Pollution Incident Response Management Plan:

Northern Rivers Livestock Exchange, Recycled Effluent, Sludge handling and Reuse System

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1. Introduction

This plan has been developed to document the processes required to prepare for and respond to pollution incidents for the Casino Saleyards, recycled effluent, sludge handling and Reuse System (EPA Licence No. 3878). To ensure that hazards to the environment, human health and safety are reduced, if not eliminated. It has been prepared in accordance with the requirements contained in section 153C of the *Protection of the Environment Legislation Amendment Act 2011* and the details prescribed by the POEO Protection of the Environment Operations (General) Regulation 2009.

The plan must include the following requirements;

- Description and likelihood of hazards (Sections 2.1 Potential Incidents and 7.4 Appendix 4 - Risk assessment)
- Pre emptive actions to be taken (Section 2.5 Pre-emptive Measures)
- Inventory of pollutants (Section 7.2 Appendix 2 - Site Chemical Register and EPA Licence No. 3878, Online at http://www.environment.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=29371&SYSUID=1&LICID=3878 note no identified pollutants in licence)
- Safety Equipment (Section 7.3 Appendix 3 - Personal Protective Equipment List)
- Contact details (Sections 2.2.2 External Contacts and 2.2.3 Internal Contacts)
- Communications with adjoining properties and the community (Sections 2.2.5 Strategic phone calls to occupiers including and 2.3 Community notification)
- Minimising harm to persons on the premise (Sections 7.5 Appendix 5 - Action plans to minimise harm and 7.6 Appendix 6 – SWMS WSC17 (v1) - Environmental Accident - Procedure)
- Maps (Section 7.1-Appendix 1 - Site Plans)
- Actions to be taken during or immediately after pollution incident (Section 2.2 Incident Response)
- Staff training (Section 2.6 Training)

Online details can be found at http://www.environment.nsw.gov.au/legislation/faqspubpmdata.htm.

Document History

Version	Date	Author	Description of Change
1.1	23/07/2014	Latoya Cooper	Update of External Contacts & Internal Role Clarification
1.2	13/07/2015	Fran Ryan	Update contact details & Department names etc., Test details noted
1.3	13/01/2017	Fran Ryan	Update contact details and hazardous chemicals register
1.4	17/07/2017	Fran Ryan	Update 2.5.2 Preventative Monitoring & maintenance
1.5	30/07/2019	Fran Ryan	Update 2.2.3 Internal Contacts

Approvers List

Name	Role	Approval / Review Date
Fran Ryan	Saleyards Administrator	23/07/2014
Fran Ryan	Saleyards Administrator	4/09/2015
Fran Ryan	Saleyards Administrator	31/07/2018
Fran Ryan	Saleyards Administrator	30/07/2018

Test

Date	Aspects Tested	Personnel Involved
23/07/2014	External Contact & Internal Role Clarification	Latoya Cooper
17/07/2015	Contacts, reporting & incident response procedures	Fran Ryan, Max Sudiro
18/08/2016	Contact, reporting & incident response procedures.	Fran Ryan, Max Sudiro
17/07/2017	Contacts, reporting & incident response procedures, as well as monitoring.	Fran Ryan, Max Sudiro
31/07/2018	Internal contacts, reporting procedures	Fran Ryan, Max Sudiro
29/7/19	Blockage causing sewage overflow, internal procedures, contacts & reporting procedures	Fran Ryan, Brad Willis

The objective of the test is to verify that the functionality of the Pollution Incident Response Management Plan is according to the specifications in this document.

The test will execute and verify the contact details, mapping information, description and likelihood of hazards, pre-emptive actions to be taken, inventory of pollutants, safety equipment, communications with adjoining properties and the community, minimizing harm to persons on the premise, actions to be taken during or immediately after pollution incident and a record of staff training.

1.1 Scope

This Pollution Incident Response Management Plan applies to Casino Sale Yards (EPA Licence No. 3878). Online at http://www.environment.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=29371&SYSUID=1&LICID=3878

For site plans, refer to Section 7.1 Appendix 1 - Site Plans.

1.2 Background

The Saleyards at Casino have a potable water system for cooling and watering cattle as well as human amenities which are a separate supply system (**Section 7.7 -Appendix 7- Reticulation and Treatment Schematics**). There is also a wastewater reuse system (**Section 7.7 -**Appendix 7- Reticulation and Treatment Schematics) which provides water for;

- Truck wash down bay,
- Irrigation system and
- Cleaning as yard flushing.

The excess water and livestock waste flows into the treatment pond system (**Section 7.7 -Appendix 7- Reticulation and Treatment Schematics**). The treatment pond system historically was the original dam with sections added to create two sedimentation lagoons and a facultative pond that is segregated to form a polishing pond. The system is designed to provide a water quality typically meeting upper limits of 30mg/L (milligrams per litre) NFR (non filterable residue) and 20mg/L BOD (biological oxygen demand) from the polishing pond. The waste water from the polishing pond is chlorinated before reuse in the system (**Section 7.7 -Appendix 7- Reticulation and Treatment Schematics**).

The additions in 2010 of a surface aerator have increased the capacity of the treatment pond system to degrade organics. The surface aerators also have the benefit of reducing algal blooms due to mixing thermoclines (i.e. thermoclines reduce temperature and light availability due to stratification of the water column), and a reduction in nutrient availability (i.e. nutrients react with oxygen and change chemical forms which restricts availability for utilisation in algae growth) by increasing dissolved oxygen (DO) in the wastewater (Water Directorate, 2009).

The process of treatment for the wastewater occurs as the wastewater moves through the treatment pond system, where large particles drop out of the solution, then smaller particles, under the influence of gravity. These particles are then utilised by microscopic bacteria (aerobic - oxygen utilising bacteria and anaerobic – without oxygen) as a food source decomposing the particles as the waste water moves through the series of treatment ponds. The decomposed particles or organic matter (OM) finally settles at the bottom of the lagoons forming sludge. The sludge fills the lagoon over time and requires removal from the system to ensure system health. Currently removal is three times every 2 years.

