



Pollution Incident Response Management Plan

Tathra Sewage Treatment Plant

Andy Poole Drive, Tathra

Issue 11

15 November 2023



RECORD AMENDMENT SHEET

Date	Reason for Amendment	Section No.	Page No.	Approved By
21/05/15	Update to reflect current EPA plan requirements	All	All	Bruce Powell
03/06/15	Insert Record Amendment Sheet	1	2	Bruce Powell
03/06/15	Update contact numbers Update response workflow	5	22	Bruce Powell
17/06/16	Update agency contact numbers and response workflow <i>(Bruce Powell, Greg O'Donnell)</i>	5, 6 & 9	21-27	Bruce Powell
23/06/17	Review requested wrt inventory of pollutants, onsite equipment, agency contact numbers and response workflow. <i>(Reviewed by Bruce Powell, Greg O'Donnell (BVSC), Matt Brill, Naomi Maher (Downer))</i>	3, 5, 6 & 9	17-20, 21, & 21-27	Bruce Powell
04/06/18	Update agency contact numbers and response workflow <i>(Bruce Powell, Wouter van der Merwe, Myfanwy Appleton, Keith Hyatt, Jason Darcy, Naomi Maher)</i>	5, 6 & 9	21-27	Bruce Powell, Wouter van der Merwe, Myfanwy Appleton, 29/08/18
16/11/20	Updated Register of Aspects and Impacts and contact number	1, 2 & 5	4 - 9	Jason Darcy, Wouter VanderMerwe, Stephen Marshall,

				Myfanwy Appleton
3/11/21	Page numbers, Issue number, Inventory of Pollutants	Title Page, Footer, Section 3	10,11	J Darcy
15/11/22	Issue number, Footer, added table for testing of plants	12	24	J Darcy
25/9/23	Issue number, Footer, updated table for testing of plants	12	24	J Darcy

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Table 1.1: Risk Analysis Matrix

		Consequences				
Image / Reputation	Slight impact	Limited impact	Local area impact	State wide impact	National Impact	
Environment	Slight effect	Minor on-site contamination	Major on-site contamination with potential for off-site contamination	Minor off - Site contamination	Major off-site contamination	
Plant / Equipment	Slight Damage (< \$2K)	Component level replacement /repair (\$2K - \$8K)	Equipment level replacement /repair (\$8K - \$12K)	Multiple equipment replacements (\$12K - \$20K)	Massive widespread equipment damage (\$20K +)	
People	First Aid Injury	Medical Treatment Injury	Lost Time Injury	Fatality	Multiple Fatalities	
		Insignificant	Minor	Moderate	Major	Catastrophic

Likelihood	Common, occurs frequently	Almost certain	High (10)	High (12)	Extreme (18)	Extreme (21)	Extreme (25)
	It is known to occur. It has happened	Likely	Moderate (6)	High (11)	High (14)	Extreme (20)	Extreme (24)
	Could occur or have heard of it occurring	Moderate	Low (3)	Moderate (7)	High (13)	Extreme (19)	Extreme (23)
	Not likely to occur	Unlikely	Low (2)	Low (5)	Moderate (9)	High (16)	Extreme (22)
	Practically impossible	Rare	Low (1)	Low (4)	Moderate (8)	High (15)	High (17)

Level of Risk
E Extreme Risk – Do not undertake Operation – re-evaluate proposed work methods
H High Risk – Significant risk control measures to be implemented before works commence
M Moderate Risk – Corrective action other than administrative controls may be needed
L Low Risk – Managed by routine Procedures and Work Practices

