plant area free from weeds & garbage	Ongoing
Service pumps	Annually (minimum)
Electrical inspections of pump controls	Annually
Pump refurbishments	Determined by service reports
Pump replacements/upgrades	Determined by service reports

### 2.6 Training

All staff required to implement this plan and associated documents must have training in its use and be inducted into it. This is to ensure they are aware of the content, processes and requirements of this plan and can competently implement it if necessary. In the event of a significant incident, an investigation and debrief will be conducted, documentation updated (if required) and staff will be re-inducted.

All incidents are to be registered into Council's ECM (electronic record management system), and training records will be sent to Human Resources WHS Unit for filing.

### 3. Responsibility

Manager Open Spaces & Facilities is responsible for the implementation of this Plan.

### 4. References

1. *EPA NSW Environmental Guidelines: Preparation of pollution incident response plans*
2. *Local Government Act 1993*
3. *Protection of the Environment Operations Act 1997*
4. *Protection of the Environment Operations (General) Regulation 2009*
5. *Public Health Act 2010*

## 5. Dictionary

**Pollution incident:** means an incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise (see the POEO Act 1997).

**Harm to the environment:** harm to the environment is material if:

- (i) it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or
- (ii) it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (or such other amount as is prescribed by the regulations), and

**Loss:** includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.

## 6. Table of Amendments

Amendment	Authorised by	Approval reference	Date

## 7. Appendices

### 7.1 Appendix 1 - Site Plans

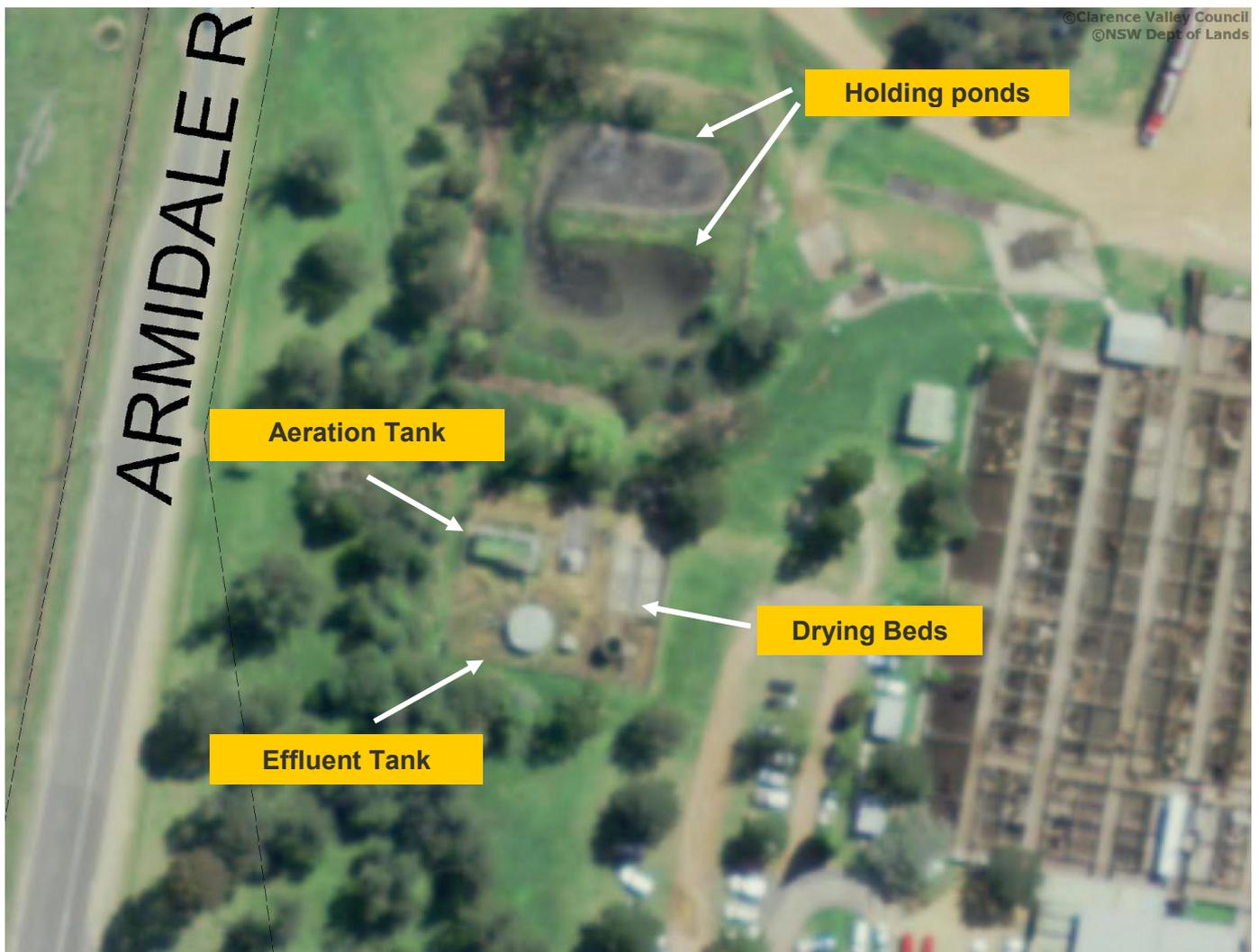


Figure 1 - Grafton Regional Saleyard Treatment Plant Site Plan

## 7.2 Appendix 2 - Site Chemical Register

Date of register: June 2016

**Table 2 – Site Chemical Register**

<b>Chemical Name</b>	<b>Manufacturer</b>	<b>Maximum Volume of Chemicals Stored</b>	<b>Location Where Chemical is Stored</b>
Unleaded petrol	CALTEX	30 L	Shed
Hand Cleaner	SEPTONE	5 L	Office
Glyphosate	ROUNDUP	20 L	Shed
Disinfectant	TRUE BLUE CHEMICALS	25 L	Shed
Cleaner / Deodorant	JASOL	20 L	Shed

### 7.3 Appendix 3 - Personal Protective Equipment

This section list the standard PPE items required.

#### Sewage Treatment Plant

The following items are to be kept at the Grafton Saleyard Treatment Plant:

- Ear/hearing protection
