Upper Lachlan Shire Council
PO Box 42
GUNNING, NSW 2581

Pollution Incident Response Management Plan (PIRMP)

EPA License No. 1938
Crookwell Sewerage Treatment Plant and Sewerage System.

McIntosh Rd Crookwell NSW 2581

Version 1.7: - 01 August 2024
Annual Review: - 01 July 2025

Upper Lachlan Shire Council
PO Box 42
GUNNING, NSW 2581

Table of Contents

Contents

Document Control			
Version No.	**Author/ Date**	**Reviewer/ Date**	**Approver/ Date**
1	Craig Bindoff (January 2021)	Tom Baldwin	Glenn Lacey
2	Craig Bindoff (March 2021)	Tom Baldwin	Glenn Lacey
3	Craig Bindoff (April 2021)	Tom Baldwin	Glenn Lacey
4	Craig Bindoff (July 2021)	Tom Baldwin	Alex Waldron
5	John Meere (June 2022)		
6	Julia Wynn (January 2024)	John Meere	John Meere (29 January 2024)
7	Julia Wynn (16 June 2024)	David Scott Leagh-Anne Cosgrove (10 July 2024)	John Meere (01 August 2024)

Distribution Copy No.	**Recipient's Position**	**Recipient/ Date**
1	Director Environment & Planning	Simon Arkinstall
2	Manager Water, Sewer and Waste (Incident Controller)	John Meere
3	Treatment Plant Operator (Incident First Responders)	David Scott
4		Council's Website: www.upperlachlan.nsw.gov.au
5	Coordinator Water, Sewer & Waste (Incident Response Auditor)	Julia Wynn

1. Introduction

This plan has been developed to document the processes required to prepare for, respond to pollution incidents for the Crookwell Sewerage Treatment Plant (CSTP) and associated sewerage system, and ensure that hazards to the environment, human health and safety are reduced, or eliminated.

It has been prepared in accordance with the requirements of the *NSW Protection of the Environment Operations Act 1997 (POEO Act)* and reflects the requirements specified in the Environment Protection Authority's Guidelines: Preparation of Pollution Incident Response Management Plans, March 2012.

1.1 Scope

This Pollution Incident Response Management Plan applies to Crookwell STP EPA License 1938 (For site plans, refer to **Appendix-1 – Site Plans**.)

2. Pollution Incident Response Management Plan

Crookwell Sewerage System currently serves the town. The system consists of conventional; gravity sewer reticulation and pumping stations for collection of sewage and its transport to the main Pumping Station, which is then pumped to the Sewerage Treatment Plant (STP).

During sewage transport and treatment, raw sewage can be spilled and chemicals and by-products are produced. If these substances are incorrectly managed during a spill, they may contaminate the environment or threaten human health.

A register of the chemicals is contained in **Appendix 5 – Site Chemical Register.**

An Emergency Operational Procedure is contained in **Appendix 10** to assist Operators and Controllers to follow the steps required to respond to incidents involving spills.

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
  - Sewerage system blockages
  - Damage to sewerage system (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 system
  - Vandalism
  - Inappropriate chemical use
  - Bund failure
  - Local Business incident
  - Illegal dumping into manholes.

Community alert and notification in the event of a spillage impacting a waterway **Section 2.3 Community Notification.**

A detailed assessment of risks is provided in **Appendix 7 – Risk assessments and actions**.

2.2 Incident Response

This section details the response requirements in the event of an incident.

In all situations, notifications from the Public :

The 24-hour emergency number for Upper Lachlan Shire Council is (02) 4830 1000.

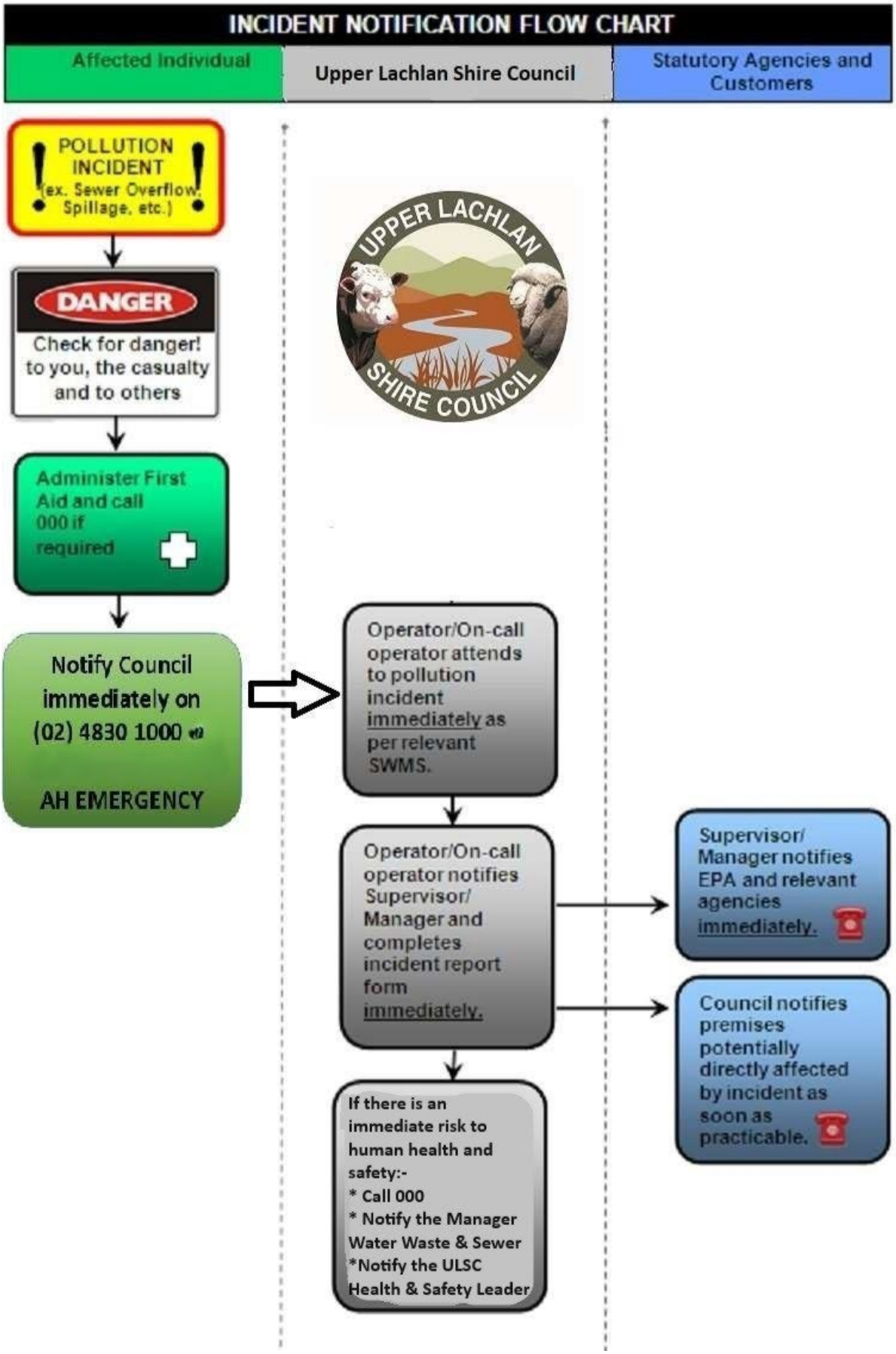
During working hours, these calls are taken by Customer Service staff at Upper Lachlan Shire Council.

If the call is after-hours, the call is redirected to a call center and the on-call operator is then contacted, who will inform appropriate personnel of issues and incidents.

ULSC operates a rostered on-call system for Water and Sewer Operators, ensuring that an experienced operator is on-call at all times. The on-call operator also has access to other qualified staff to assist in an after-hours emergency. The On-Call Water and Sewer Operator will ring the Manager Water, Sewer and Waste or Coordinator Water, Sewer and Waste should a call be directed to them.

The following flow chart is the ULSC Pollution Incident Procedure.

(Please note this flow chart is being updated to fully reflect the Emergency Operating Procedure contained in **Appendix 10**.)