Table 1.2: Register of Aspects and Impacts

Activity	Aspect	Impact	Risk Rating /Score	Environmental Control Measure	Residual Risk/ Score	Monitoring	Action
Operation	Odours generated from STP at inlet works	Customer complaints	High 11	Routine monitoring and testing, daily inspection, SCADA system, paged alarms. Odour control devices installed as required.	Low 4	Daily inspection of inlet works operation and SCADA control	Notification of compliant to Treatment Works Coordinator. Review control methods. Discuss at weekly meeting.
Operations	Spillages of petrol, oils and other contaminants	Contamination of soils, groundwater and waterways. Contamination of biological process causing out of spec effluent being discharged to environment	M / 7	Compliance with Environmental Protection Act 1994 Chemicals stored in bunded containers and separated as per the Dangerous Goods requirements. Spill kits available at storage location and site of use. Plant and equipment to be well maintained and serviced to prevent oil leaks on site. Petrol not stored onsite.SOP's in place for handling of bulk chemicals, Emergency response, Spill Clean-up and training in these SOP's to be provided.	L / 3	Informally daily monitoring Scheduled Safety inspections with BVSC WHS officer	Notification to Treatment Works Coordinator. r of storage issues / spills. Review of control methods and discuss at weekly meeting.
Handling of Chemicals/ Storage of Dangerous Goods	Chemical spills	Contamination of soil, water quality, groundwater and surface water. Contamination of biological process causing out of spec effluent being discharged to environment	H / 13	All chemical storage areas are bunded as per the Australian Standards. Spill kits available at storage location and point of use. Maintenance of the chemical dosing facility undertaken as required with quarterly preventative maintenance undertaken on all pumps and pipework. SOP's in place for handling of bulk chemicals, Emergency response, Spill Clean-up and training in these SOP's to be provided.	L / 5	Daily monitoring using SCADA systems Appropriate PPE as per MSDS worn and in good condition. Test Safety shower and eye wash weekly for operation and accessibility.	Notification to Treatment Works Coordinator of storage issues / spills. Annual review of procedures, control methods and infrastructure.

Activity	Aspect	Impact	Risk Rating /Score	Environmental Control Measure	Residual Risk/ Score	Monitoring	Action
						All personnel to be trained in chemical handling. Ensure emergency response/site plans are reviewed annually.	
Operation	General waste	Deplete natural resources and creates excessive waste that needs appropriate disposal.	M / 7	Used Chemical Kits are returned to supplier for disposal and possible re-use. Any old expired chemical removed and disposed of appropriately with consultation of the chemical supplier	L / 2	Regular review of waste tracking log sheets.	Notification to Treatment Works Coordinator Review of purchasing and waste control methods.
Operation	Grit and Screening disposal	Attracts rodents to site – resulting in damage to electrical works Strong odour levels, offensive to community and users of the facility.	H / 11	Baiting process in place to control rodents that may be attracted to the site. Regular disposal of grit and screenings to prevent odour build up. Disposal to be directly into bins provided with Longopac attached.	M / 7	Daily inspection of grit and screening facility to ensure area is clean and change bins at Narrung St as necessary.	Reported to the Treatment Works Coordinator Annual review of SOPs in place
Operation	Fire: Fire originating on-site Bushfire	Death, complete destruction of assets, emissions to atmosphere, contamination of surface water (due to substances containing contaminants washing into system from fire fighting methods).	H / 13	Dispose of rubbish to licensed tips and do not burn rubbish on-site. Hot work FPP to be adhered to at all times and permits to be obtained prior to welding /cutting and grinding works. Fire extinguishers to be available on site and tested as required. Smoke alarms fitted to all buildings	M / 9	Smoke alarms and fire fighting equipment is tested 6 monthly as part of asset maintenance program (C-Works)	Review of work practices Adopt good housekeeping practices and maintain grounds
Operation	Sludge management / Transfer of Bio	Odour complaints from the public.	M / 14	Note wind direction and strength (approx) when transferring to beds.	L / 5	Inspection of biosolids unloading	Complaints to be reported to

Activity	Aspect	Impact	Risk Rating /Score	Environmental Control Measure	Residual Risk/ Score	Monitoring	Action
	Solids from Sludge Lagoons to Drying Beds at Bega / Bermagui / Tura / Tathra / Merimbula / Eden	Locate onsite contamination, unsightly.		Clean-up hard stands as soon as the contractor has finished loading truck to reduce odour and unsightly mess.		area daily and clean as necessary. inspection.	Treatment Works Coordinator. Digester Operation to be reviewed quarterly.
Operation	Harmful influent/ out of spec effluent	Contamination of process causing out of spec effluent being discharged to environment	H / 13	Emergency response plans are in place and need to be updated / reviewed annually.	L / 4	Daily monitoring of SCADA trends and on site Laboratory testing as per SOP	Detection to be reported to Treatment Works Coordinator. Plant Manager to inform Operations Manager-South
Operation	Blower failures - high ammonia	Contamination of biological process causing out of spec effluent being discharged to environment	High 14	Spare blowers kept at Bega, 3 monthly inspections carried out by PM service provider.	Moderate 9	Daily inspection of plant, daily monitoring of SCADA trends and regular preventative maintenance activities	Detection to be reported Treatment Works Coordinator. Treatment Works Coordinator to inform Operations Manager-South
Operation	Chemical Substances	Fume inhalation, skin or eye contact, spills	M / 7	Storage in bunded containers on site. Up to date MSDS on site and MSDS Register maintained. Storage and use in accordance with MSDS specifications. PPE is used when handling chemicals. Personnel trained in Chemical Handling techniques.	L / 5	Daily inspection of bunded areas.	Notification of issues to Treatment Works Coordinator. Review of controls and SOP.
Operation	Noise	Hearing damage	M / 7	Hearing protection to be worn if occupying the following areas for more than 4 hours; near blowers . Quietest equipment practicable selected for works.	L / 5	Ongoing monitoring (during site walks etc)	Notify compliance issues to Treatment Works Coordinator. Retraining.

