

# Pollution Incident Response Management Plan

## Coutts Crossing Sewage System (STP and Reticulation)

---

| Title                   | Doc No | Version | Author          | Reviewer      | Approver     | Approval Date |
|-------------------------|--------|---------|-----------------|---------------|--------------|---------------|
| PIRMP – Coutts Crossing |        | 4.4     | Kieran McAndrew | Andrew Potter | Greg Mashiah | 17/06/2021    |

## Table of Contents

|  |    |
|--|----|
| Table of Amendments .....                                      | 3  |
| 1. Introduction.....   | 4  |
| 1.1 Scope.....   | 4  |
| 2. Pollution Incident Response Management Plan.....            | 4  |
| 2.1 Potential Incidents .....                                  | 4  |
| 2.2 Incident Response.....                                     | 5  |
| 2.2.1 Human health or Safety Incident .....                    | 5  |
| 2.2.2 Pollution incident .....                                 | 5  |
| 2.3 Community notification .....                               | 5  |
| 2.3.1 Incidents at the Sewage Treatment Plant .....            | 6  |
| 2.4 Incident Investigation.....                                | 6  |
| 2.5 Pre-emptive Measures .....                                 | 6  |
| 2.5.1 Physical and preventative measures .....                 | 6  |
| 2.5.2 Preventative inspection, monitoring and maintenance..... | 7  |
| 2.5.3 Pre-emptive documentation .....                          | 7  |
| 2.6 Training & Exercises.....                                  | 8  |
| 3. Responsibility .....  | 8  |
| 4. References .....  | 8  |
| 5. Glossary .....  | 8  |
| 6. Appendices.....   | 9  |
| 6.1 Appendix 1 - Site Plan .....                               | 10 |
| 6.2 Appendix 2 – Wastewater Storage Volumes.....               | 11 |
| 6.3 Appendix 3 - Site Chemical Register .....                  | 12 |
| 6.4 Appendix 4 - Personal Protective Equipment List .....      | 12 |
| 6.5 Appendix 5 - Risk assessments and actions.....             | 13 |
| 6.6 Appendix 6 - Additional Emergency Contacts .....           | 17 |
| 6.7 Appendix 7 – Power Failures Generator Priorities .....     | 18 |
| 6.8 Appendix 8 – (Not Used) .....                              | 19 |
| 6.9 Appendix 9.1 – Major Pollution Incident Form.....          | 20 |

| Title                    | Doc No | Version | Author          | Reviewer      | Approver     | Approval Date |
|--------------------------|--------|---------|-----------------|---------------|--------------|---------------|
| PIRMP – Couotts Crossing |        | 4.4     | Kieran McAndrew | Andrew Potter | Greg Mashiah | 17/06/2021    |

### Table of Amendments

| Amendment Detail  | Authorised by | Date       |
|---|---------------|------------|
| Version 2 - All CVC PIRMP's re-drafted after testing on the 1 <sup>st</sup> December 2015. Amendments included minor formatting changes, updated to schematics, contact details, chemical registers.  | G. Mashiah    | 24/05/2016 |
| Version 3 - Pollution incident section and form removed, replaced with reference to SOP. References to OHS unit changed to WHS Unit. Updated WHS Unit phone numbers.  | D. Eaton      | 19/05/2017 |
| Version 4.1 – post Testing/review meeting December 2017. <ul style="list-style-type: none"> <li>• Info added to Section 2.6 on exercising this plan Names of key personnel added</li> <li>• Quantity of onsite wastewater added in Appendix 2</li> <li>• Minor drafting and typo corrections</li> <li>• Remove references to 'Human Resources' section</li> <li>• Add section 2.5.4 and Remove from appendix 6</li> <li>• Appendix 9 added</li> </ul> | G. Mashiah    | 30/11/2017 |
| Version 4.2 – post testing / review meeting February 2019 <ul style="list-style-type: none"> <li>• Minor alterations and corrections</li> <li>• Appendix 2 updated</li> </ul>   | G. Mashiah    | 15/12/2017 |
| Version 4.3 - individual onsite meetings held at each STP <ul style="list-style-type: none"> <li>• Key personnel added</li> <li>• Reticulation changes made</li> </ul>  | G. Mashiah    | 25/03/2019 |
| Version 4.4 – Group review meetings held on 08/06/21 and 09/06/21 <ul style="list-style-type: none"> <li>• New staff inducted</li> <li>• Existing staff participated in document review</li> <li>• SOP for pollution incidents reviewed</li> </ul>  | G. Mashiah    | 24/06/2020 |

| Title                   | Doc No | Version | Author          | Reviewer      | Approver     | Approval Date |
|-------------------------|--------|---------|-----------------|---------------|--------------|---------------|
| PIRMP – Coutts Crossing |        | 4.4     | Kieran McAndrew | Andrew Potter | Greg Mashiah | 17/06/2021    |