INCIDENT NOTIFICATION FLOW CHART
Affected Individual
Upper Lachlan Shire Council
Statutory Agencies and Customers
POLLUTION INCIDENT (ex. Sewer Overflow, Spillage, etc.)
DANGER
Check for danger! to you, the casualty and to others
Administer First Aid and call 000 if required
Notify Council immediately on (02) 4830 1000
AH EMERGENCY
Operator/On-call operator attends to pollution incident immediately as per relevant SWMS.
Operator/On-call operator notifies Supervisor/ Manager and completes incident report form immediately.
Supervisor/ Manager notifies EPA and relevant agencies immediately.
Council notifies premises potentially directly affected by incident as soon as practicable.
If there is an immediate risk to human health and safety:-
* Call 000
* Notify the Manager Water Waste & Sewer
*Notify the ULSC Health & Safety Leader

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. If required, evacuate the site.
2. Contact Manager Water and Sewer **(0492 442 694**).
3. Undertake reporting in accordance with the procedures listed in the ULSC Emergency Operating Procedure see **Appendix 10**
4. Report the incident to Health & Safety Leader **(0437 615 003)**
5. In the event of a major incident requiring more resources, the Manager Water Waste and Sewer may request assistance from the LEMO.

2.2.2 Pollution Incident

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

1.	EPA Environment Line (written report to be provided within 7 days)	**131 555**
2.	NSW Health Main	**1300 066 055**
3.	NSW Health Goulburn Office	**(02) 4825 4944**
4.	NSW Health Goulburn Mobile (Tabitha Holliday)	**0407 060 237**
5.	Dept. Industry Regional Inspector (Joe Fuller)	**0428 443 790**
6.	SafeWork NSW	**131 050**
7.	ULSC Environmental Coordinator (Ranger)	**(02) 4845 4149**
8.	Fire & Rescue	**000**

Upper Lachlan Shire Council should also consider contacting the following as soon as practical:

1.	Affected neighbors	**List at Plant.**
2.	Fisheries Watch (for reporting illegal fishing and fish kills)	**1800 043 536**
3.	Chemical Supplier	**Refer to the MSDS**
4.	Police Crookwell	**(02) 4823 1044**

For details of other contacts that might be required, see **Appendices 2 and 8.**

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:

- Manager Governance **(02) 4830 1000**

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

- **Emergency Operating Procedure - Appendix 10**
- **Risk Assessments & Actions – Appendix 7**

SWMS and SWI's relating to the Emergency Operating Procedure are being redeveloped on the next license period in consultation with Water, Sewer and Waste Operators and the Health & Safety Leader.

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.

Upper Lachlan Shire Council will attempt to provide early warning to directly affected premises (either upstream or downstream depending on impacts where relevant) by phone call or site visit. Early warning is to include details of what the imminent 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 Upper Lachlan Shire 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 –contact details for properties adjacent to the River that may use river water filed on ULSC database

- Site visits/door knocking
- Letter drops
- Warning signs
- Other methods as the situation requires, such as social media.

In the event of a chemical or sewage spill into stormwater or waterway, Upper Lachlan Shire 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 stock usage, swimming, fishing, and boating until contamination has cleared. Additionally, if the event occurred or was occurring during dry weather, Upper Lachlan Shire 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). Upper Lachlan Shire Council is to take signs down and advise the public that regular activities can be resumed by (as required):

- Phone calls
- Letter drops
- Other methods as the situation requires e.g. local radio alert to restrict stock and domestic use access.
- Ensure that steps taken are noted in the Incident Log with time and date they were undertaken.

2.3.1 Incidents at the Sewerage Treatment Plant.

Crookwell STP is located approximately 1.0 kilometres to the west of the town of Crookwell. The Crookwell STP discharges to a wet land. The closest residential buildings to the site are located approximately 200m to the north and east of the facility, which is less than the desirable minimum buffer distance of 400 metres. If an incident did occur and any community members

or neighbors were affected then the processes listed in **Section 2.2 Incident Response** would be implemented as required.

This may include an air pollution alert under PEPO due to the proximity of dwelling to the facility.

2.4 Incident Investigation.

All incidents 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-coordinating the investigation

Ensure that steps taken are noted in the Incident Log with time and date they were undertaken.

A de-brief is to be conducted for all emergency incidents **within 72 hours** of the incident. However, the responsible manager may also initiate de-briefs for other incidents where they feel it is appropriate.

2.5 Preventative Measures.

The following preventative measures are undertaken by ULSC to prevent or minimise pollution incidents throughout the year.

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 Crookwell 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 sewerage system issues. Additionally, the sewerage system, pump stations, and Crookwell STP have multiple alarm systems to alert operators of conditions that may result in incidents, which include:

- High level alarms
- Communication failure
- Chemical bund alarms
- Mechanical failure and level sensors
- No flow/high flow alarms

In the event that these systems fail, Upper Lachlan Shire Council has portable bypass pumps, generator and other containment options available.

2.5.2 Preventative monitoring and maintenance.

Upper Lachlan Shire Council uses monitoring and preventative maintenance to reduce the potential for incidents at the STP. These separated in the following timeframes:

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

Daily

The STP is attended daily and the following undertaken:

- Maintenance tasks;
- Chemical quantities checked;
- Plant performance data is checked and entered;
- Housekeeping issues that requiring attention;
- Vandalism and/or theft checks;
- Bunds checked;
- Check all Alarms are working;
- Pump Stations 1 (Kennedy St) checked for correct operation.

Weekly

For the sewerage system and associated pump stations staff are to conduct weekly pump station checks include:

- Check & Clean EAT;
- Maintenance of cables, ropes;
- Turn-over of No.2 digester;
- Vegetation maintenance activities;
- Building maintenance activities;
- Check the Alum tank and test the Alum pump.
- All other Pump Stations are checked for correct operation once or twice weekly.

Monthly to Annually

The following is to be checked **monthly** for the sewerage system and pump stations:

- Alarm testing – power fail, critical float;
- EPA testing.

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

- All valve operations - exercising, maintenance. Automatic valve operator is located at Kennedy Street SPS.

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

- Backup Batteries
- Fire Extinguishers
- Overflow Plugs - inspection

- Remove grit with suck truck - Vacuum Truck
- Stink Pipe - cartridges and whirly bird - inspection
- Sump Pumps - Dry Well PS's
- Vermin/Insect Protection
- Change membrane on Oxygen Meter.
- All lifting equipment is tested.

Annually, the following tasks are undertaken:-

- Maintenance of gear boxes on aerator, Heli worm decant, bridge gearboxes;
- Replace filter screens and oils.
- Pump performance testing (drop tests)
- Bund integrity
- Tree maintenance

Every **2 years**, the following tasks are undertaken:-

- Replacement of decant cables.

Every **5 years**, the following tasks are undertaken:-

- Replacement of decant rubbers.

ULSC has programs currently underway of:-

- Planned maintenance and replacement works;
- Smoke testing of failures to assess stormwater infiltration and condition of the asset where incidents have occurred;
- Update of Safety and Emergency Management procedures; and;
- Staff training.

3. 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. Additionally, relevant staff will be involved in an annual exercise/drill to test the implementation of the plan and review its currency. In the event of a significant incident, an investigation and debrief will be conducted, documentation updated *(where required)* and staff will be inducted.

All, documentation, desktop exercises, drill debriefs and incident records are to be registered into Council's electronic record management system, "TRIM," and training records will be sent to Human Resources for filing on personnel records.

4. Responsibility.

Upper Lachlan Shire Council's Manager- Water, Waste and Sewer is responsible for the implementation of this Plan.