Activity	Aspect	Impact	Risk Rating /Score	Environmental Control Measure	Residual Risk/ Score	Monitoring	Action
				Maintenance of equipment to reduce noise generated through wear and tear. Hearing protection to be provided at all times and SWMS for hand tools to include hearing protection.			
Operation	Biological (bacteria, viruses,	Deterioration in health, injury / fatality	H / 13	Adequate washroom and lunchroom facilities will be provided. High risk personnel are recommended for relevant medical injections and training. First aid box and suitably qualified/competent first aid nominee to be on site during working hours. Emergency response procedures as per the site induction. Personal Protective Equipment to be provided and used where contamination present . SOP's developed for works being conducted around these areas with appropriate measures included. Training in these SOP's is required for all personnel working in these areas.	L / 5	Ongoing monitoring (during site walks etc) Annual review of induction.	Notify issues to Treatment Works Coordinator. . Review control methods and retraining
Operation	Dust	Inhalation – Respiratory irritation	M / 7	If material is dry and dust is being generated water will be sprayed onto to minimise. Activities to be restricted if dust is unable to be suppressed.	L / 5	Ongoing monitoring (during site walks etc)	Notify issues to Treatment Works Coordinator. Review control methods and retraining
Outdoors	Non-Potable water taps.	Biological hazard, deterioration of health.	H / 13	All non-potable taps on site are to have signage installed and pipe work to the taps to be painted lilac. Site induction to reiterate the hazard of drinking this water.	L / 3	Regular inspections of sites to maintain signage.	Replace as required

SECTION 3 – INVENTORY OF POLLUTANTS

Bega Valley Shire Council STP's					
Product		Maximum Onsite Quantity	SDS Issue date	Class	Location on site, Storage area
1	114559 – Ammonium Cell Test Method 4-80mg/l		19/06/2017	9	All sites/Lab
2	114558 – Ammonium Cell test Method 0.20-8mg/l		15/06/2017	9	All sites/Lab
3	114752 – Ammonium test 0.010-3mg/l		08/11/2017	8	All sites/Lab
4	114540 – COD Cell Test Method 10-150mg/l		29/11/2017	9	All sites/Lab
5	114541 – COD Cell test method 25-1500mg/l		29/11/2017	9	All site/Lab
6	114542 – Nitrate Cell test Method 0.5-18mg/l		20/01/2014	9	All sites/Lab
7	114773 – Nitrate test 0.20-20mg/l		20/01/2014	8	All sites/Lab
8	114543 – Phosphate Cell Test Method .05-5mg/l		11/04/2017	9	All sites/Lab
9	114848 – Phosphate test Method DPD 0.010-6		31/08/2017	9	All sites/Lab
10	114547 – Nitrite Cell test Method 0.03 -2.30		22/06/2017		All sites/Lab
11	100595 - Chlorine Cell test (free chlorine) Method DPD 0.03 - 6		20/01/2014		All sites/Lab
12	100599 – Chlorine test (free and total Chlorine)		20/06/2017		All sites/Lab
13	114729 – Phosphate Cell test method 0.5-25mg/l		11/04/2017	9	All sites/Lab
14	114537 – Nitrogen Cell test Method 0.5-15mg/l		11/04/2017	9	All sites/Lab
15	109475 – Buffer Solution - red		14/07/2017		All sites/Lab
16	109477 – Buffer Solution – Green		19/12/2017		All sites/Lab
17	101758 – Acid Capacity cell test 0.03 – 2.30mg/l		20/01/2014	9	All sites/Lab
18	Alum Sulfate Solution	15000L	18/04/2017		Bega/ Tathra Shed