The sludge is removed by excavator from the ponds (after initial dewatering and drying) in an alternate manner, allowing the system to continue to receive the waste from the saleyards while one pond is offline. The dry solids are then transported to a stockpiling area located on site. Part of the current licence conditions PRP is an application of 250 kL per day (liquid or solid) (EPA licence, 2006) which equates to 250 tons per day of solid material.

2. Pollution Incident Response Management Plan

The town of Casino has a Northern Rivers Livestock Exchange known as the Casino Sale Yards, the Saleyard site at Casino is located on Dargaville Drive with a land size of 44.12 hectares (100 acres approximately) and is displayed in Section 7.1 Appendix 1 - Site Plans.

During waste treatment, chemicals and by-products are produced which, if they are spilt or incorrectly managed, may contaminate the environment or threaten human health. A register of the chemicals is contained in Section 7.2 Appendix 2 - Site Chemical Register.

2.1 Potential Incidents

The potential hazards to the environment include:

- Animal Waste Effluent overflow (raw or partially treated) – potentially caused by:
  - Storms (lightning/heavy rainfall/wind) causing infrastructure damage
  - Reticulation blockages
  - Damage to reticulation (contractors or other damage during excavations etc)
  - Infrastructure failure due to age
  - Excessive flows
  - Mechanical break down
- Chemical spill – potentially caused by
  - Tank/storage failure
  - Delivery incident
  - Damage to chemical reticulation
  - Vandalism
  - Inappropriate chemical use
  - Bund failure

Other potential environmental risk factors for K100 animal waste are:

- The possibility of the spread of infectious disease prevalent in cattle and the possibility of cattle diseases to infect different species (i.e. crossing of species barrier) (DPI, 2007; DEC, 2004, ROU, 2003 & SCARM, 2002). Notably the incidence of disease crossing species barriers is unlikely with no reported cases of infection (DPI, 2007).
- Contamination of groundwater (i.e. creek systems) with nutrients and salts (DEC, 2004 & DWE, 2002).
- Contamination of weeds from germination of seeds in SSS (DEC,2004 & ROU, 2003)
- Build-up of salts in soils i.e. field sodification (salinity-salt accumulation) from application (testing for salinity on a 3 yearly basis) (DEC, 2004; ROU, 2003 & SCARM, 2002).
- Surface runoff and groundwater storage (ANZECC, 1995).

A detailed assessment of risks is provided in Section 7.4 Appendix 4 - Risk assessment and Risk Controls adverse (hazardous) affects evaluated utilising a risk management framework (RVC, 2005). For detail on actions to reduce risks see Section 2.5 Pre-emptive Measures and Section 7.5 Appendix 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 24 hour emergency number for Richmond Valley Council is (02) 6660 0300

During working hours, these calls are taken by staff on the Richmond Valley Council Switch. If the call is after hours, the call is redirected to SNP Security, who informs appropriate personnel of issues and incidents

Council also has the Richmond Valley Local Disaster Plan (DISPLAN) which has been prepared by the Richmond Valley Local Emergency Management Committee in compliance with the State Emergency and Rescue Management Act, 1989 (as amended), Section 29 (1) the plan details can be found online at http://www.richmondvalley.nsw.gov.au/content/Document/A-Z/RVBushFireRiskManagementPlan.pdf

http://www.richmondvalley.nsw.gov.au/page/A-Z_of_Services/Emergency_Management_Arrangements/

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. Implement the ***Health and Safety*** Procedures
2. If required, evacuate and restrict entry of the site for subsequent Workcover inspection
3. Contact Richmond Valley Council Incident reporting (6660 0300) immediate supervisor and manager (internal and external contacts list below 2.2.2 and 2.2.3).

2.2.2 External Contacts

Emergency Services	000
Environment Protection Authority	13 15 55
Public Health Unit – Lismore	6620 7585 (0417 244 966 a/h)
Richmond Valley Council	6660 0300
Essential Energy	13 20 80

2.2.3 Internal Contacts

Director of Infrastructure and Environment – Angela Jones Mobile 0415 299 192 or Phone 6660 0262

Manager Infrastructure Services – David Timms Phone 6660 0273 or Mobile 0475 959 715

Manager NRLX – Bradley Willis Mobile 0408 203 654

Casino Saleyards Administrator– Frances Ryan 02 6660 0268 or Mobile 0455 095 364

2.2.4 Pollution incident

During a pollution incident which involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial, Richmond 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.	Public Health Unit – Lismore	**6620 7585 (0417 244 966 a/h)**
	Infection & Disease -	**0439 882 752**
	Environmental Health -	**0428 882 805**
4.	Richmond Valley Council	**6660 0300**
5.	Essential Energy	**13 20 80**
6.	Work Cover	**13 10 50**
7.	RVC Environmental Health Officer	**(02) 6660 0300**
8.	Fire & Rescue	**000**

Richmond Valley Council should also consider contacting the following as soon as practical:

1. The staff member's Supervisor, Coordinator and Manager
2. Affected neighbours **Refer to Section 2.2.5**
3. Chemical supplier **Refer to the SDS**
4. Boolangle Aboriginal Land Council **(02) 6662 6286**
5. Police **(02) 6662 0099**

2.2.5 Strategic phone calls to occupiers including

DTM Timber -	6662 2722
Northern Rivers Livestock Exchange -	6662 6403 or 6660 0300
Riverina Stock Feed -	6662 7400
Richmond Valley Council -	6660 0300
Northern Co-operative Meat Company-	6662 2444

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 Risk Coordinator, or **(02) 6660 0300**
- Governance Officer (Risk) **(02) 6660 0300**

All communications with emergency response agencies due to incidents that apply to this plan must be made through either the Saleyards Administrator or **Manager Infrastructure Services**.

The incident response required depends on the type of incident that has occurred. The following is the safe work method statements to be implemented in the event of a related incident:

- Richmond Valley Council **–*Section* 7.6 Appendix 6 WSC17 (v1) - Environmental Accident – Procedure**

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 Council will attempt to provide early warning to directly affected premises (either upstream or downstream) 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 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 chemical or waste spill into stormwater or waterway, Council staff are to 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 and boating until contamination has cleared. Additionally, if the event occurred or was occurring during dry weather, Council staff are to attend popular sites and advise users directly.