## 1. Introduction

This plan has been developed to document the processes required to prepare for and respond to pollution incidents for the Coutts Crossing Sewage Treatment Plant (STP) and associated reticulation (EPA Licence No. 807) 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. Prior to this PIRMP, Council followed the actions listed in the Environmental Management Plan (EMP) for the Sewerage Systems. The EMP reporting and incident procedures have now been superseded by this PIRMP. This PIRMP also includes valuable information formerly contained in the EMP which can be used as a reference, including detail on generator requirements.

### 1.1 Scope

This Pollution Incident Response Management Plan applies to Coutts Crossing Sewage System (STP and Reticulation - EPA Licence No. 807). For site plan refer to Section 6.1 Appendix 1 - Site Plan.

## 2. Pollution Incident Response Management Plan

Coutts Crossing is serviced by 5.4km of sewer mains and one pump station at the head of the STP. The Coutts Crossing STP treats approximately 100kL of sewage daily in dry weather, potentially reaching 20 times this flow during heavy rain periods. During sewage 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 6.2 Appendix 3 – Site Chemical Register.

### 2.1 Potential Incidents

The potential hazards to the environment include:

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

A detailed assessment of risks is provided in Section 6.5 Appendix 5 - Risk assessments and actions. For detail on actions to reduce risks see Section 2.5 Pre-emptive Measures.

| Title                   | Doc No | Version | Author          | Reviewer      | Approver     | Approval Date |
|-------------------------|--------|---------|-----------------|---------------|--------------|---------------|
| PIRMP – Coutts Crossing |        | 4.4     | Kieran McAndrew | Andrew Potter | Greg Mashiah | 17/06/2021    |

## 2.2 Incident Response

This section details the response requirements in the event of an incident. See also pollution incident form provided in Appendix 9. 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 Switch. 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 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 **serious** 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 Water & Sewer Engineer and/or Manager Water Cycle (Refer contact list Appendix 6)
4. Report the incident to Council's WHS Unit on 6643 0822, 6643 0820 or 0427 288 483.

### 2.2.2 Pollution incident

Water Cycle have developed a Standard Operating Procedure No. 11 for responding to major pollution incidents, which is available on Water Cycle's K Drive at <K:\Water Cycle\OPERATIONS\SOPS\NEW SOP FORMAT\011 Major Pollution Incidents Form.doc> Major Pollution Incidents Form.doc and is included at Appendix 9.

## 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 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 – only CVC staff with appropriate delegations are permitted to speak to the media)
- Site visits/door knocking
- Letter drops
- Warning signs (e.g. 'Potential Sewer Contamination – Do Not Enter Water')

| Title                   | Doc No | Version | Author          | Reviewer      | Approver     | Approval Date |
|-------------------------|--------|---------|-----------------|---------------|--------------|---------------|
| PIRMP – Coutts Crossing |        | 4.4     | Kieran McAndrew | Andrew Potter | Greg Mashiah | 17/06/2021    |

- Other methods as the situation requires

In the event of a chemical or sewage spill into stormwater or waterway, Clarence Valley 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, 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 nearest neighbours from the Coutts Crossing STP are residential dwellings approximately 200m to the South. There is nothing onsite that would create an emergency for any neighbours. 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: 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 where they feel it is appropriate.