5. Governing Legislation.

- EPA Licence No. 1938 Crookwell Sewerage Treatment Plant
- 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

6. Glossary.

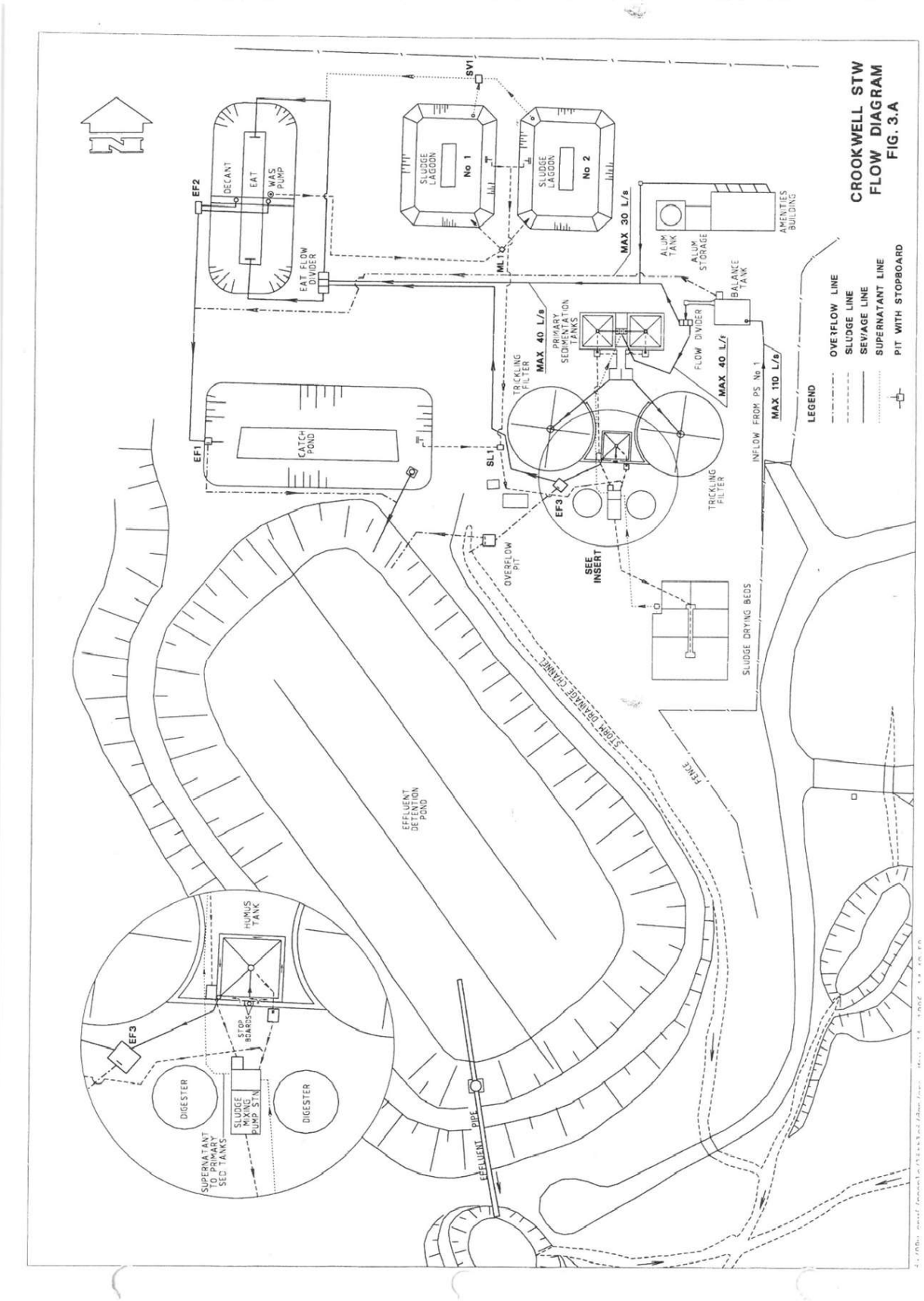
Term	Definition
PIRMP	Pollution Incident Response Management Plan
ULSC	Upper Lachlan Shire Council – The Council
PPE	Personal Protective Equipment
SOP	Standard Operating Procedure
SWMS	Safe Work Method Statement
GUN STP	Gunning Sewerage Treatment Plant
EPA	Environmental Protection Authority
DLEMO	Deputy Local Emergency Management Officer
LEMO	Local Emergency Management Officer
POEO	Protection of the Environment Operations Act 1997 (NSW)
PS	Pump Station
SES	State Emergency Services
SPS	Sewer Pump Station
SOP	Standard Operating Procedure
STP	Sewerage Treatment Plant
SWMS	Safe Work Method Statement
WHS	Work Health Safety
WHA Act.	Work Health Safety Act 2011

7. Appendices.

- Appendix 1 - Site Plans
- Appendix 2 – Compulsory and Optional Downstream Landholders
- Appendix 3 – Crookwell Sewerage Pump Station Schematic
- Appendix 4 - Map Crookwell EPA License Monitoring Points
- Appendix 5 - Site Chemical Register
- Appendix 6 - Personal Protective Equipment
- Appendix 7 - Risk Assessments and Action
- Appendix 8 – Additional Emergency Contacts
- Appendix 9 - Incident Notification Forms
- Appendix 10 – Emergency Operating Procedure

Appendix-1 - Site Plans.

Crookwell Sewerage Treatment Plant



Appendix 2- Compulsory & Optional Downstream Landholder Notifications

The EPA requires ULSC notify downstream landholders for approximately 5km of river mileage. At 5.5km downstream, Kentgrove Creek Joins the Crookwell River. ULSC considers this junction to be the point to end the notification list.

Compulsory Notifications:-

Incidents from Crookwell STP discharge onto ULSC land then into Crown Water Reserve, therefore notifying the Manager Water Waste and Sewer (the ULSC Representative) and the NSW EPA (the Crown representative) are sufficient.

Optional Notifications:-

As at 15 May 2024, 15 landholders adjacent to the Crown Water Reserve within the 5km distance may not have the river stock fenced and/or may have a water license to draw water from the Crookwell River.

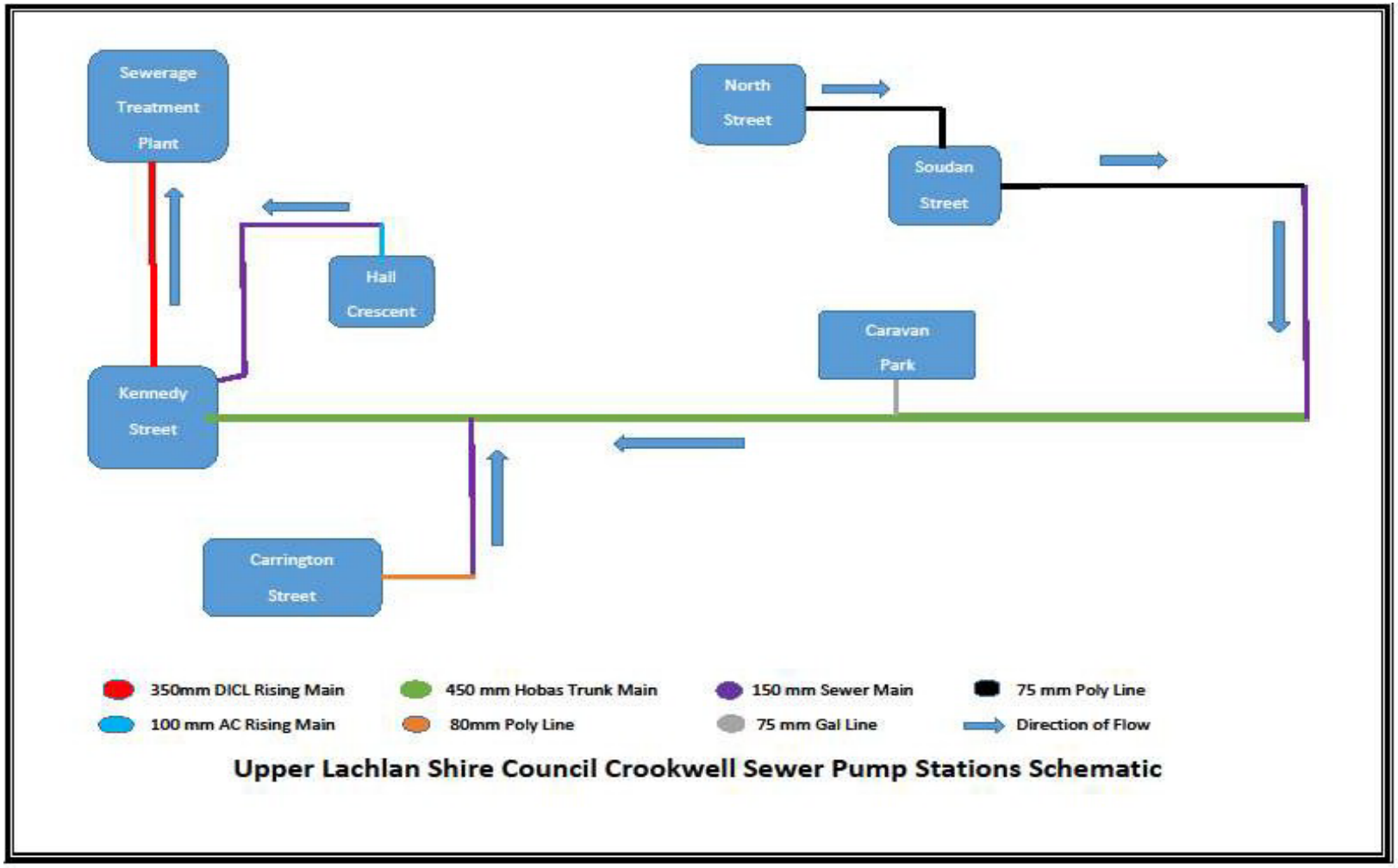
A Confidential list of landholders not published on ULSC's web site is available to Operators at Crookwell STP and Crookwell ULSC Water Sewer & Waste Office. This list is not published on ULSC's web site due to privacy requirements.