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). 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

Additionally it is Richmond Valley Council policy that no person other than:

The CEO can authorise or divulge any information to the media. Any form of contact from the media should be referred to those mentioned above under all circumstances. Should any staff be approached by media representatives for comment, the staff member must refer them to the CEO or the person authorised to speak on their behalf such as a media officer.

2.3.1 Incidents at the Casino Sale Yards

The township of Casino is approximately 2 km away from the Casino Sale Yards. The nearest neighbour from the Casino Sale Yards is approximately 500 metres uphill and is the Council's Casino landfill. There is nothing onsite that would create an emergency for any neighbours. Additionally, the inflow into this plant and the available storage means that even at peak wet weather flows the potential of an overflow from this plant reaching Richmond River (approximately 1km away) is low. However, if an incident did occur and any community members or neighbours were affected then the processes listed in Section 2.3 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: The *Section* 7.6 Appendix 6 WSC17 (v1) - Environmental Accident – Procedure should be used when an incident occurs.

2.5 Pre-emptive Measures

2.5.1 Physical and preventative measures

First priority for pre-emptive measures is to eliminate substances that can become potential pollutants. If this is not possible, physical barriers should be installed to prevent pollutants from entering the environment such as bunding and spill drainage containment. At the Casino Sale Yards, all chemical storages are bunded to ensure that if the storage fails the pollutant is contained and treatment processes with retaining bunding are installed to prevent nutrient escape into the wetland system due to flooding or process issues.

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

2.5.2 Preventative monitoring and maintenance

Council uses monitoring and preventative maintenance to reduce the potential for incidents at the Casino Sale Yards contained in the Northern Rivers Livestock Exchange Re-circulation System (Regional Saleyards Wastewater Management System Operation and Maintenance Manual, 1999)

These are separated in the following timeframes:

- Daily
- Weekly
- Monthly to Annually
- Longer term (capital works and maintenance programs)

Irrigation & flow meter records

- Weather conditions, rainfall reading, including time of reading & total of today's & yesterday's rainfall
- Pond level, free of ground animals, irrigation station numbers, flowmeter reading & start time
- Sprinklers rotation & spray is correct & acceptable, free of leaks & no spray drift offsite
- Within 2 hours of commencement of irrigation, re check time, free of ground animals, sprinklers ore rotating & spray is correct & acceptable, as well as free of leaks & spray drift offsite.
- After completion, record finish time, pond level & flow meter reading.

Daily

The below are daily checks which take place to ensure compliance with EPA licence.

- Sedimentation lagoons free of overflows, sludge is not excessive, which lagoon is in service
- That the pipe to the lagoon is free of blockages & leaks/blow outs
- That the stormwater bypass channel water level is not excessive
- That the irrigation area is free of water leaks

Weekly

The Casino Sale Yards are to be attended on week days and the following inspections are to occur weekly:

- The effluent collection pipe & open drains are free of blockages & leaks
- The sedimentation lagoons are functioning correctly
- The stormwater bypass channel is clear, no excessive sediment & vegetation is under control
- The effluent pond condition: walls are intact, connection pipes clear & sludge not excessive
- The irrigation areas are free of unwanted growth
- Maintenance requirements
- Chemical quantities
- Housekeeping issues that require attention
- Vandalism and/or thefts
- Issues with bunds
- Check bund valves are closed.

Monthly to Annually

The following is to be checked monthly for the reticulation and drying beds:

- Drainage channels.
- Chlorination dosing.
- Stockpiles

The following is to be checked or conducted every three months:

- All valve operations - exercising, maintenance
- Spray and exercise locks

The following is to be checked or conducted every six months:

- Backup Batteries - (December)
- Fire Extinguishes
- Irrigation/Sprinkler System - inspection
- Overflow Plugs - inspection
- Vermin/Insect Protection

The following is to be checked or conducted annually:

- Lopping and pruning of trees
- Painting
- Reticulation System Performance Testing
- Team Training - New Technologies and Upgrades
- Bund integrity

Other checks include inspection, maintenance, repair and resealing (as required) safety net checks (bi-annually), renewing woodchips and gravel (as required) and inspecting and exercising Overflow points (after heavy rainfall).

2.5.3 Pre-emptive documentation

Reticulation blockages, breaks or distribution issues can result in spills if not acted upon. Therefore the following procedures and SWMS are to be used to address issues and before overflows occur:

- **WSC17 (v1) - Environmental Accident**
- **Northern Rivers Livestock Exchange Re-circulation System (Regional Saleyards Wastewater Management System Operation and Maintenance Manual, 1999)**
- ***Environmental Management Plan GeoLINK, 1997 ..\..\..\Saleyards\Environmental Management Plan.pdf***

2.6 Training

The management aim is to ensure that all staff; are competent in key functional areas, ongoing training will be provided and the currency of training is monitored throughout their period of employment with Richmond Valley Council.

Records of training currency are maintained by the Councils Human Resources (HR) section. HR tracks expiry dates and arranges appropriate training as necessary and annual employee reviews are conducted to identify all required training needs.

Specific site related training includes:

- Chemical users and handling certificates
- Drummuster inspection training

- First aid

Richmond Valley Council ensure all staff are trained in general and site specific Safe Work Method Statements.

Daily tool box meetings are undertaken for waste disposal staff and tool box meetings from waste collection staff are undertaken where possible.

Mock emergency response training events are held annually. These events are utilised to demonstrate readiness and refine responses to a specific scenario for which an Emergency Scenario Response has been documented. De-briefing after the training event allows for further staff consultation and procedural refinement of the response.

Additionally all new Richmond Valley Council Waste employees shall be trained in the application of the Pollution Incident Response Management Plan.

3. Responsibility

Executive Manager Infrastructure and Environment is responsible for the implementation of this Plan.