19	Caustic Soda – Liquid 5%-45%	15000L	09/06/2015	8 corrosive	Bega/Tathra/Storage shed
20	Alphos	15000L	01/09/2017	8 corrosive	Bega/Tathra In tanks bunded area
21	Hypo – Liquid Pool Chlorine	2000L	14/03/2016	8	Bega Storage shed on bunded pallet
22	GOJO Antibacterial Foam Soap	1L	15/06/2016	3	All sites / Bathroom
23	Citric Acid	12x35kg bags	18/11/2014		Bega / Storage shed
24	Unleaded Fuel	10L/20L	06/05/2014	3	All sites/Shed
25	Diesel	150L	01/12/2015	9	All sites/ In shed
26	Hydrated lime	30x25kg bags	01/02/2017		Bega Storage shed
27	Chlorine gas	280kg		2.3 toxic gas	Tura and Eden sites, in chlorination rooms marked by signage
28	Hypo – Liquid Pool Chlorine	9000L	14/03/2016	8	Merimbula / storage tank
29	Hypo – Liquid Pool Chlorine	2000L	14/03/2016	8	All sites/ bunded area
30	Hypo – Liquid Pool Chlorine	10000L	14/3/2016	8	Tathra/storage tank

SECTION 4 – SAFETY EQUIPMENT

Item	Number	Location at Site
Hydrocarbon Spill Kits	1	Admin Office
Chemical Goggles, Gloves	1 pair/ 1 each	STP laboratory
Hard Hats, Vests, S/Glasses	> 3 of each	Admin Office
First Aid Kits	1 + 1	Admin Office + Operator's vehicle
Safety Eyewash	1	Chemical Dosing Area
Material Safety Data Sheets	1 binder	Admin Office
Fire Extinguishers	1 of each type	Admin Office (wet) & Switch Room (dry)

SECTIONS 5, 6 & 9

- **Contact Details**
- **Communicating with Neighbours and the Local Community**
- **Actions to be Taken During or Immediately After an Event**

<u>STEPS</u>	<u>NOTES/RISKS</u>	<u>Responsible Officer</u>
SEWERAGE SYSTEMS		
Report of unlicensed sewage discharge	<p><i>Report may be received via:</i></p> <ul style="list-style-type: none"> • BVSC staff member • Regulator (eg EPA) • Member of public, via BVSC Customer Services or Well Done International (WDI) 	
↓		
1. Advise W&SS operator immediately	<p>Refer to BVSC On-Call Duty Roster and advise W&SS Area On-Call operator by mobile phone.</p> <p><i>(<u>Person to person voice contact must be made</u> – do not leave voice messages).</i></p>	BVSC/ WDI officer >> W&SS On-Call Operator
↓		
2. Note time of notification, name and contact details of notifying person, location and nature of discharge.	<p>Create Customer Request Management (CRM) for W&SS admin officer, with sub tasks for -</p> <ul style="list-style-type: none"> i) Environmental Health, Building and Regulatory Services (EHB&RS) Manager, and ii) Responsible W&SS area team. W&SS field staff are to also note event details in personal diary, including CRM number when this is provided. 	CS/ WDI officer, W&SS Admin Officer
↓		
3. Attend site and assess situation	<p style="text-align: center;">*** High priority to be given to achieving minimum response time ***</p> <p><i><u>Assess event</u> - Where sewage overflows are of significant volume (i.e. >100L), or may remain uncontained, or have discharged to or adjacent to a body of water, the event is to be considered <u>Significant</u>.</i></p> <p style="text-align: center;">>>> FOR ALL OTHER EVENTS >>> MOVE TO STEP 8 >>></p>	W&SS Operator(s)



4. Advise BVSC Environmental Health Officer & W&SS Operations Supervisor & Manager

For Significant Events -

- Refer to on-call roster for Environmental Health Officer (EHO) and seek attendance.

W&SS Operator/
BVSC Duty Officer

Note - EHO notification and subsequent EHO response to the discharge must take place as a priority.

- Notify Council's Customer Care Officer immediately if the sewage discharge has affected the inside of a customer's premises.

W&SS Manager/
Operations



5. If discharge has potential to affect waterways, oyster beds or public contact areas or if volume discharged is significant. Notify external authorities

Notify external authorities immediately if discharge is affecting waterways/ oyster beds or has the potential to do so.