Below is the map of lots adjacent to affected lots.

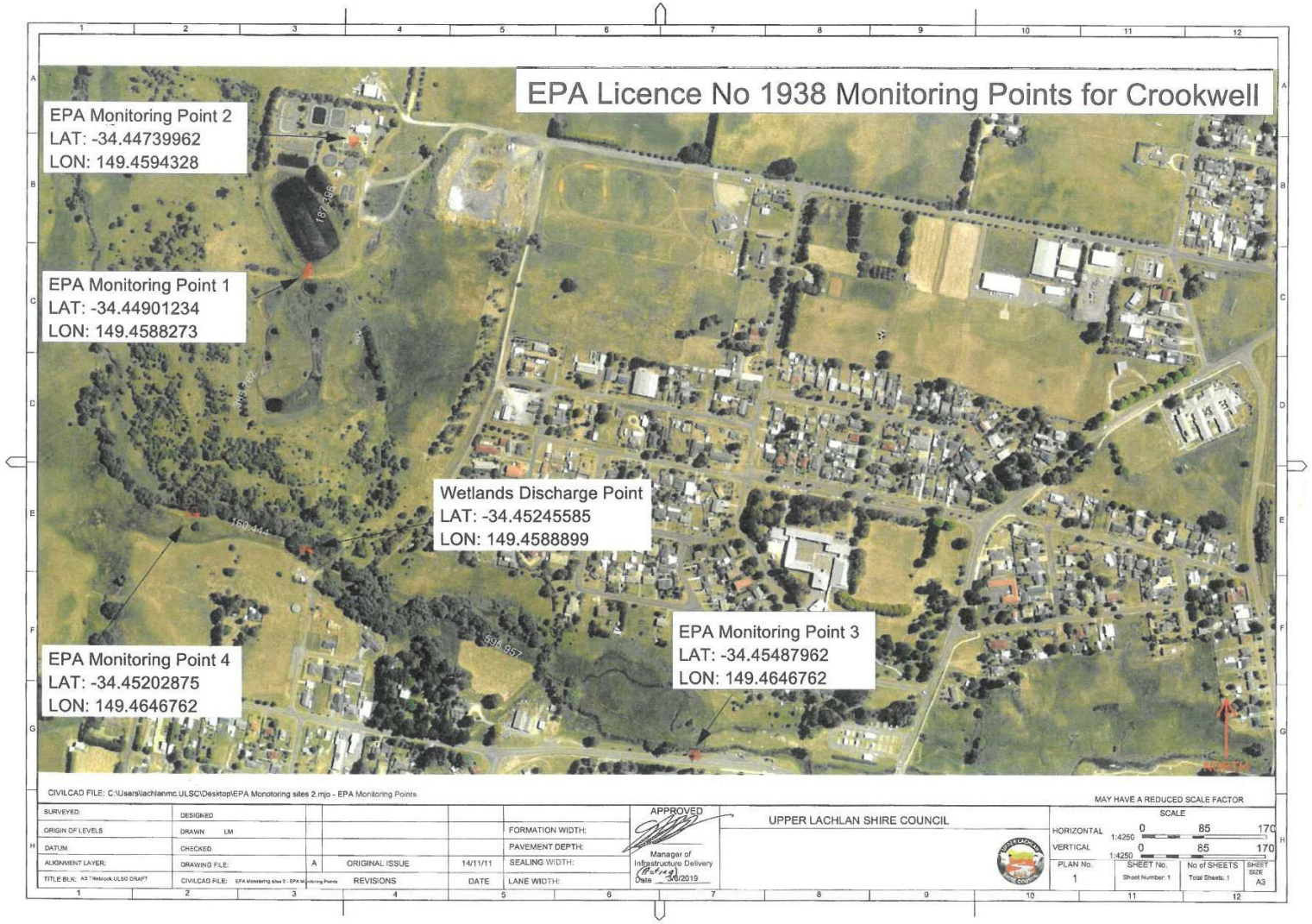

DP753012
Lot 3
DP1041408
Lot 1
DP136371
Lot X
DP368
Lot 3
DP1221378
Lot 4
DP1041408
Lot 2
DP843754
85894
Lot 4
DP1086805
Lot 218
DP753042
Lot 4
DP193210
Lot 2
DP193210
Lot 118
DP753042
Lot 3
DP193210
Lot 1
DP193210
OAD

Upper Lachlan Shire Council
PO Box 42
GUNNING, NSW 2581

Appendix 3 – Sewerage Pump Station Schematic.



Appendix 4 – Map Crookwell EPA License Monitoring Points.



Appendix 5 - Site Chemical Register.

Date of register: June 2024

Folder Reference	Chemical Name	Manufacturer	MSDS Issue Date	Audited Volume of Chemicals Stored	Location Where Chemical is Stored
1	Wastewater	STP Plant	01/06/2015	8 Megalitres	Sewerage Treatment Plant
2	Raw Sewerage	Crookwell Township	24/06/2004	8 Megalitres	Sewerage Treatment Plant
3	Liquid Aluminum Sulphate	Nowra Chemicals	09/06/2016	13,100 litres	Alum Tank
4	Optigear Synthetic 800/320	Castrol	7/10//2020	22 litres	Chemical Dosing Room Bunded
5	Hyspin AWS 68	Castrol	14/08/2020	5 litres	Chemical Dosing Room Bunded
6	Alpha SP 320	Castrol	7/10/2020	20 litres	Chemical Dosing Room Bunded
7	Hydrated Lime	Adelaide Brighton Cement	15/06/2017	1320 kg	Chemical Dosing Room Bunded
8	Optileb	Castrol	11/01/2018	40 litres	Chemical Dosing Room Bunded
9	Alphasyn PG 460	Castrol	18/11/2019	160 litres	US Jetter Garage
10	PVC Pipe Cement Type P Blue	Soudal	12/03/2020	1 litres	US Jetter Garage
11	PVC Pipe Cement Type N Green	Soudal	12/03/2020	1 Litres	US Jetter Garage
12	Red Primmer	Soudal	26/09/2020	1 Litres	US Jetter Garage
13	Unleaded Petrol	Caltex	01/09/2016	30 litres	Workshop
14	Premium Heavy Duty Grease	Castrol	14/02/2018	4.05 kg	Workshop
15	Sulfuric Acid	Chem-Supply	April 2018	1 litre	Workshop
16	Cockpit-care spray	Wurth	20/11/2020	500 ml	Workshop
17	HHS2000	Wurth	3/08/2020	800 ml	Workshop
18	Super De-icer spray	Wurth	20/09/2019	350 ml	Workshop
19	Rodex B rat blocks	Adama Australia	July 2016	8 kg	Workshop
20	Rodex B mouse pellets	Innovative Pest Management	17/03/2017	5 kg	Workshop
21	Auto Glass Cleaner	Auto 1	22/12/2015	300	Workshop
22	RootoX Pipeline Root Control Chemical	RootoX Root Control Corp.	April 2011	4 lbs.	Workshop

Folder Reference	Chemical Name	Manufacturer	MSDS Issue Date	Audited Volume of Chemicals Stored	Location Where Chemical is Stored
23	Spirigel Antiseptic Alcohol Gel	Ecolab	04/07/2020	5.5 litres	Laboratory
24	Buffer Solution 4, 7	Thermo Fisher Scientific	4/07/2020	800ml	Laboratory
25	NitraX reagent Tube	Thermo Fisher Scientific	8/10/2017	53 Tubes	Laboratory
26	Ross Electrode Filling Solution	Thermo Fisher Scientific	10/08/2016	150 ml	Laboratory
27	Ross Electrode Storage Solution	Thermo Fisher Scientific	10/08/2016	450 ml	Laboratory
28	Phosphate Reagent	Thermo Fisher Scientific	22/08/2017	80 Tests	Laboratory
29	Ammonia Cyanurate Reagent	Thermo Fisher Scientific	2/08/2017	70 Sachets	Laboratory
30	Ammonia Salicylate Reagent	Thermo Fisher Scientific	3/08/2017	70 Sachets	Laboratory
31	Deodoriser	A1 Chemicals	02/07/2020	20 kg	Storeroom
32	Power Wash	A1 Chemicals	19/12/2019	3 litres	Storeroom
33	Linga Longa	A1 Chemicals	16/04/2020	35 litres	Storeroom
34	Mechanic in a Can	A1 Chemicals	21/11/2019	400 g	Storeroom
35	Sweet Lu	A1 Chemicals	14/03/2015	2.4 kg	Storeroom
36	Han-I-size	Momar	Jan 2017	2 litres	Storeroom
37	Mo-Flo	Momar	Sept 2017	2 litres	Storeroom
38	Drain Kleen	Momar	Nov 2016	1 litres	Storeroom
39	Sodium Hydroxide			1 kg	Storeroom