4. References

- EPA NSW Environmental Guidelines: Preparation of pollution incident response plans
- Local Government Act 1993
- Protection of the Environment Operations Act 1997
- Protection of the Environment Operations (General) Regulation 2009
- Public Health Act 1991
- Water Administration Act 1986

Note: Legislative details can be found at
http://www.environment.nsw.gov.au/legislation/faqspubpmdata.htm.

Also see www.environment.nsw.gov.au/pollution/notificationprotocol.htm

Amended by the Protection of the Environment Operations (General) Amendment (Pollution Incident Response Management Plans) Regulation 2012
www.legislation.nsw.gov.au/sessionalview/sessional/sr/2012-54.pdf

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

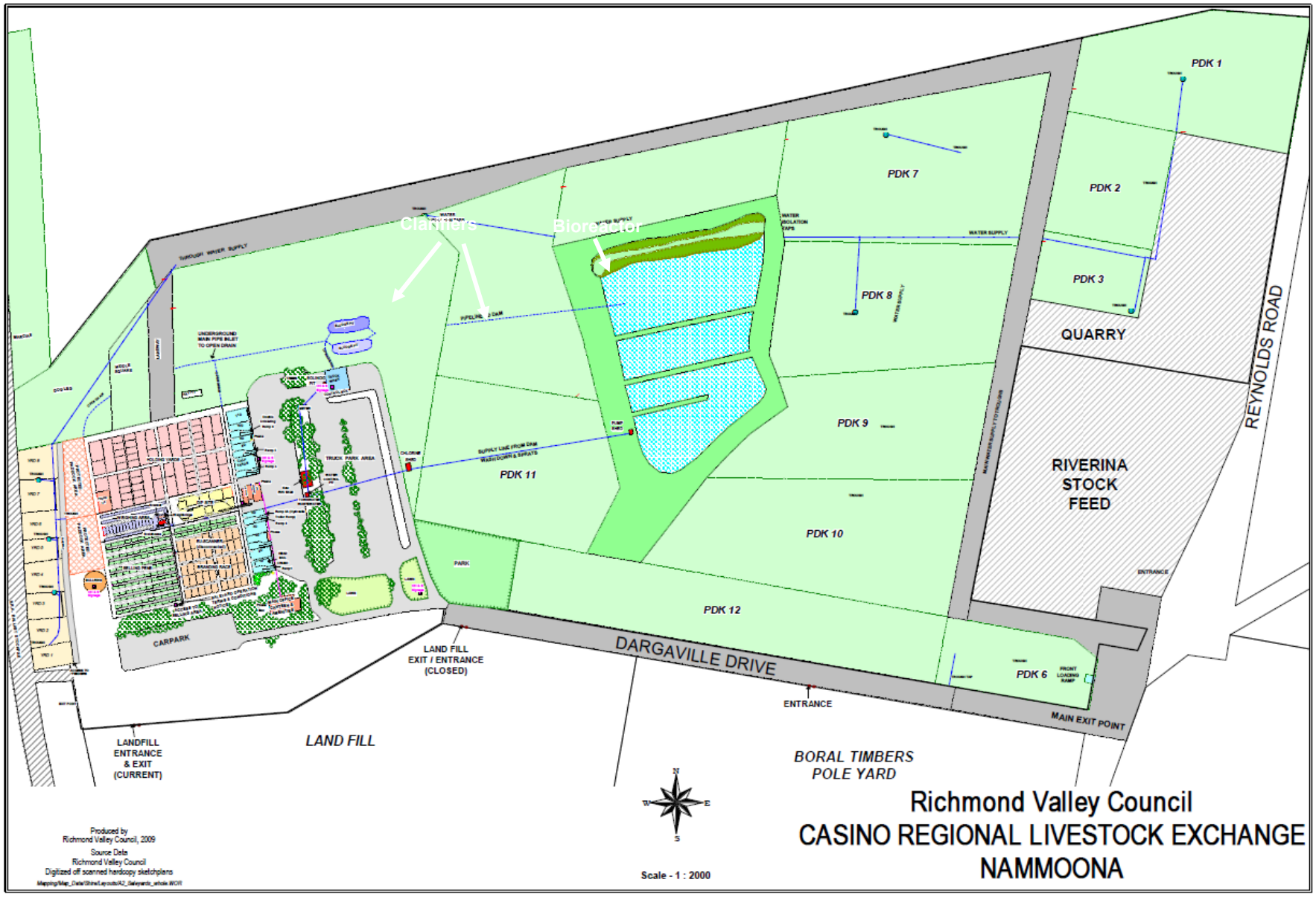
Amendment	Authorised by	Approval reference	Date

7. Appendices

- Appendix 1 - Site Plans
- Appendix 2 - Site Chemical Register
- Appendix 3 - Personal Protective Equipment
- Appendix 4 - Risk assessments and actions
- Appendix 5 - Action plans to minimise harm
- Appendix 6 – SWMS WSC17 (v1) - Environmental Accident - Procedure
- Appendix 7- Reticulation and Treatment Schematics