Environmental Health Officer

Contact

- EPA Pollution Line 131 555, then Option 1
- NSW Food Authority 1300 552 406, then Option 1 (Business Hours)
- NSW Food Authority - Shellfish Team Manager 0407 078 269 (After Hours)
- Safe Work NSW 131 050, then Option 2
- Fire & Rescue NSW 0414 379 117

And - where a waterway is potentially affected, contact -

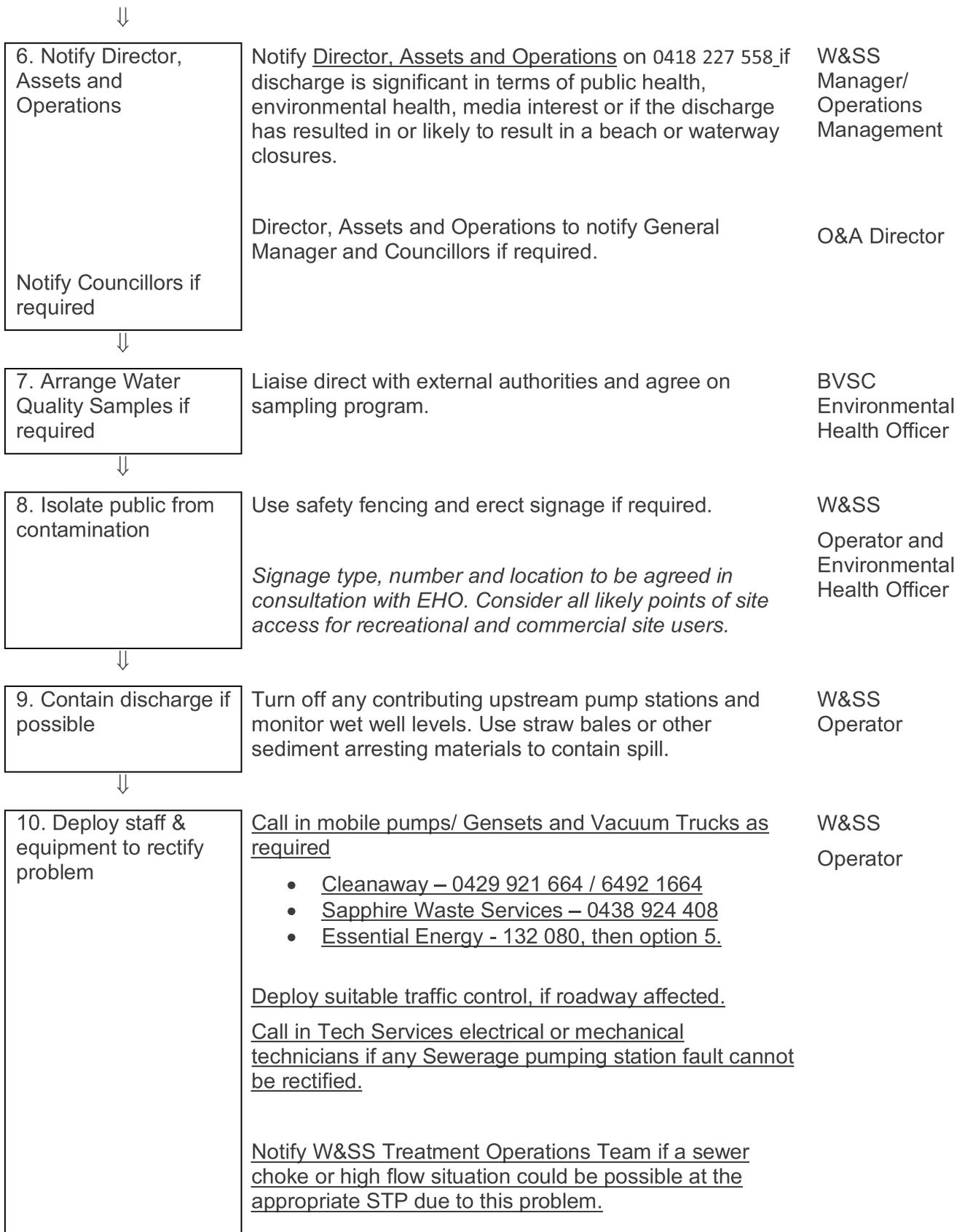
- NSW Fisheries 02 6496 8200 (Business Hours, then leave a message if after hours).

And - where the discharge has the potential to affect public health, contact -

- Dept. of Health 1300 066 055 (24hrs). Will divert to nearest office or AH officer.