## 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 Coutts Crossing STP, all chemical storages are bunded to ensure that if the storage fails the pollutant is contained and treatment process bypasses are installed to prevent partially treated sewage spills due to reticulation issues. Additionally, the reticulation, pump stations, and Coutts Crossing STP have multiple alarm systems to alert operators of conditions that may result in incidents, which include:

- High level alarms
- Communication failure
- Pump fail alarm

| Title                   | Doc No | Version | Author          | Reviewer      | Approver     | Approval Date |
|-------------------------|--------|---------|-----------------|---------------|--------------|---------------|
| PIRMP – Coutts Crossing |        | 4.4     | Kieran McAndrew | Andrew Potter | Greg Mashiah | 17/06/2021    |

- Aeration tank overflow alarms

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

Power failures can occur at any time and can be planned or unplanned interruptions. If extended power failure is experienced Council has a generator that can be used to keep the plant operational.

### 2.5.2 Preventative inspection, monitoring and maintenance

Clarence Valley Council uses monitoring and preventative maintenance to reduce the potential for incidents at both the STP and with the reticulation network. Many specific actions occur in regular cycle, from daily checks (e.g. chemical quantities, check pump station via telemetry, vandalism, bunds), monthly checks (e.g. valve exercising, inspection of controlled overflow/surcharge points), and annual checks (e.g. RPZ testing, service pumps, electrical inspections of pump controls). More detail on regular operational/maintenance activities is provided below:

| Activity  | Frequency                     |
|---|-------------------------------|
| <b>Sewage Treatment Plant</b>                               |                               |
| Operate the STP as per operation and maintenance procedures | Daily                         |
| <b>Pumping Station</b>                                      |                               |
| Visual check of pumping operations                          | Fortnightly                   |
| Clean pump stations   | As Required                   |
| Service pumps   | Annually (minimum)            |
| Electrical inspections of pump controls                     | BI -Annually                  |
| Pump refurbishments   | Determined by service reports |
| Pump replacements/upgrades                                  | Determined by service reports |
| <b>Reticulation</b>   |                               |
| CCTV inspections of mains                                   | As per program                |
| Mains rehabilitations                                       | As per program                |
| Location of manholes and boundary shafts                    | 3 year program                |
|   |                               |

### 2.5.3 Pre-emptive documentation

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

- SWP 071 - Jetting Sewer Mains
- SWP 106 - Sewer Main Repair

| Title                   | Doc No | Version | Author          | Reviewer      | Approver     | Approval Date |
|-------------------------|--------|---------|-----------------|---------------|--------------|---------------|
| PIRMP – Coutts Crossing |        | 4.4     | Kieran McAndrew | Andrew Potter | Greg Mashiah | 17/06/2021    |

#### 2.5.4 Action plans to minimise harm

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

- Further detailed Investigations of very high and extreme risks
- Augmentation of Sewerage Assets to Increase Capacity
- Planned Maintenance of Existing Assets
- Planned Renewal of Existing Assets
- Telemetry Monitoring of Sewage Pumping Stations
- Continuous Improvement of Sewerage System Operations
- Emergency Response Procedure to Power Failures

#### 2.6 Training & Exercises

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 and training records will be sent to People and Culture section for filing.

Training will be undertaken annually at the same time as the plan is exercised.

### 3. Responsibility

Manager Water Cycle 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 2010

### 5. Glossary

**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.

| Title                   | Doc No | Version | Author          | Reviewer      | Approver     | Approval Date |
|-------------------------|--------|---------|-----------------|---------------|--------------|---------------|
| PIRMP – Coutts Crossing |        | 4.4     | Kieran McAndrew | Andrew Potter | Greg Mashiah | 17/06/2021    |



## 6. Appendices

- Appendix 1 - Site Plan
- Appendix 2 – Wastewater Storage Volumes
- Appendix 3 - Site Chemical Register
- Appendix 4 - Personal Protective Equipment
- Appendix 5 - Risk assessments and actions
- Appendix 6 - Additional Emergency Contacts
- Appendix 7 – Not Used
- Appendix 8 – Not Used
- Appendix 9 – Major Pollution Incident Form

---

| Title                    | Doc No | Version | Author          | Reviewer      | Approver     | Approval Date |
|--------------------------|--------|---------|-----------------|---------------|--------------|---------------|
| PIRMP – Couatts Crossing |        | 4.4     | Kieran McAndrew | Andrew Potter | Greg Mashiah | 17/06/2021    |