Folder Reference	Chemical Name	Manufacturer	MSDS Issue Date	Audited Volume of Chemicals Stored	Location Where Chemical is Stored
40	Washing Powder	Unilever	18/07/2018	7 kg	Laundry
41	Fabric Softener	Unilever	1/03/2013	9 litres	Laundry
42	Handy Andy	Clorox	20/10/2017	500 ml	Laundry
43	Ajax Fresh	Colgate	21/09/2000	500 g	Laundry
44	Jif cream	Rexona	03/06/2010	375 ml	Laundry
45	Multi Klean	Enviro Chemicals	16/02/2018	1 litres	Laundry
46	Duck Gel	Johnson	19/07/2017	1.5 litres	Bathroom
47	True Grit	A1 Chemicals	04/02/2020	3 litres	Bathroom
48	9 v Batteries	Energizer	Jan 2017	0 Batteries	Office
49	AAA Batteries	Energizer	Jan 2017	0 batteries	Office
50	AA Batteries	Energizer	Jan 2017	0 batteries	Office
52	Inkjet Cartridge Set - Black Magenta, Cyan, Yellow	Hewlett-Packard	05/02/2019	1 set	Office
52	Fly Spray - Mortein	Reckit		300 g	Office

Appendix 6 - Personal Protective Equipment List.

This section list the standard PPE items required.

All Incidents require the following equipment

- High visibility protective clothing and footwear
- Protective gloves – rubber to elbow and disposable nitrile
- Ear plugs
- Eye protection
- Face masks
- Reflective vests
- Sun hat and sun screen cream
- 4WD & Mobile Phone/2 way radio
- Spill, Signage & Barriers
- Disinfection equipment e.g. lime.

Additionally, the Sewerage Treatment Plant is to keep:

- Floatation vests
- Safety Boots (NOT Gumboots)
- Gas Monitor
- Spill kit

Additionally, the Sewerage system response truck is to keep:-

- Asbestos kit
- Apron/disposable overalls
- Gumboots

Please Note: - Gumboots are **not** to be used within the Sewerage Treatment Plant near deep water zones without a self-inflating floatation vest as they pose a safety risk to workers. Gumboots may be used away from deep water zones for wash downs, etc.

Appendix 7 - Risk assessments and actions

No	Risk	Impact	Risk LxC = Rating	Controls
	Crookwell Sewerage system			
CSS1	Sewage overflow due to heavy rainfall	Land contamination, possibly enter a waterway	C2 = M	▪ Sewerage system maintenance and rehabilitation to reduce infiltration and inflows ▪ Spare capacity in pump wells ▪ Monitoring and maintenance ▪ Pre-emptive measures see Section 2.5 Preventative Measures
CSS2	Sewage overflow due to power failure	Land contamination, possibly enter a waterway	B2 = L	▪ Lightning protection ▪ Backup generators ▪ Pre-emptive measures see Section 2.5 Preventative Measures
CSS3	Sewage overflow due to storm damaging infrastructure	Land contamination, possibly enter a waterway	B2 = L	▪ Lightning protection ▪ Sight vegetation management to prevent damage to infrastructure ▪ Portable pumps ▪ Pre-emptive measures see Section 2.5 Preventative Measures
CSS4	Sewage overflow due to sewerage system blockages or damage	Land contamination, possibly enter a waterway	C2 = M	▪ Sewerage system maintenance ▪ Sewer Jetting program (high pressure cleaning of mains for repeat chokes) ▪ Spare capacity in pump wells ▪ Monitoring and maintenance ▪ Pre-emptive measures see Section 2.5 Preventative Measures
CSS5	Sewage overflow due to an external persons excavation hitting the sewers	Land contamination, possibly enter a waterway	C2 = M	▪ Provide underground service locations to external persons ▪ Telemetry designed to pick up a change in inflows ▪ Vacuum trucks (for clean-up) ▪ Portable pumps (for clean-up)
CSS6	Sewage overflow due to SCADA/Communications failure	Land contamination, possibly enter a waterway	A2 = L	▪ SCADA testing and alarming ▪ Monitoring of SCADA signal issues ▪ Pre-emptive measures see Section 2.5 Preventative Measures

No	Risk	Impact	Risk LxC = Rating	Controls
CSS7	Sewage overflow due to Infrastructure failure (e.g. due to age)	Land contamination, possibly enter a waterway	B2 = L	▪ Reasonably Old network ▪ Maintenance and renewal programs ▪ Pre-emptive measures see Section 2.5 Preventative Measures
CSS8	Sewage overflow due to Mechanical breakdown/dual pump failure	Land contamination, possibly enter a waterway	B2 = L	▪ Telemetry monitoring ▪ Maintenance and inspection programs ▪ Spare capacity in pump wells ▪ Portable pump to bypass site and vacuum truck to maintain flows ▪ Monitoring and maintenance ▪ Pre-emptive measures see Section 2.5 Preventative Measures
	Crookwell Wastewater Treatment Plant			
ULTP1	Sewage overflow (raw) due to heavy rainfall	Land contamination, possibly enter a waterway	B2 = L	▪ Sewerage system maintenance to reduce infiltration and inflows ▪ Spare capacity in pump wells ▪ Overflow storage at the WWTP ▪ Bypass systems to overflow storage pond ▪ Monitoring and maintenance ▪ Pre-emptive measures see Section 2.5 Preventative Measures
ULTP2	Sewage overflow (raw) due to storm (lightning/wind) causing power failure	Land contamination, possibly enter a waterway	B2 = L	▪ Lightning protection ▪ Backup generators ▪ Pre-emptive measures see Section 2.5 Preventative Measures
ULTP3	Sewage overflow (raw) due to storm (lightning/wind) causing infrastructure damage	Land contamination, possibly enter a waterway	A2 = L	▪ Lightning protection ▪ Sight vegetation management to prevent damage to infrastructure ▪ Pre-emptive measures see Section 2.5 Preventative Measures
ULTP4	Sewage overflow (raw) due to sewerage system blockages	Land contamination, possibly enter a waterway	A2 = L	▪ Sewerage system maintenance ▪ Spare capacity in pump wells ▪ Overflow storage at the WWTP ▪ Bypass systems to overflow storage pond ▪ Monitoring and maintenance ▪ Pre-emptive measures see Section 2.5 Preventative Measures

No	Risk	Impact	Risk LxC = Rating	Controls
ULTP5	Sewage overflow (raw) due to damage to onsite sewerage system (e.g. during excavations etc)	Land contamination, possibly enter a waterway	B2 = L	▪ Locate services prior to excavations ▪ Appropriate supervision of contractors ▪ Bypass systems
ULTP6	Sewage overflow (raw) due to SCADA/Communications failure	Land contamination, possibly enter a waterway	B2 = L	▪ SCADA testing and alarming ▪ Pre-emptive measures see Section 2.5 Preventative Measures
ULTP7	Sewage overflow (raw) due to Infrastructure failure (e.g. due to age)	Land contamination, possibly enter a waterway	B2 = L	▪ Maintenance and renewal programs ▪ Pre-emptive measures see Section 2.5 Preventative Measures
ULTP8	Sewage overflow (raw) due to excessive flows	Land contamination, possibly enter a waterway	A2 = L	▪ Sewerage system maintenance to reduce infiltration and inflows ▪ Spare capacity in pump wells ▪ Overflow storage at the WWTP ▪ Bypass systems to overflow storage pond ▪ Monitoring and maintenance ▪ Pre-emptive measures see Section 2.5 Preventative Measures
ULTP9	Sewage overflow (raw) due to Mechanical break down	Land contamination, possibly enter a waterway	A2 = L	▪ Maintenance and inspection programs ▪ Spare capacity in pump wells ▪ Overflow storage at the WWTP ▪ Bypass systems to overflow storage pond ▪ Monitoring and maintenance ▪ Pre-emptive measures see Section 2.5 Preventative Measures
ULTP10	Sewage overflow (raw) due to Treatment plant blockage	Land contamination, possibly enter a waterway	A2 = L	▪ Bypass systems ▪ Gross solid screening
ULTP11	Chemical spill due to Tank/storage failure	Land contamination, possibly enter a waterway	B2 = M	▪ Bunding ▪ Alarms ▪ Inspection and maintenance of tanks
ULTP12	Chemical spill During delivery	Land contamination, possibly enter a waterway	B2 = M	▪ SWMS ▪ PPE