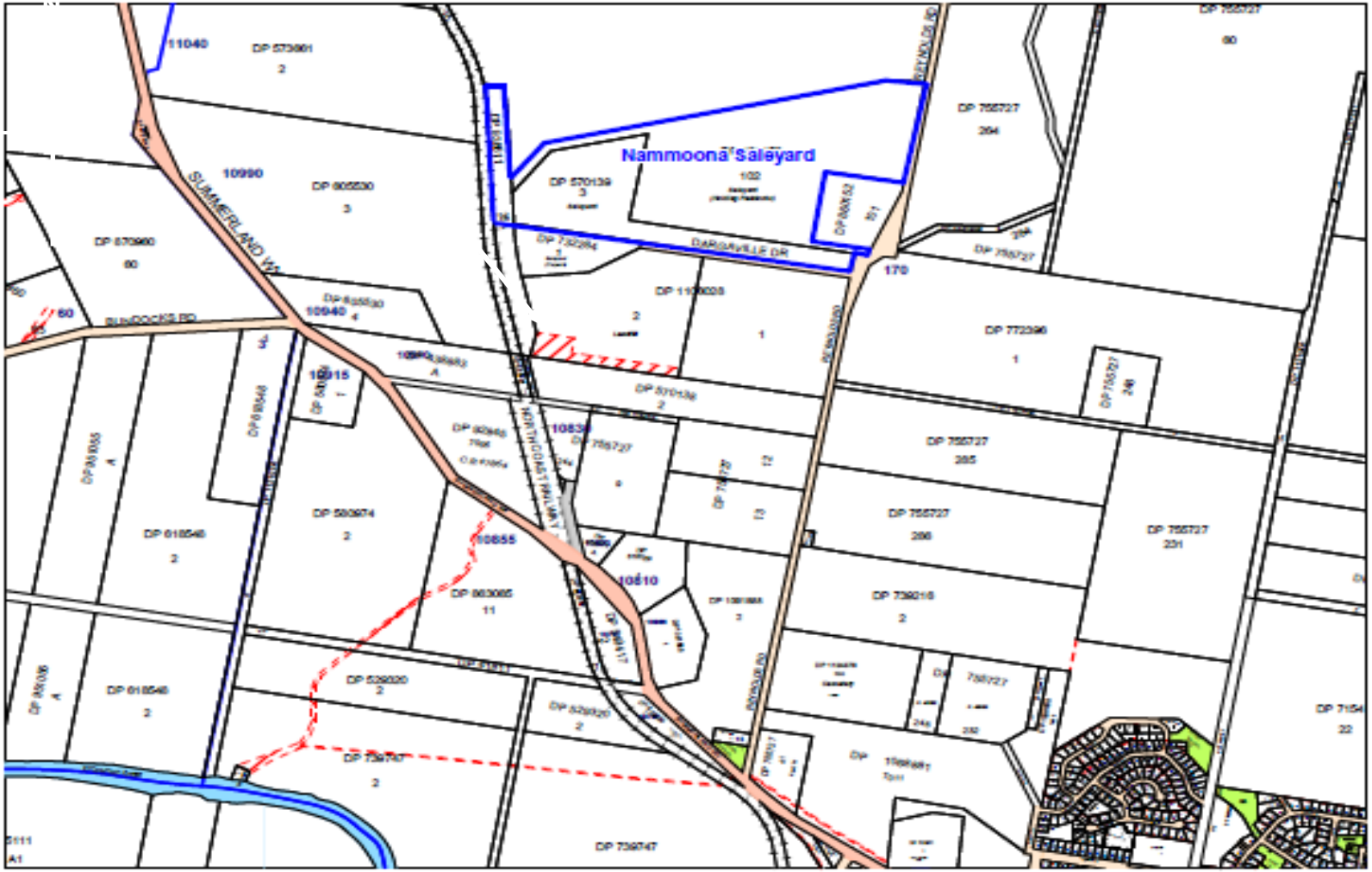
7.1 Appendix 1 - Site Plans

7.1.1 Casino Sale Yards



7.1.2 Richmond Valley Council Local Government Area (Source: Hydrosphere Consulting, 2010)

7.1.3 Casino Saleyard Location Map (Marchant 2011)



7.2 Appendix 2 - Site Chemical Register - Date of register: 2007 See Hyperlink documents below

Saleyard Chemical Register.pdf

Saleyard Chemical Register 2.pdf

Exert of register below

HAZARDOUS CHEMICALS REGISTER – (name of site)

Product name	GHS hazard classification	Location	Maximum quantity held	MSDS		Risk Assessment		Action/comments
				Y/N	Date	Y/N	Date	
KEMGRIP		WORKSHOP		✓	REVISED 2012			RENEW 2017
UNLEADED PETROL	CLASS 3	WORKSHOP		✓	1-1-13			1-1-18
TWO STROKE FUEL	3	WORKSHOP		✓	FEB 1-1-13			FEB 1-1-18
DIESEL	3	WORKSHOP		✓	NOV 2011			NOV 2016
TANK EQUIPMENT CLEANER	✓	WORKSHOP		✓	4/2014			4/2019
DY-MARK ARMY INK TOLUENE FREE-ALL COLOURS		WORKSHOP		✓	1/1/13			1/1/2018
MELPAT COPPER SULPHATE		WORKSHOP		✓				NO DATE NO ISSUE DATE
FEAST WATSON WEATHERPROOF		WORKSHOP		✓	1-5-15			* 1-5-20
RAPIDLINE ROAD MARKING PAINT WHITE		WORKSHOP		✓	16-11-11			16-11-16
DY-MARK SPRAY-MARK TOLUENE AEROSOL	✓	WORKSHOP		✓	28.2.14			28-2-2019
WATTYL SOLAGARD GLOSS COLOUR RANGE		WORKSHOP		✓	5-8-16			5-8-21
SOLVEX 4201 RAPIDLINE ROAD MARKING GLOSS YELLOW		WORKSHOP		✓	1-1-13			1-1-18
LMX GREASE	✓	WORKSHOP		✓	29.2.12			29-2-17

Date of register review: ___/___/___	TEM.4.1.v1 8 Nov 11	Authorised by: Chris Way Position: OHS Coordinator	Hazardous Chemicals Register Page 1 of 1

HAZARDOUS CHEMICALS REGISTER – (name of site)