- Sun screen
- Rubber Gloves
- Goggles
- Gumboots
- Steel capped Boots

#### Sewerage reticulation response truck

The following items are to be kept on the sewerage reticulation response truck:

- Asbestos kit
- Goggles/eye protection
- Hearing protection
- Apron/disposable overalls
- Rubber gloves
- Gumboots

## 7.4 Appendix 4 - Risk assessments and actions

No	Risk	Impact	Risk LxC = Rating	Controls
<b>Saleyard Treatment Plant</b>				
1	Pond overflow due to heavy rainfall	Land contamination, possibly enter a waterway	C2 = M	<ul style="list-style-type: none"> <li>Monitoring of expected weather</li> <li>Spare capacity in holding ponds</li> <li>Monitoring and maintenance</li> <li>Pre-emptive measures see Section 2.5 Pre-emptive Measures</li> </ul>
2	Sewage overflow due to power failure	Land contamination, possibly enter a waterway	B2 = L	<ul style="list-style-type: none"> <li>Lightning protection</li> <li>Back up generators, priorities provided in CVC's Sewer System EMP</li> <li>Pre-emptive measures see Section 2.5 Pre-emptive Measures</li> </ul>
3	Sewage overflow due to storm damaging infrastructure	Land contamination, possibly enter a waterway	A2 = L	<ul style="list-style-type: none"> <li>Lightning protection</li> <li>Pre-emptive measures see Section 2.5 Pre-emptive Measures</li> </ul>
4	Sewage overflow due to Treatment plant blockages or damage	Land contamination, possibly enter a waterway	C2 = M	<ul style="list-style-type: none"> <li>Spare capacity in holding pond</li> <li>Monitoring and maintenance</li> <li>Pre-emptive measures see Section 2.5 Pre-emptive Measures</li> </ul>
5	Sewage overflow due to SCADA/Communications failure	Land contamination, possibly enter a waterway	A2 = L	<ul style="list-style-type: none"> <li>SCADA testing and alarming</li> <li>Monitoring of SCADA signal issues</li> <li>Pre-emptive measures see Section 2.5 Pre-emptive Measures</li> </ul>
6	Sewage overflow due to Infrastructure failure (e.g. due to age)	Land contamination, possibly enter a waterway	B2 = L	<ul style="list-style-type: none"> <li>Regular inspection of infrastructure</li> <li>Maintenance and renewal programs</li> <li>Pre-emptive measures see Section 2.5 Pre-emptive Measures</li> </ul>
7	Sewage overflow due to Mechanical break down/dual pump failure	Land contamination, possibly enter a waterway	B2 = L	<ul style="list-style-type: none"> <li>Maintenance and inspection programs</li> <li>Spare capacity in holding pond</li> <li>Monitoring and maintenance</li> <li>Pre-emptive measures see Section 2.5 Pre-emptive Measures</li> </ul>