Upper Lachlan Shire Council
PO Box 42
GUNNING, NSW 2581

No	Risk	Impact	Risk LxC = Rating	Controls
ULTP13	Chemical spill due to Damage to chemical system	Land contamination, possibly enter a waterway	A3 = M	▪ Locate services prior to excavations ▪ Appropriate supervision of contractors ▪ Bypass systems ▪ Shut off valves for chemicals
ULTP14	Chemical spill due to Vandalism	Land contamination, possibly enter a waterway	A3 = M	▪ Site security fences
ULTP15	Chemical spill due to Bund failure	Land contamination, possibly enter a waterway	B3 = M	▪ Bund inspections ▪ Annual bunding tests ▪ Maintenance and renewal
ULTP16	Chemical truck incident outside of bunded area	Land contamination, possibly enter a waterway	B3 = M	▪ Only use transport companies with evidence of driver licensing and training ▪ Operator onsite during deliveries (or at minimum direct contact with deliver in exceptional circumstances)

Likelihood

A **IMPROBABLE -** May occur only in exceptional circumstances
B **REMOTE -** Could occur at some time
C **OCCASIONAL -** Might occur at some time
D **FREQUENT -** Will probably occur in most circumstances
E **CONTINUOUS -** Is expected to occur in most circumstances

Refer also to Councils Hazards, Risks and Controls Guidelines

Consequences

1. **INSIGNIFICANT -** 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
2. **MINOR -** 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
3. **MODERATE -** 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/License conditions, business failure resulting in delay < 3 months and costs, plant/equipment loss < $50,000
4. **MAJOR -** 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
5. **CATASTROPHIC -** 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

Rating

L = Low
M = Medium
H = High
V = Very High
X = Extreme

	Likelihood				
Consequence	A	B	C	D	E
1	L	L	L	M	H
2	L	L	M	H	V
3	M	M	H	V	X
4	H	H	V	X	X
5	V	V	X	X	X

Appendix 8 - Additional Emergency Contacts.

UPPER LACHLAN SHIRE COUNCIL

(02) 4830 1000

Organization	Contact Person Details (Name, position, etc.)	Telephone Number
Emergency Services	Fire, Police, Ambulance	**000**
Crookwell Police	33 Goulburn St, Crookwell NSW 2583	**(02) 4832 1044**
Gunning Police	Warrataw St, Gunning NSW 2581	**(02) 4845 1244**
Taralga Police	MacArthur St, Taralga NSW 2580	**(02) 4840 2044**
Crookwell Fire & Rescue	157 Goulburn St, Crookwell NSW 2583	**(02) 4832 1601**
Gunning Rural Fire Service	26 Nelanglo St, Gunning NSW 2581	**000 or 1800 679 737**
Taralga Rural Fire Service	Orchard Street, Taralga NSW 2580	**000 or 1800 679 737**
LEMO's Upper Lachlan Shire Council.	ULSC – Robert Johnson LEMO ULSC – Shelley Knight DLEMO	**(02) 4830 1034 (02) 4830 1053**
NSW Water	Sydney / Lachlan Water Management Area.	**(02) 9338 6600 or 1300 722 468**
Crookwell Health Care Centre	17 Kialla Road, Crookwell NSW 2583	**(02) 4843 2500**
Crookwell Hospital	Kialla Road Crookwell, NSW 2583	**(02) 4837 5000** 24 Hrs / 7 Days
Goulburn Hospital	130 Goldsmith St, Goulburn NSW 2580	**(02) 4827 3111** 24 Hrs / 7 Days
NSW Public Health (Goulburn)	Ms Tabitha Holliday tabitha.holliday@health.nsw.gov.au	**0407 060 237**
NSW Poisons Information Centre	Westmead Children's Hospital	**13 11 26**

Organization	Contact Person Details (Name, position, etc.)	Telephone Number
NSW Fisheries	5 O'Keeffe Ave, Nowra NSW 2541	**(02) 4424 7400**
ULSC Acting Director Environment & Planning	Simon Arkinstall	**(02) 4830 1024**
ULSC Manager of Water, Sewer & Waste	John Meere	**0492 442 694**
ULSC Media Officer		**(02) 4830 1000**
ULSC Health & Safety Leader	Leagh-Anne Cosgrove	**0437 615 003**

Appendix 9 – Incident Notification Forms

Upper Lachlan Shire Council – SEWER TREATMENT PLANT

RELEASE EXCEEDANCE NOTIFICATION

ULSC
Received Date:
Entered By:
TRIM Doc ID:

Upper Lachlan Shire Council is collecting information supplied on this form in accordance with the *Protection of the Environment Operations Act. 1997*. Information will be accessed by persons who have been authorised to do so. Information will not be given to any other person or agency unless required by law. Personal information is handled in accordance with the *Privacy Information Act 2000*.

DETAILS [Crookwell STP - Location of Exceedance]					
Time of Sample		Date of Sample		Plant Location	Crookwell STP
EPA LICENCE No.	1938	Name of Person Reporting			

PARAMETER EXCEEDED	RELEASE LIMIT	RESULT	YES	NO
Biological Oxygen Demand	20 mg/L (maximum)			
Total Suspended Solids	30 mg/L (maximum)			
pH	6.5 – 8.5 (range)			
Faecal Coliforms (organisms)	200 cfu /100ml (maximum)			
Nitrogen (Ammonia)	5mg/L (maximum)			
Nitrogen Total	15 mg/L (maximum)			
Oil & Grease	10 mg/L			
Phosphorus (Total)	1 mg/L			
Chlorophyll-a	>100µg/L			
Volume / Mass Limit	>8,078 ltrs / day (Point 2)			

EXCEEDANCE CAUSE:		
☐ Equipment failure	☐ Telemetry failure	☐ Algal Bloom (>100µg/L)
☐ Weather event / Infiltration	☐ Excess plant demand	☐ Unknown *Provide Details Below.*
☐ Operator error/experience	☐ Non-natural disaster event	

DETAILS [Type here]					
Time of Sample		Date of Sample		Plant Location	CROOKWELL STP
EPA LICENCE No.	1938	Name of Person Reporting			

PARAMETER EXCEEDED	RELEASE LIMIT	RESULT	YES	NO
Biological Oxygen Demand	20 mg/L (maximum)			
Total Suspended Solids	30 mg/L (maximum)			
pH	6.5 – 8.5 (range)			
Faecal Coliforms (organisms)	200 cfu /100ml (maximum)			
Nitrogen (Ammonia)	5mg/L (maximum)			
Nitrogen Total	15 mg/L (maximum)			
Oil & Grease	10 mg/L			
Phosphorus (Total)	1 mg/L			

Upper Lachlan Shire Council – SEWER TREATMENT PLANT

RELEASE EXCEEDANCE NOTIFICATION

Chlorophyll-a	>100µg/L			
Volume / Mass Limit	>8,078 ltrs / day (Point 2)			
EXCEEDANCE CAUSE:				
☐ Equipment failure	☐ Telemetry failure	☐ Algal Bloom (>100µg/L)		
☐ Weather event / Infiltration	☐ Excess plant demand	☐ Unknown *Provide Details Below.*		
☐ Operator error/experience	☐ Non-natural disaster event			
CORRECTIVE ACTIONS & ADDITIONAL INFORMATION.				
ATTACH ALL TEST RESULTS AND PHOTOS, AS REQUIRED FOR EVENT REPORTING *For exceedance in the Sewerage System, Test only Faecal coliforms at site & 500m U/S & D/S.* *Testing is undertaken during the event and for 2 weeks after the event has ceased, on Monday, Tuesday, Wednesday and Thursday.*				
AUTHORISATIONS / EPA REPORTING: *(Office Use Only)*				
Reporting Officer:		**Date:**		
Position:				
EPA Report Phone: **131 555** or South East – Queanbeyan Office (02) 6229 7002 (9:00am – 5:00pm) E-mail notifications and correspondence to; queanbeyan@epa.nsw.gov.au				
Time:		**Event / Log Reference:**		
Follow-up:		**Due Date:**		
Protection of the Environment Operations Act 1997.				