Product name	GHS hazard classification	Location	Maximum quantity held	MSDS		Risk Assessment		Action/comments
				Y/N	Date	Y/N	Date	
889-LINE DULUX QUICK DRY SPRAYPAK		workshop		✓	7-1-14			7-1-19
ATHERTON CHEMICALS PRIMING FLUID		workshop		✓	18-1-13		x	18-1-18
ATHERTON CHEMICALS SOLVENT CEMENT TYPE N BLUE		workshop		✓	1-7-14		x	1-7-19
GRAFFITI REMOVER FOR CONCRETE		WORKSHOP		✓	1/13 ~~25-3-08~~			1/18 ~~25-3-15~~ K
07 MARK SPRAY. MARK AEROSOL FLUORESCENT COLOURS	✓	workshop		✓	28-2-14			28-2-2019
EZI WELD FLUX	✓	workshop		✓	1-1-2013			1-1-2018
GRAFFITI REMOVER PAINTED SURFACE		workshop		✓	1-1-13 ~~25-3-08~~			1-1-18 ~~25-3-15~~
CASTROL DIESEL OIL TECTION GLOBAL ES 15W-40		workshop		✓	1-1-13			1-1-18
CASTROL ACRI PLUS 10W30 TRANSMISSION FLUID		workshop		✓	19-2-13			19-2-18
STIHL BAR-CHAIN LUBE		workshop		✓	28-2-14			28-2-19
CALMET DURACAL SILVER AEROSOL		workshop		✓	1-1-13			1-1-18 *
SHIELDCOAT TEXTURE SHIELD		workshop		✓	8-12			8-17 **
SIKAFLEX PRO		workshop		✓	23-9-14			23-9-19

Date of register review: ___/___/___	TEM.4.1.v1 8 Nov 11	Authorised by: Chris Way Position: OHS Coordinator	Hazardous Chemicals Register Page 1 of 1

HAZARDOUS CHEMICALS REGISTER – (name of site)

Product name	GHS hazard classification	Location	Maximum quantity held	MSDS		Risk Assessment		Action/comments
				Y/N	Date	Y/N	Date	
BOSTIK Z BOND GENERAL PURPOSE SILICONE 616				✓	1-1-13			1-1-18
GENERAL PURPOSE CEMENT		workshop		✓	1-1-13			1-1-18
CONCRETE BORAL CEMENT		workshop		✓	12.12.13			12.12.18
MEGAPOXY 36 GUN GRADE PART B		workshop		✓	26.10.11			26-10-16
MEGAPOXY PART A		workshop		✓	24.5.13			24.5.18
NUFARM ACTIVATOR SURFACTANT		workshop		✓	1/13 - ~~6008~~			1/18
MEGAPOXY 36 GUN GRADE PART A		workshop		✓	26-10-11			26-10-16
GO GRON METSUN 600	LITIA * BRAND CHECK CHANGED	workshop		✓	1-1-13			1-1-18 CHEC
SODIUM HYPOCHLORITE SOLUTION 10-15%		chlorine shed		✓	26.8.13			26.8.18
CYNOAN MATTA BOSE ISECTACUARD		workshop		✓	5.11.15			5.11.20
METHYLATED SPIRITS		workshop		✓	26.6.15			26.6.20
SEPTONE TRUCK WASH		workshop		✓	1-1-13			1-1-18

HAZARDOUS CHEMICALS REGISTER – (name of site)

Product name	GHS hazard classification	Location	Maximum quantity held	MSDS		Risk Assessment		Action/comments
				Y/N	Date	Y/N	Date	
UNLEADED PETROL		workshop		✓	28-11-5-09			- 1-16
SOLVER 4290 DURAGUARD - LOW SHEEN		WORKSHOP		✓	23.4.14			23.4.2019 *
CYDEN ECONO 101		workshop		✓	-1-1-13-			-1-1-18
ROUNDUP NU FARM BIATIVE		workshop		✓	2-12 -~~18~~			2-17
COMMAND TOILET. URINAL CLEANER		OFFICE		✓	25.6.13			25.6.18
MINERAL TURPENTINE		workshop		✓	14.4.14			14.4.19
DT MARK DYE SPRAY AGRICULTURE	SCANNER POINT	workshop		✓	15.12.14			15-12-19 NIL IN STOCK *
GRAZON EXTRA HERBACIDE		workshop		✓	29.4.14			29.4.19
				✓	-			
CITRA SCRUB SEPTONE NATURE	MSD CLEAN IN WORKSHOP ONLY	WORKSHOP		✓	7.7.14 ~~31-10-11~~			7-7-19 ~~31-10-18~~
FAULDING ZINCSTIC WHITE ZINC CREAM SPF 15 – 30		OFFICE		✓	15-11-13			15-11-18
ARGON COMPRESSED		WORKSHOP		✓	16.2.15			16.2.20

Date of register review: ___/___/___	TEM.4.1.v1 8 Nov 11	Authorised by: Chris Way Position: OHS Coordinator	Hazardous Chemicals Register Page 1 of 1

HAZARDOUS CHEMICALS REGISTER – (name of site)

Product name	GHS hazard classification	Location	Maximum quantity held	MSDS		Risk Assessment		Action/comments
				Y/N	Date	Y/N	Date	
OXYGEN COMPRESSED		workshop		✓	1-1-13			1-1-18
ACETELENE DISSOLVED		workshop		✓	16-10-14			16-10-19
WD-40 AEROSOL	✓ RED FOLDER ✗	workshop		✓	8-7-13			8-7-18
INOX	"IN RED FOLDER"	workshop		✓	20-3-14			20-3-19
WINDEX GLASS CLEANER		OFFICE SCALEHOUSE		✓	1-1-13			1-1-18
				✓				
DRIBOND LEVEL FLOOR STANDARD		workshop		✓	1-7-12			1-7-17
QUARTET WHITEBOARDCLEANER		SCALES			1-1-13			1-1-18
COPPER SULPHATE	IN WORKSHOP FOLDER				21-5-13			21-5-18
DY MARK LINE MARKING FREE AEROSOL WHITE, YELLOW		MSD IN WORKSHOP ON L-T			7-7-14			7-7-19
DOW CORNING MOLYKOTE M-1-L-N	WORKSHOP SCALES GREASE CHAIN LUBE	SCALES WORKSHOP			1-1-13			1-1-17
COMPAIR 4000 HR OIL ISO 46	SHED OFFICE	WORKSHOP		✓	28-7-15			28-7-20
KUBOTA COOLANT ANTIFREEZE MONER					4-5-15			4-5-20

7.3 Appendix 3 - Personal Protective Equipment List

This section list the standard PPE items required.