## 6.1 Appendix 1 - Site Plan

### Coutts Crossing STP



| Title                   | Doc No | Version | Author          | Reviewer      | Approver     | Approval Date |
|-------------------------|--------|---------|-----------------|---------------|--------------|---------------|
| PIRMP – Coutts Crossing |        | 4.4     | Kieran McAndrew | Andrew Potter | Greg Mashiah | 17/06/2021    |

## 6.2 Appendix 2 – Wastewater Storage Volumes

| <b>Item</b>      | <b>Max Storage (kL)</b> |
|------------------|-------------------------|
| Aeration Tank    | 240                     |
| Sludge Lagoon    | 300                     |
| Catchpond        | 300                     |
| Effluent Storage | 7500                    |

---

| <b>Title</b>            | <b>Doc No</b> | <b>Version</b> | <b>Author</b>   | <b>Reviewer</b> | <b>Approver</b> | <b>Approval Date</b> |
|-------------------------|---------------|----------------|-----------------|-----------------|-----------------|----------------------|
| PIRMP – Coutts Crossing |               | 4.4            | Kieran McAndrew | Andrew Potter   | Greg Mashiah    | 17/06/2021           |

### 6.3 Appendix 3 - Site Chemical Register

Date of register: June 2020

MSDS kept in operator room.

| Chemical Name | Maximum Volume of Chemicals Stored | Location Where Chemical is Stored |
|---------------|------------------------------------|-----------------------------------|
| Alum Sulphate | 1000 L Bulk Container              | Bunded Area                       |

### 6.4 Appendix 4 - Personal Protective Equipment List

This section list the standard PPE items required.

#### Sewage Treatment Plant

The following items are used at the Coutts Crossing STP:

- Ear/hearing protection
- Rubber Gloves
- Face shield

#### 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

#### Rushforth Depot

- Sun screen
- Apron/disposal overalls
- Goggles
- Gumboots
- Steel capped Boots

---

| Title                   | Doc No | Version | Author          | Reviewer      | Approver     | Approval Date |
|-------------------------|--------|---------|-----------------|---------------|--------------|---------------|
| PIRMP – Coutts Crossing |        | 4.4     | Kieran McAndrew | Andrew Potter | Greg Mashiah | 17/06/2021    |

## 6.5 Appendix 5 - Risk assessments and actions

| No                           | Risk   | Impact  | Risk<br>LxC =<br>Rating | Controls   |
|------------------------------|--|---|-------------------------|--|
| <b>Coutts Crossing Retic</b> |  |   |                         |  |
| 1                            | Sewage overflow due to inflow/infiltration                               | Land contamination, possibly enter a waterway | C2 = M                  | <ul style="list-style-type: none"> <li>▪ Reticulation maintenance and rehabilitation to reduce infiltration and inflows</li> <li>▪ Spare capacity in pump wells</li> <li>▪ Monitoring and maintenance</li> <li>▪ Pre-emptive measures see Section 2.5 Pre-emptive Measures</li> <li>▪</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 Appendix 7</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 | B2 = L                  | <ul style="list-style-type: none"> <li>▪ Lightning protection</li> <li>▪ Site vegetation management to prevent damage to infrastructure</li> <li>▪ Portable pumps</li> <li>▪ Pre-emptive measures see Section 2.5 Pre-emptive Measures</li> </ul>  |
| 4                            | Sewage overflow due to Reticulation blockages or damage                  | Land contamination, possibly enter a waterway | C2 = M                  | <ul style="list-style-type: none"> <li>▪ Reticulation maintenance</li> <li>▪ Sewer Jetting program (high pressure cleaning of mains for repeat chokes)</li> <li>▪ Spare capacity in pump wells</li> <li>▪ Monitoring and maintenance</li> <li>▪ Pre-emptive measures see Section 2.5 Pre-emptive Measures</li> </ul> |
| 5                            | Sewage overflow due to an external persons excavation hitting the sewers | Land contamination, possibly enter a waterway | C2 = M                  | <ul style="list-style-type: none"> <li>▪ Provide underground service locations to external persons</li> <li>▪ Telemetry designed to pick up a change in inflows</li> <li>▪ Vacuum trucks (for clean up)</li> <li>▪ Portable pumps (for clean up)</li> </ul>  |
| 6                            | 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>   |
| 7                            | 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>▪ Reasonably Young network</li> <li>▪ Maintenance and renewal programs</li> <li>▪ Pre-emptive measures see Section 2.5 Pre-emptive Measures</li> </ul>  |