Once completed please send this form and any attachments either:
In person at your local Upper Lachlan Shire Council Office
or e-mail to council@upperlachlan.gov.au or
CHIEF EXECUTIVE OFFICE
UPPER LACHLAN SHIRE COUNCIL
PO BOX 42, GUNNING NSW 2581

Incident Notification
for sewerage spill or overflow

PLACE YOUR COUNCIL LOGO HERE

DATE

Dear

Overflow at

EPA Ref #

EPA Licence # of Sewerage Scheme.

Following our initial telephone call, we are advising you in writing (Refer to R4 of Licence) of more details of a sewage spill or overflow that Council experienced at am/pm on

The overflow was caused by

Once Council staff became aware of the overflow, the EPA and were notified immediately and corrective measures were put in place.

(Refer to Condition M9) of Licence: requires that Council record the following details in relation to each observed or reported overflow from the reticulation system and from the sewage treatment plant:

a) The location of the overflow:

b) The date, the estimated start time and estimated duration of the overflow:

c) The estimated volume of the overflow (litres):

d) A description of the receiving environment of the overflow:

e) Classification as a dry or wet weather overflow:

f) The probable cause of the overflow:

g) Any actions taken to stop the overflow happening:

h) Any action taken to clean up the overflow:

i) Any actions taken to prevent the overflow happening again:

Additionally, sampling was undertaken at and the results of these samples are attached.

Yours faithfully,

NAME SIGNATURE DATE

APPROVED BY GROUP DOCUMENT ID VERSION

ISSUED REVISED STATUS PAGE

Appendix 10 – Emergency Operational Procedure

Operational Procedure to cover the areas of concern in the event of a Pollution Incident Response.

Purpose.

The purpose of this SOP is to detail the correct actions for securing a site where a pollution incident has occurred and the preventative measures to be undertaken to minimise the risk of the incident escalating.

Scope.

This procedure applies to sites where

- a pollution incident has occurred

This procedure is to be used by staff who are generally familiar with the water and sewer systems managed by Council.

As a pollution incident can vary widely in nature the EOP is primarily focused on providing an orderly thought process as the management of the event unfolds.

Responsibilities.

Role	Responsible for
Water and Wastewater staff.	Responding to pollution incidents, performing corrective action tasks, reporting responses to the relevant person or authority.
Manager/ Supervisor - Treatment or Maintenance.	Primary Incident Controller Overseeing the response to the incident to ensure WHS and POEO related issues are completed..
Health & Safety Leader	Manages WHS Training of Incident Response personnel.
ULSC Environmental Coordinator	In the case of a large incident, investigates non-compliances.
Coordinator Water Sewer and Waste	Post Incident Auditor and Incident Observer. Review and Management of Incident Management Plans. Public Safety Plans and associated documents. Training of Incident Response personnel.
ULSC Local Emergency Management Coordinator (LEMO)	LEMO may be required in the event of a large incident to Incident Control

Key Safety Plant/Equipment and PPE.

All Incidents require the following equipment

- High visibility protective clothing and footwear
- Protective gloves – rubber to elbow and disposable nitrile
- Ear plugs
- Eye protection
- Face masks
- Reflective vests
- Sun hat and sun screen cream
- 4WD & Mobile Phone/2 way radio
- Spill, Signage & Barriers
- Disinfection equipment e.g. lime.

Additionally, the Sewerage Treatment Plant is to keep:

- Floatation vests
- Safety Boots (NOT Gumboots)
- Gas Monitor
- Spill kit

Additionally, the Sewerage system response truck is to keep:-

- Asbestos kit
- Apron/disposable overalls
- Gumboots

Please Note: - Gumboots are **not** to be used within the Sewerage Treatment Plant near deep water zones without a self-inflating floatation vest as they pose a safety risk to workers. Gumboots may be used away from deep water zones for wash downs, etc.

Procedures.

In the event of an incident, the following steps are to be undertaken: -

- Locate the incident site;
- Don required PPE;
- Assess the site
  - If required, use gas monitor to test for noxious gasses;
- Isolate the Incident.
  - In the event of a pollution incident, the site must be isolated to prevent unauthorised entry.
  - Isolate the area with barrier boards, parafencing, witches hats, etc. This may be in the form of barrier boards and/or para-webbing fence.
  - The site once defined will be attended by an authorised Council employee until the incident is addressed and the site made safe.
- Apply First Aid if required to any injured or contaminated persons.
- Remove any persons or animals from potential harm.
- Preserve the site.
  - Ensure the site is preserved for incident investigation.
  - Photograph the site
- Notify Manager Water Waste & Sewer (the Incident Controller) & Health & Safety Leader.
- Advise the Manager Water Waste and Sewer if Emergency Services are required.
- Control the pollution incident. Manage the incident until such time as the spill ceases and is made safe.
  - Shut down pumps,
  - Apply bund,
  - Apply appropriate control methodology e.g. clear the blockage
  - Initiate testing procedures
  - Prevent escalation of the incident.
- Advise downstream landholders as per Appendix 2 (list located at site).
- Advise EPA on 13 15 55
  - Record the Incident Number the EPA provides
- If livestock are likely to consume contaminated water, notify additional landholders where stock are involved.
- Notify Queanbeyan EPA Office and ask if they have any special requirements.
- Place warning signage.
- Initiate testing approximately 500m upstream, at the site, and approximately 500m downstream or just before another watercourse joins the affected watercourse.
  - Test required is faecal coliforms.
  - Samples are to be taken from a safe place.
  - Testing continues for 2 weeks post-event.
  - If the incident occurs on a weekend, samples can be stored in the STP sample fridge for 24 hours, but same day transport is preferred.
- Follow sewer safety procedures for PPE in relation to cleaning and disposal.
- Record all steps taken in the Incident Log.
- Prepare Release Exceedance Notice and return to the EPA within 48 hours.
- Initiate contaminated site clean-up.
- Hold an all-responding ULSC personnel de-brief within 72.
- Prepare a Lessons Learned document.
- Send all documentation to the Incident Auditor for compliance audit and document review.

Communication.

- Notify management. Alert any immediate neighbors of the potential hazard.
- When completed communicate with the various stakeholders to let them know the incident has been managed and is no longer a threat.

Preventing an Escalation.

1. In the event the pollution is made worse by the operation of a pump station then the pump station is to be shut down or if this is not possible then the pollution site to be by-passed using up-stream and down-stream manholes (in the case of sewerage surcharge) and portable pumping equipment. If bypassing is not practical, then consider engaging the use of a tanker to transport any liquids to a suitable disposal location.

2. **Bunding:** To prevent contaminating surrounding areas appropriate bunding must be put in place as soon as it is safe to do so. These can be in the form of earthen bunds using the material on site. Use sand bags, hay bales, black plastic or HAZCHEM socks, to contain the polluting material or substance. Once the incident is controlled, any polluted material is to be collected and disposed either at an approved site. If the polluted material is of a toxic nature (e.g. chemical) then disposal will require the engagement of specialist service providers.

Records.