Likelihood	Consequences	Rating	Likelihood					
			Consequence	A	B	C	D	E
A <b>IMPROBABLE</b> - May occur only in exceptional circumstances	<b>1. INSIGNIFICANT</b> - No injuries, minimal level of pollution, Employee grievances dealt with on site, Loss <5% of job cost, service, business failure resulting in delay < 1 week and costs, plant/equipment loss < \$1,000 <b>2. MINOR</b> - First aid treatment, limited/localised impact, Employee grievances dealt with by senior management, loss 5-10% of job cost, business failure resulting in delay < 1 month and costs, plant/equipment loss < \$10,000 <b>3. MODERATE</b> - Medical treatment & several days off work, significant pollution requiring outside assistance, Employee grievances taken to the union, loss 10-20% of job cost, non-compliance with legislation/Licence conditions, business failure resulting in delay < 3 months and costs, plant/equipment loss < \$50,000 <b>4. MAJOR</b> - long term illness/serious injury, significant pollution requiring outside assistance & long term environ damage, threatened industrial action, loss 20-70% of job cost, loss of production capability, order placed on Council by Authorities, business failure resulting in delay < 6 months and costs, plant/equipment loss < \$100,000 <b>5. CATASTROPHIC</b> - Death or permanent disability/illness, serious permanent environmental damage, Actual industrial action, loss >70% of job cost, potential prosecution by Authorities, business failure resulting in delay > 6 months and costs, plant/equipment loss > \$100,000	L = Low						
B <b>REMOTE</b> - Could occur at some time		M = Medium						
C <b>OCCASIONAL</b> - Might occur at some time		H = High	1	L	L	L	M	H
D <b>FREQUENT</b> - Will probably occur in most circumstances		V = Very High	2	L	L	M	H	V
E <b>CONTINUOUS</b> - Is expected to occur in most circumstances		X = Extreme	3	M	M	H	V	X
<b>Refer also to Councils Hazards, Risks and Controls Guidelines</b>		4	H	H	V	X	X	
		5	V	V	X	X	X	

Title	Doc No	Version	Author	Reviewer	Approver	Approval Date
Saleyard STP		2	Chris Moran	Julie Schipp	Peter Birch	June 2016

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## 7.5 Appendix 5 - Action plans to minimise harm

To minimise the risk of sewage overflows Clarence Valley Council has in place a number of management actions comprising one or more of the following:

- Dry sweeping of yards to minimise animal faeces in yard run off
- Further detailed investigation of risks
- Regular dredging of the holding pond
- Planned Renewal of Existing Assets
- Increased Telemetry Monitoring of the Treatment Plant
- Continuous Improvement of Sewerage System Operations
- Emergency Response Procedure to Power Failures
- Incident Response Protocol

## 7.6 Appendix 6 - Additional Emergency Contacts

<b>AMBULANCE</b>	<b>000</b> 6643 1765
<b>FIRE BRIGADES</b>	<b>000</b>
SOUTH GRAFTON	6642 7655
GRAFTON	6643 3491
<b>POLICE STATIONS</b>	<b>000</b>
GRAFTON	6642 0222
<b>RURAL FIRE SERVICE</b>	<b>000</b>
ULMARRA OFFICE	6644 5135
<b>STATE EMERGENCY SERVICES (SES)</b>	<b>132500</b>
CLARENCE NAMBUCCA REGION OFFICE	66 416900
ROSS BLEWETT (LOCAL CONTROLLER)	0403 395 686
<b>HOSPITALS</b>	
GRAFTON	6640 2222
<b>ROADS &amp; MARITIME AUTHORITY (RMA)</b>	<b>66 401300</b>
SOUTH GRAFTON	66 401064
AFTER HOURS EMERGENCY	1800 644 116
TRANSPORT MANAGEMENT CENTRE	131700
<b>ELECTRICITY (ESSENTIAL ENERGY)</b>	<b>132080</b>
<b>MEDIA</b>	
THE DAILY EXAMINER	6643 0500
THE CLARENCE VALLEY INDEPENDENT	6646 9466
RADIO 2GF	6642 2766
ABC RADIO NORTH COAST	6627 2011
<b>WIRES</b>	<b>6643 4055</b>
<b>WORKCOVER</b>	<b>131050</b>
Dave Davies	6659 1700 0427 000 623
<b>LOCAL EMERGENCY MANAGER OFFICERS</b>	
Kieran McAndrew	0417 690 543
Matt Davidson (Alternate)	0429 660 136