| Title                   | Doc No | Version | Author          | Reviewer      | Approver     | Approval Date |
|-------------------------|--------|---------|-----------------|---------------|--------------|---------------|
| PIRMP – Coutts Crossing |        | 4.4     | Kieran McAndrew | Andrew Potter | Greg Mashiah | 17/06/2021    |

| No | Risk   | Impact  | Risk LxC = Rating | Controls  |
|----|--|---|-------------------|---|
| 8  | 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>▪ Telemetry monitoring</li> <li>▪ Maintenance and inspection programs</li> <li>▪ Spare capacity in pump wells</li> <li>▪ Portable pump to bypass site and vacuum truck to maintain flows</li> <li>▪ Monitoring and maintenance</li> <li>▪ Pre-emptive measures see Section 2.5 Pre-emptive Measures</li> </ul> |

### Coutts Crossing STP

|   |  |   |        |  |
|---|--|---|--------|--|
| 1 | Sewage overflow (raw) due to heavy rainfall  | Land contamination, possibly enter a waterway | A1 = L | <ul style="list-style-type: none"> <li>▪ Reticulation maintenance to reduce infiltration and inflows</li> <li>▪ Spare capacity in pump wells</li> <li>▪ Overflow storage at the WRP</li> <li>▪ Bypass systems to overflow storage pond</li> <li>▪ Monitoring and maintenance</li> <li>▪ Pre-emptive measures see Section 2.5 Pre-emptive Measures</li> </ul> |
| 2 | Sewage overflow (raw) due to Reticulation blockages                                      | Land contamination, possibly enter a waterway | A2 = L | <ul style="list-style-type: none"> <li>▪ Reticulation maintenance</li> <li>▪ Spare capacity in pump wells</li> <li>▪ Overflow storage at the WRP</li> <li>▪ Bypass systems to overflow storage pond</li> <li>▪ Monitoring and maintenance</li> <li>▪ Pre-emptive measures see Section 2.5 Pre-emptive Measures</li> </ul>                                    |
|   |  | Land contamination, possibly enter a waterway |        |  |
| 3 | Sewage overflow (raw) due to damage to onsite reticulation (e.g. during excavations etc) |   | B2 = L | <ul style="list-style-type: none"> <li>▪ Locate services prior to excavations</li> <li>▪ Appropriate supervision of contractors</li> <li>▪ Bypass systems</li> </ul>   |

| Title                   | Doc No | Version | Author          | Reviewer      | Approver     | Approval Date |
|-------------------------|--------|---------|-----------------|---------------|--------------|---------------|
| PIRMP – Coutts Crossing |        | 4.4     | Kieran McAndrew | Andrew Potter | Greg Mashiah | 17/06/2021    |

| No | Risk  | Impact  | Risk LxC = Rating | Controls   |
|----|---|---|-------------------|--|
| 4  | Sewage overflow (raw) due to SCADA/Communications failure             | Land contamination, possibly enter a waterway | B2 = L            | <ul style="list-style-type: none"> <li>▪ SCADA testing and alarming</li> <li>▪ Pre-emptive measures see Section 2.5 Pre-emptive Measures</li> </ul>  |
| 5  | Sewage overflow (raw) due to Infrastructure failure (e.g. due to age) | Land contamination, possibly enter a waterway | B2 = L            | <ul style="list-style-type: none"> <li>▪ Maintenance and renewal programs</li> <li>▪ Pre-emptive measures see Section 2.5 Pre-emptive Measures</li> </ul>  |
| 6  | Sewage overflow (raw) due to excessive flows                          | Land contamination, possibly enter a waterway | A2 = L            | <ul style="list-style-type: none"> <li>▪ Reticulation maintenance to reduce infiltration and inflows</li> <li>▪ Spare capacity in pump wells</li> <li>▪ Overflow storage at the WRP</li> <li>▪ Bypass systems to overflow storage pond</li> <li>▪ Monitoring and maintenance</li> <li>▪ Pre-emptive measures see Section 2.5 Pre-emptive Measures</li> </ul> |
| 7  | Sewage overflow (raw) due to Treatment plant blockage                 | Land contamination, possibly enter a waterway | A2 = L            | <ul style="list-style-type: none"> <li>▪ Bypass systems</li> <li>▪ Gross solid screening</li> </ul>  |
| 8  | Chemical spill due to Tank/storage failure                            | Land contamination, possibly enter a waterway | B2 = M            | <ul style="list-style-type: none"> <li>▪ Bunding</li> <li>▪ Alarms</li> <li>▪ Inspection and maintenance of tanks</li> </ul>   |
| 9  | Chemical spill During delivery  | Land contamination, possibly enter a waterway | B2 = M            | <ul style="list-style-type: none"> <li>▪ SWMS</li> <li>▪ PPE</li> </ul>  |