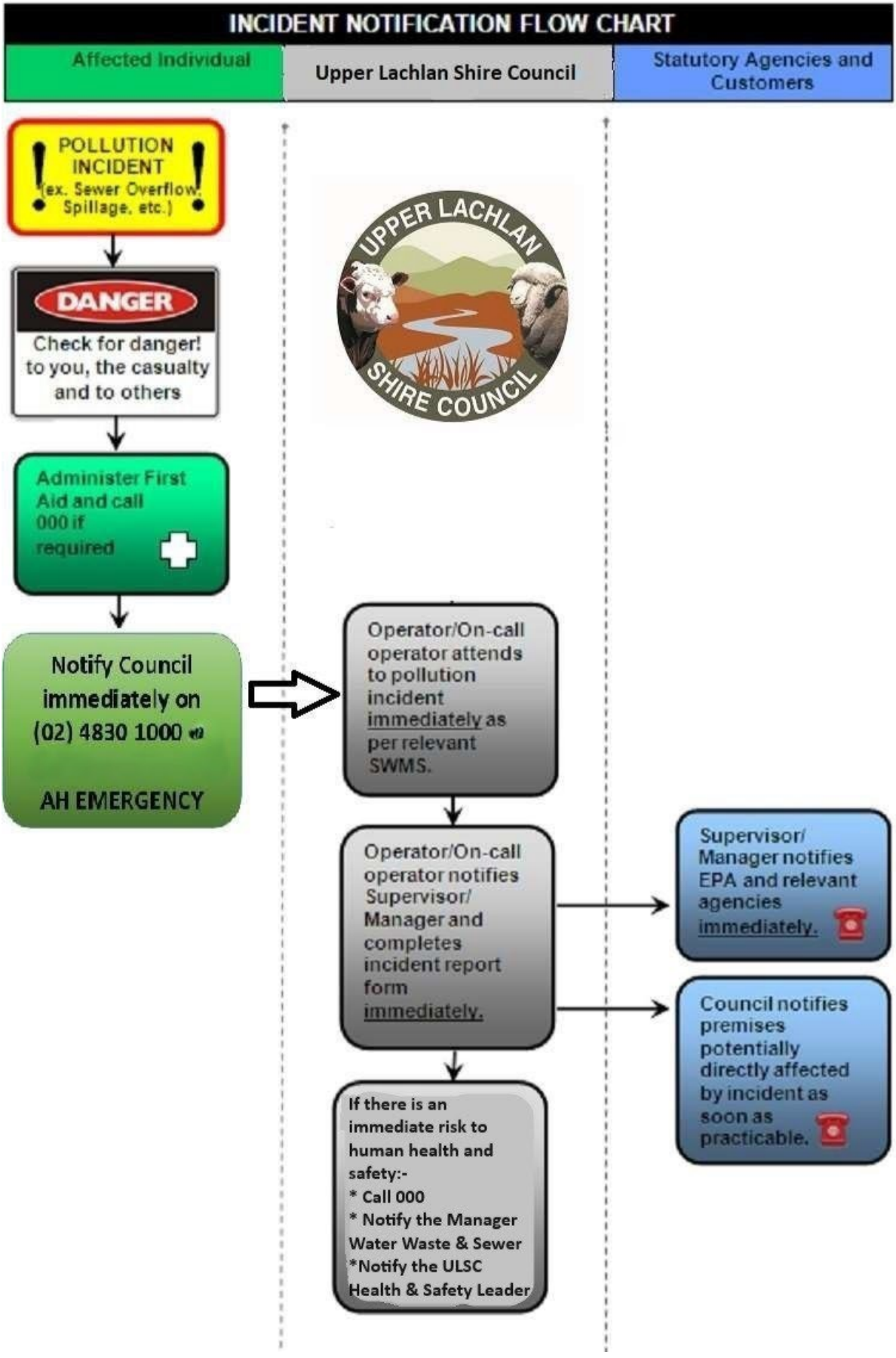
Timeline of Events:

1. Ensure the course of events and critical decisions are recorded during the management of the incident. These may only be in the form of dates, times and dot points that will act as memory stimulants when a formal report is completed.
2. If the incident is a sewerage surcharge, then complete the “Incident Notification “. **See Appendix 9 of this PIRMP.**

Clean Up:

1. Ensure a thorough clean-up of the area is carried out once the incident is rectified
   a. For sewer surcharge, disinfect the affected area.
   b. For toxic chemicals remove and bag the affected soil and back-fill with new material
   c. Remove all signage and barrier fencing.

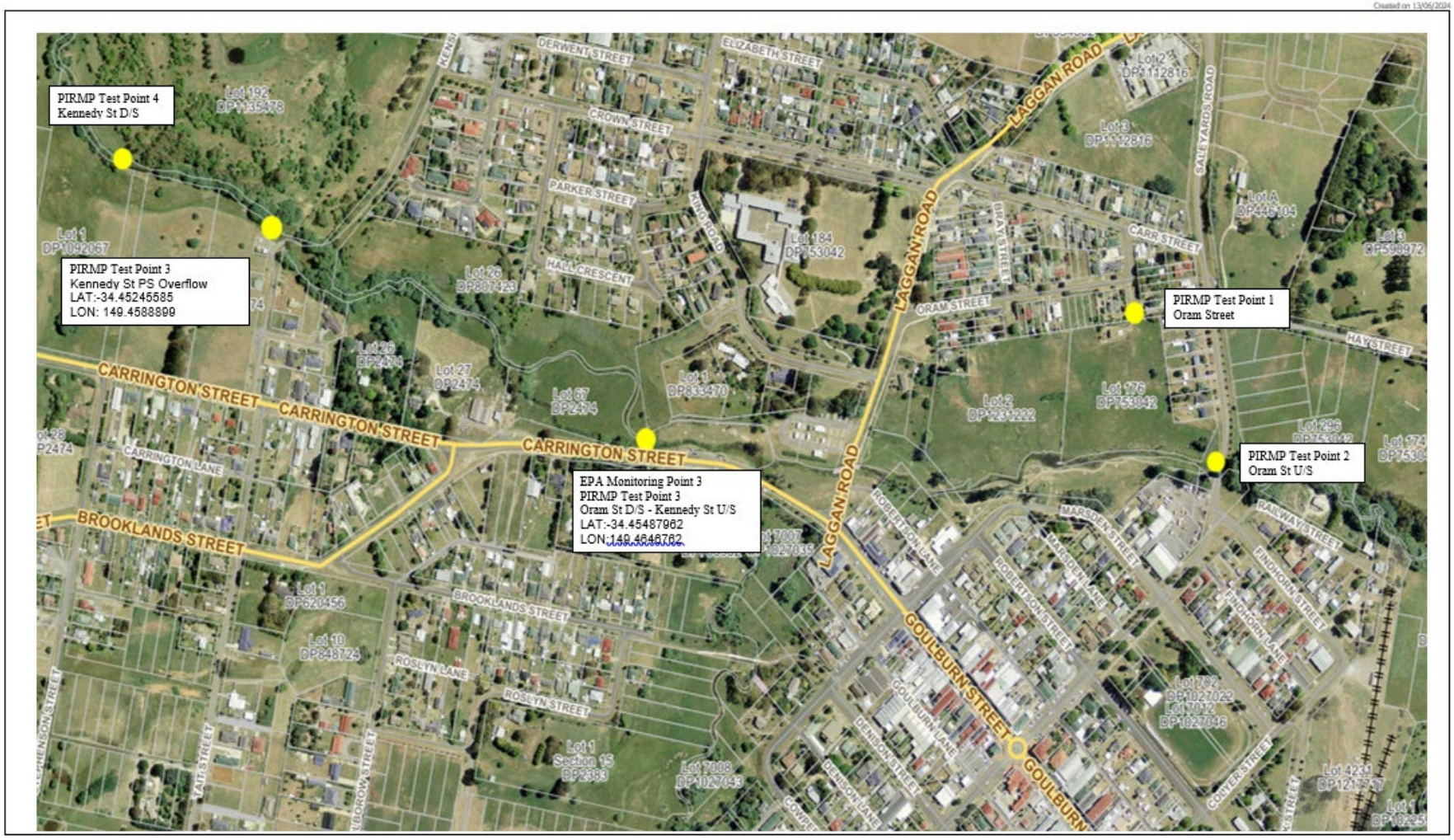
Upper Lachlan Shire Council



Upper Lachlan Shire Council
PO Box 42
GUNNING, NSW 2581

Upper Lachlan Shire Council

Created on 13/06/2024



Upper Lachlan Shire Council
PO Box 42
Gunning NSW 2581
Telephone: 02 4830 1000
Email: council@upperlachlan.nsw.gov.au

Important Notice!
This map is not a precise survey document. Accurate locations can only be determined by a survey on the ground.
This information has been prepared for Council's internal purposes and for no other purpose. No statement is made about the accuracy or suitability of the information for use for any purpose (whether the purpose has been notified to Council or not). While every care is taken to ensure the accuracy of this data, neither the Upper Lachlan Shire Council nor the SS makes any representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damages) and costs which you might incur as a result of the data being inaccurate or incomplete in any way and for any reason.

Projection:	GDA2020 / MGA zone 55
Date:	13/06/2024
Drawn By:	Julia Wynn

Crookwell STP PIRMP Test Points
Oram St & Kennedy St

References.

File Number	Description (File)	Status	Location
SWMS/SWI	Emergency Procedures	Pending	To be Re-Developed