Casino Sale Yards

The following items are to be kept at the Casino Sale Yards:

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

7.4 Appendix 4 - Risk assessment

Saleyard Reviewed Controls Risks

Risk Description	Likelihood scale	Potential Impacts	Consequences	Ranking	Controls/Risk Action Plan Number	Revised Likelihood scale	Revised Potential Impacts	Revised Consequences	Revised Ranking
Blue Green Algae, toxins create irritations	Likely	Moderate	Medium	5	Treatment based on observation of bloom past practice utilised copper based algaecide. Current practices with aeration will destabilise thermoclines reducing algal growth.	Rare	Minor	Low	9
Weed seed germination	Likely	Moderate	Medium	5	Sludge dried in rows mixed with sweepings then stock piled for 2 months greatly reduces germination rates.	Unlikely	Negligible	Low	9
Climate Change reducing capacity to provide water, livestock and agriculture	Possible	Major	High	5	Provide closed systems creating conditions for environmental sustainability	Unlikely	Minor	Low	8
Nutrient build up in soils	Likely	Moderate	Medium	5	Plant growth reduces nutrients, harvesting and/or grazing utilises nutrients dependant on plant species growth	Unlikely	Negligible	Low	9
Pesticides Herbicides	Likely	Moderate	Medium	5	Limit use on site of herbicides especially in/around waste water recycling system. Dip provided follows design and procedures that reduce pesticide introduction to environment	Rare	Minor	Low	9
Biogas from oxidation pond	Possible	Major	High	5	Inclusion of surface aerators to improve biological function	Unlikely	Minor	Low	8
Sludge Drying Beds contaminating water catchment	Possible	Moderate	Medium	6	Bunding around drying beds directs run-off away from catchment infiltration. Application of dry sludge limits run-off.	Unlikely	Minor	Low	8
Livestock or human disease aerosols/contamination	Possible	Moderate	Medium	6	Waste water treatment, utilisation, irrigation and drying sludge and sweeping with a holding period reduces the likelihood of pathogen survival.	Unlikely	Negligible	Low	9

Risk Description	Likelihood scale	Potential Impacts	Consequences	Ranking	Controls/Risk Action Plan Number	Revised Likelihood scale	Revised Potential Impacts	Revised Consequences	Revised Ranking
Salinity- build-up of salinity in fields can cause soil structure degradation.	Possible	Moderate	Medium	6	Livestock waste contains some salts, system recycling biologically degrades some forms. Application of SSS would improve soil structure from organics limiting effects. Provision of an EC (electrical conductivity) meter to establish salinity in effluent and sludge for load calculations would allow greater control	Rare	Minor	Low	9
Land-owners/Producers, not ensuring cattle free of disease and treatment holding periods adhered to before selling cattle.	Possible	Moderate	Medium	6	Regulation adherence for agents and farmers. Saleyard procedures for accepting livestock at sales.	Rare	Negligible	Low	10
Hypochlorate-Chlorine storage and injection system leakage to environment	Unlikely	Moderate	Medium	7	System designed to inject chlorine when in operation, tank storage is bunded. Operations staff visually check system in routine maintenance.	Unlikely	Minor	Low	8
Heavy & other Metals; Lead, Zinc, Barium, Boron, Cadmium, Chromium, Nickel.	Unlikely	Moderate	Medium	7	Livestock not directly subject to heavy metal contamination, secondary feed contamination from fetiliser application off-site provides minimal residues. Testing has established negligible (limit of detection LOD) heavy metal contamination.	Rare	Negligible	Low	10
Flooding	Unlikely	Minor	Low	8	Site design and Bunding to reduce contamination of surface run-off	Unlikely	Negligible	Low	6
Vandalism and/or Terrorism and/or Illegal Dumping of contaminants.	Rare	Moderate	Low	8	Secure boundaries, security guard checks, gates and lighting	Rare	Minor	Low	9

7.5 Appendix 5 - Action plans to minimise harm

To address the risk of overflows, Richmond Valley Council has a number of management actions comprising of one or more of the following:

- Investigations of very high and extreme risks
- Augmentation of Assets to Increase Capacity
- Planned Maintenance of Existing Assets
- Planned Renewal of Existing Assets
- Continuous Improvement of Operations
- Emergency Response Procedure
- Incident Response Protocol

7.6 **Appendix 6 – SWMS** WSC17 (v1) - Environmental Accident - Procedure

Richmond Valley Council	Title: WSC17 (v1) - Environmental Accident - Procedure	
	PPE required	

ALWAYS COMPLETE PRE-OPERATIONAL CHECKLISTS AND REFER TO ADDITIONAL SAFE WORK METHOD STATEMENTS ASSOCIATED WITH THE TASK / ACTIVITY BEING PERFORMED &