| Title                   | Doc No | Version | Author          | Reviewer      | Approver     | Approval Date |
|-------------------------|--------|---------|-----------------|---------------|--------------|---------------|
| PIRMP – Coutts Crossing |        | 4.4     | Kieran McAndrew | Andrew Potter | Greg Mashiah | 17/06/2021    |

| No | Risk  | Impact  | Risk LxC = Rating | Controls  |
|----|---|---|-------------------|---|
| 10 | Chemical spill due to Damage to chemical reticulation | Land contamination, possibly enter a waterway | A3 = M            | <ul style="list-style-type: none"> <li>Locate services prior to excavations</li> <li>Appropriate supervision of contractors</li> <li>Bypass systems</li> <li>Shut off valves for chemicals</li> </ul>   |
| 11 | Chemical spill due to Vandalism                       | Land contamination, possibly enter a waterway | A3 = M            | <ul style="list-style-type: none"> <li>Site security fences</li> </ul>  |
| 12 | Chemical spill due to Bund failure                    | Land contamination, possibly enter a waterway | B3 = M            | <ul style="list-style-type: none"> <li>Bund inspections</li> <li>Annual bunding tests</li> <li>Maintenance and renewal</li> </ul>   |
| 13 | Chemical truck incident outside of bunded area        | Land contamination, possibly enter a waterway | B3 = M            | <ul style="list-style-type: none"> <li>Only use transport companies with evidence of driver licensing and training</li> <li>Operator onsite during deliveries (or at minimum direct contact with deliver in exceptional circumstances)</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<br><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<br><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<br><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<br><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 |
|--------------------------|--------|---------|-----------------|---------------|--------------|---------------|
| PIRMP – Couatts Crossing |        | 4.4     | Kieran McAndrew | Andrew Potter | Greg Mashiah | 17/06/2021    |



6.6 Appendix 6 - Additional Emergency Contacts

|   |                     |
|---|---------------------|
| <b>AMBULANCE</b>  | <b>000</b>          |
| GRAFTON   | 6643 1765           |
| <b>NSW FIRE &amp; RESCUE</b>  | <b>000</b>          |
| GRAFTON   | 6643 3491           |
| <b>POLICE STATION</b>   | <b>000</b>          |
| GRAFTON   | 6642 0222           |
| <b>EPA POLLUTION HOTLINE</b>  | <b>131 555</b>      |
| <b>RURAL FIRE SERVICE</b>   | <b>000</b>          |
| ULMARRA OFFICE  | 6644 5135           |
| <b>STATE EMERGENCY SERVICES (SES)</b>   | <b>132 500</b>      |
| CLARENCE NAMBUCCA REGION OFFICE   | 6641 6900           |
| <b>HOSPITAL</b>   |                     |
| GRAFTON   | 6640 2222           |
| <b>ROADS &amp; MARITIME SERVICES (RMS)</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>132 080</b>      |
| <b>WIRES</b>  | <b>1300 094 737</b> |
| <b>WORKSAFE NSW</b>   | <b>131 050</b>      |
| <b>NSW Health</b>   | <b>1300 555 555</b> |
| Pager   | 149377              |
| <b>CLARENCE VALLEY COUNCIL</b>  |                     |
| Call centre – business hours  | 6643 0200           |
| Call centre – after hours   | 6626 6858           |
| Manager Water Cycle Greg Mashiah  | 0428 112 982        |
| Water & Sewer Operations Coordinator – Andrew Potter                              | 0436 639 521        |
| Environmental Health Officer – contact through call centre or Manager Water Cycle |                     |

## 6.7 Appendix 7 – Power Failures Generator Priorities

*Priority Ranking Philosophy.*

| Ranking | Response Time (Dry Weather) | Response Time (Wet Weather) |
|---------|-----------------------------|-----------------------------|
| 1       | <3hrs                       | <1hr                        |
| 2       | <4hrs                       | <2hrs                       |
| 3       | <6hrs                       | <3hrs                       |
| 4       | <10hrs                      | <4hrs                       |
| 5       | <12hrs                      | <5hrs                       |

*Generator Requirements and Ranking Priority of Pump Stations during power failure*

| SPS # | Location     | Generator Required (KVA) | Priority ranking |
|-------|--------------|--------------------------|------------------|
|       | Inlet to STP | 20                       | 2                |
|       |              |                          |                  |
|       |              |                          |                  |

## 6.8 Appendix 8 – (Not Used)

| Title                   | Doc No | Version | Author          | Reviewer      | Approver     | Approval Date |
|-------------------------|--------|---------|-----------------|---------------|--------------|---------------|
| PIRMP – Coutts Crossing |        | 4.4     | Kieran McAndrew | Andrew Potter | Greg Mashiah | 17/06/2021    |

## 6.9 Appendix 9.1 – Major Pollution Incident Form (Please use either form)

K:\Water Cycle\OPERATIONS\SOPS\NEW SOP FORMAT\011 Major Pollution Incidents Form.doc

### WATER CYCLE PROCEDURE # 011 – Major Pollution Incidents Form



This form is usually completed by the Supervisor based on information provided by Operator. If Operator cannot contact the Supervisor, she/he should complete this form. This form is to be saved as an ECM when completed.

**Minor events:** There is no need to report minor pollution incidents as they are captured through CRMs. If a minor event occurs without a CRM please create a CRM. Examples of minor events: odour complaints and chemical spills with no human health risk contained in bunded areas.

**Major events:** All major incidents need to be reported through this form. Examples of major events:

- any pollution incident with risk to human health
- chemical spills outside bunded areas or with health impacts
- significant sediment run off incidents
- large sewer spills, or sewer spills near waterways (including dry gullies), inside buildings or sensitive areas (e.g. schools, shopping precincts)

#### Incident Details

|  |  |   |  |
|--|--|---|--|
| Person Completing Form:                                  |  |   |  |
| Incident Location:                                       |  |   |  |
| Cause of Pollution Incident:                             |  |   |  |
| Method of detection. (e.g. telemetry, inspections, CRM): |  |   |  |
| Actions taken to rectify:                                |  |   |  |
| Incident witnesses (names/ph):                           |  |   |  |
| Quantity discharged:                                     | kL <input type="checkbox"/> Known<br><input type="checkbox"/> Estimate | Duration of Discharge:                                | hr <input type="checkbox"/> Known<br><input type="checkbox"/> Estimate |
| Rainfall in last 24 hours:                               | mm   | Other weather conditions (e.g. tide, currents, wind): |  |

**Immediate Contacts:** The following should be immediately contacted.

| Name   | Number   | Contacted? | Time contacted | Ref. Number |
|--|--|------------|----------------|-------------|
| EPA Environment Line   | 131 555  | Yes / No   | am / pm        |             |
| SafeWork NSW*  | 131 050  | Yes / No   | am / pm        |             |
| Fire & Rescue NSW*   | 000  | Yes / No   | am / pm        |             |
| <i>Consider contacting the following if relevant to incident.</i>  |  |            |                |             |
| One of following:<br>(1) NSW Shellfish Program<br>(2) Grant Webster Shellfish Safety Officer<br>(3) Local Industry Rep Alan Brooks | (1) BH: 6539 4800 or AH: 0407 078 269<br>(2) BH: 6539 4809 or AH: 0407 947 730<br>(3) 0408 214 896 | Yes / No   | am / pm        |             |
| NSW Environmental Health   | BH: 1300 056 055 or AH: 0428 882 805   | Yes / No   | am / pm        |             |
| Fisheries  | 1800 043 536   | Yes / No   | am / pm        |             |
| Affected Neighbours  | Determined on site   | Yes / No   | am / pm        |             |
| Chemical suppliers   | Refer to MSDS  | Yes / No   | am / pm        |             |
| Council's Insurance & Risk Officer   | 6643 0200  | Yes / No   | am / pm        |             |

\*Notification is required by legislation. NSW EPA has requested that Council only notify Fire & Rescue of pollution incidents where they have a role in managing the incident (e.g. chemical spill, fire).