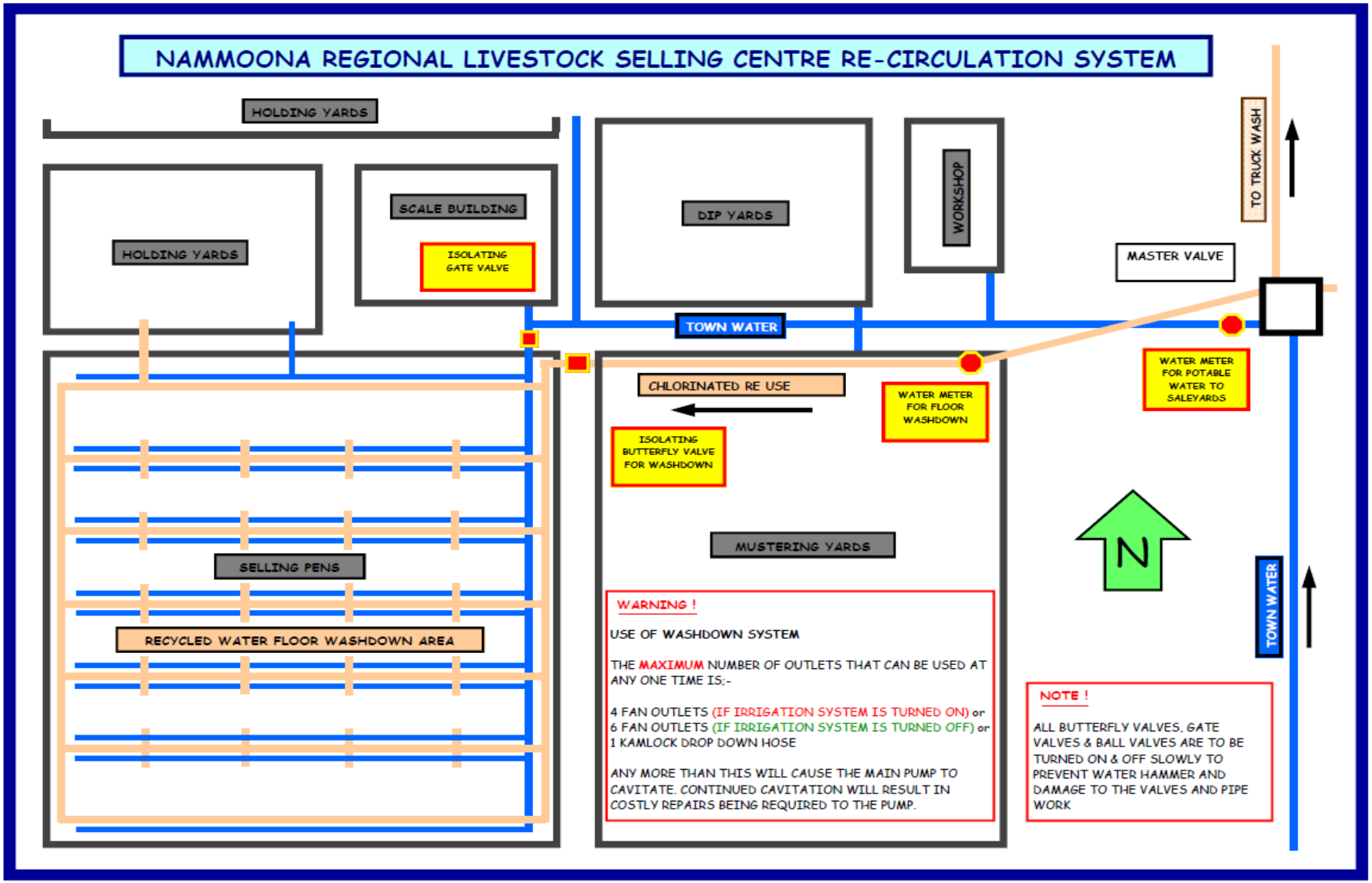
RE-INSTATE WORKSITE ONCE JOB IS COMPLETED. COMPLETE MAINTENANCE CHECKLIST/PAPERWORK AS REQUIRED.

Work Steps	Potential Hazards	Risks	L	C	R	Identified Risk Controls Required:	L	C	R
Receiving Call from Authority	Manual Handling	Sprain/Strain	C	3	H	Ensure all details of emergency are recorded Ensure that all equipment to be used has been checked & tagged Spills kits available and personnel trained in their use Refer to Manual handling SWMS Ensure communications are working (mobile phones, two way radio) Ensure a full list of emergency contact numbers are contained in the plant	D	3	M
Arrive at Site	Traffic	Accident involving Traffic/Pedestrians	D	4	H	Park vehicle & leave lights flashing Be aware of surrounds when leaving vehicle	E	3	M
	Chemical Spills	Chemical exposure	D	3	M	Have correct MSDS available for any spills material	D	2	L
	Flooding or Fire	Drown/Burns				Set up protective boarder around hazardous areas			
	Falling Trees		D	3	M	Stay clear of trees that are unstable	E	2	L
	Slip/Trip/Falls	Injury from falling objects	C	2	M	Remain aware of surrounds & wear PPE	D	2	L
	Electricity	Injury Electrocution	D	4	H	Identify all electrical hazards & contact the relevant authority	E	3	M

Set Up Traffic Controls	Traffic Manual Handling	Struck by Passing Vehicles Sprain/Strain	D C	4 3	H H	Ensure correct PPE is worn Where possible set up the TCP in accordance with RTA standards Refer to manual handling SWMS	E D	3 3	M M
Work Steps	**Potential Hazards**	**Risks**	**L**	**C**	**R**	**Identified Risk Controls Required:**	**L**	**C**	**R**
Arrival on Site of Other Equipment/Personnel	Traffic Chemical Spills Flooding or Fire Fallen Trees Slip/Trip/Falls Electrocution	Accident involving Traffic/Pedestrians Chemical exposure Drown/Burns Injury from falling objects Injury Electrocution	D D D C D	4 3 3 2 4	H M M M H	Ensure that all plant operators are inducted to the site Have correct MSDS available for any spills material Set up protective boarder around hazardous areas Stay clear of trees that are unstable Remain aware of surrounds & wear PPE Identify all electrical hazards & contact the relevant authority Maintain a list of all personnel on site Ensure correct Authorities are in attendance Ensure Spills Kits available Install & maintain erosion and sedimentation control devices Ensure that members of the public in the near vicinity have been warned of danger and assist with their evacuation If required Be alert for any intrusions by outsiders	E D E D E	3 2 2 2 3	M L L L M
Completion of Emergency Situation	Manual Handling Environmental	Sprain/Strain Excess Materials left in surrounding environment	C D	3 2	H L	Refer to Manual Handling SWMS Ensure that all excess material has been removed & disposed of accordingly Leave warnings signs in place if a hazard is still present Maintain records	D E	3 1	M L
Leaving Site	Traffic	Accident involving Traffic/Pedestrians	D	4	H	Disengage the warning lights on plant or vehicle & merge with the traffic in a safe manner	E	3	M

7.7 Appendix 7- Reticulation and Treatment Schematics

7.7.1 Northern Rivers Livestock Exchange Re-circulation System (Regional Saleyards Wastewater Management System Operation and Maintenance Manual, 1999)



7.7.2 Northern Rivers Livestock Exchange Re-circulation System (Regional Saleyards Wastewater Management System Operation and Maintenance Manual, 1999)