**Sampling:** The requirements of a sampling program are likely to be discussed with the immediate contacts listed above. Generally samples will be taken at the point of discharge and a suitable point upstream and downstream of the incident.

**Clean Up:** The clean up requirements will also be agreed upon by the contacts listed above.

|                     |              |                |                 |
|---------------------|--------------|----------------|-----------------|
| Responsible Officer | Greg Mashiah | Version (Date) | V1.0 (May 2017) |
|---------------------|--------------|----------------|-----------------|

Page 1 of 1

|                         |        |         |                 |               |              |               |
|-------------------------|--------|---------|-----------------|---------------|--------------|---------------|
| Title                   | Doc No | Version | Author          | Reviewer      | Approver     | Approval Date |
| PIRMP – Coutts Crossing |        | 4.4     | Kieran McAndrew | Andrew Potter | Greg Mashiah | 17/06/2021    |

Appendix 9.2 – Major Pollution Incident Form (Please use either form)

<B:\Water Cycle\SEWER\PIRMPs>

|   |
|---|
| <p align="center"><b>CVC Standard Operating Procedures -Surcharge and Overflow Events.</b></p> <p align="center">Form 1 (To be filled out by the Sewerage Operator attending the surcharge / overflow event.)</p> |
|---|

**Is the event Minor or Major?**

- Minor- any surcharge not immediately threatening public health or not likely to enter a waterway.
- Major - any surcharge immediately threatening public health or is likely to enter a waterway.

**Record the following information.**

Location.....  
Cause of surcharge.....  
Rainfall in the last 24 hrs.....mm  
Estimated quantity discharged.....KL. Estimated Duration of Discharge.....  
Method of detection. E.g. Telemetry, regular inspections, Customer request

**For Major Overflows / Surcharges Complete the Following:**

Tide and current movements.....

- Operator to contact Supervisor / Operations Engineer when situation assessed.

**Supervisor to contact the following people if appropriate and note time of contact:**

- DECC – Pollution Line 131555 or Grafton 6640 2500 – immediately situation assessed
- NSW Shellfish Program – B/Hours 6539 4800, A/H 0407078269  
Email [nswsp@foodauthority.nsw.gov.au](mailto:nswsp@foodauthority.nsw.gov.au)  
Or Grant Webster Shellfish Safety Officer 6539 4809, mob 0407 947 730  
Local Industry Rep Mitchell Gorman 0457 601 602
- Operations Engineer (BH: 6640 3528, AH: 0419 206 427) – within 12 hours
- NSW Dept of Health Ph - 6620 7500 Fax 6621 7088
- CVC Environmental Officer

**Sampling**

If a **Major** overflow or surcharge occurs, the requirements of a sampling program will be agreed to by the responsible persons listed above. Generally, samples will be taken at the point of discharge and a suitable point approximately 50 metres each side of the contamination entering the waterway. Testing will be carried out for Faecal Coliforms by a suitably qualified laboratory.

**Clean Up**

Operator to arrange control of or arrest surcharge and commence clean up of site.

**Operators Name**.....**Date**.....

This form is to be retained at the Sewerage Treatment Plant or by Supervisor and a copy sent to the Operations Engineer the next working day.

**CVC Standard Operating Procedures -Surcharge and Overflow Events.**

**Major Surcharge and Overflow Incident Report – Additional Information**

Form 2 (To be filled out by the Sewerage Operator attending the surcharge/overflow event)

Date: .....

Time: .....

Duration: .....

Concentration of pollutant entering waterway:

.....  
.....  
.....

Actions taken to rectify the problem(s) and the reduction of pollutants entering waterways:

.....  
.....  
.....

Details of any proposed measures to prevent reoccurrence of the problem:

.....  
.....  
.....

Names and contact details of witnesses to the incident:

.....  
.....  
.....

Location of where test samples were taken from:

.....  
.....

Results of tests taken:

.....  
.....  
.....

Any other relevant information:

.....  
.....  
.....

Operator.....Date.....