And - where shellfish beds may be also be affected, contact the local Shellfish Program Coordinator, as follows -

- Merimbula Lake – 0487 240 260 or 0477 585 245
- Pambula River – 6495 6704 or 0419 211 818
- Bermagui River –
- Twofold Bay – 6496 1116 or 0428 961 116





- On-Call STP operator – 0437 947 116, or where no direct voice contact,
- Treatment Operations Supervisor – 0458 095 853
- Treatment Operations Supt – 0427 418 911

11. Clear mains blockages if applicable

Use jetting trailer as required. Sewer rods may only be used for lengths less than 8m. Adhere to safe work method statements and associated hygiene practices.

W&SS Operator

12. Retrieve solids on site.

Place all solids and contaminated clean up materials BVSC 200 micron (thick blue) plastic bags for disposal at BVSC landfill site.

W&SS Operator

13. Disinfect site including gutters and downstream areas.

Disinfect site including gutters and downstream areas. *Where event declared significant, consult Environmental Health Officer for appropriate methods and extent of required disinfection.*

W&SS Operator / Environmental Health Officer

14. Determine extent of environmental impact/pollution

Check for extent of contamination travel in drains and gutters.
Double check for discharge to waterways.

Environmental Health Officer

15. Final inspection

Check all public health issues have been considered.

Environmental Health Officer

16. Document incident

Complete EHO action form template electronically and attach to CRM sub-task within 72 hrs. Forward CRM sub task to EHB&RS manager for review and closure.

Environmental Health Officer

Complete FastField Sewer Choke form, within 72 hrs, and close CRM sub task if raised.

W&SS Operator

Upon receipt of EHO, re-assign CRM to W&SS Operations Superintendent for review - and the issuing of an R3.3 report to the EPA where it is expected this will be required, or where it has been requested by the EPA.

W&SS Admin

Review of CRM and close out as described below.

W&SS Operations Supt

SEWAGE TREATMENT PLANT

If Incident occurs at an STP



Incidents where effluent is, or is likely to be discharged which may - or have potential to - cause material harm to the environment.

POEO Reporting Obligations are described within the following link;

<http://www.epa.nsw.gov.au/licensing/s148incidents.htm>



Advise the NSW Office of the Environment & Heritage's Pollution Line.
(obligations described under POEO Act 1997).

Report the event to STP Licensor -

NSW EPA Pollution Line

- 131 555

STP Operator/
STP Operations Supervisor/
Operations Supt

Record EPA Event Number on event log and quote on report correspondence.

Advise W&SS Treatment Operations Management.

Notify W&SS Operations Supervisor 0458 095 853 or where unavailable, Treatment Operations Supt 0427 418 911. On Call Officer available on 0437 947 116

Treatment Plant Operations Staff



Commence Site Incident Log

Commence Site Incident Log of all events, for preparation of the Incident Notification and preparation of R3.3 report where required.

Treatment Plant Operator/ Plant Supervisor



Complete necessary regulator / stakeholder reporting.

(Apart from EOH reporting where completed by Downer staff above).



Incident Management,
Incident Response,
Sampling and Testing,
Incident Clean Up,
Incident Reporting and
Record Keeping.

Create a CRM with details of the event. Forward to actioned EHO for the addition of comments, before its return to the Treatment Supt for completion.

Treatment
Administratio
n/ Supervisor
EHO

Treatment Supt to complete CRM and details for possible R3.3 report to EPA where required.

Treatment
Supt.



7. MINIMISING HARM TO PERSONS ON THE PREMISES

- Operators of BVSC Sewage Treatment Facilities are to initiate the attendance of Combat agencies in the first instance, to minimise risk to themselves or those in their care at the plant at the time of any incident.
- Operators are to ensure lone worker protocols are followed when working alone or attending or after hours on-call events.
- Only inducted, trained, experienced, competent staff may operate this plant.
- Operators are to ensure safety eyewash facilities at chemical storages have been checked for correct operation at the commencement of chlorine cylinder change, and otherwise, weekly..



8, 9 **MAP – TATHRA SEWAGE TREATMENT PLANT**

10. TRAINING REQUIREMENTS

10.1 PIRMP procedures

- Training in this procedure is to be undertaken at time of induction for all new employees, and for all existing employees, every 12 months.
- Contract staff and sub-contractors will be introduced to the requirements of the POEO Act with respect to reporting events that have the potential to cause material harm to the environment.
- Records of training in this and subsequent versions of this procedure will reside on the corporate training database.
- Testing of this procedure will occur annually.

10.2 Operator Competence

- All operators of BVSC Treatment Plants undertake Water Industry Operations / Water Industry Treatment Certificate III training, and additional competence and safety training as required.

11. AVAILABILITY OF PLANS

- A copy of this plan is maintained at the licensee's premises. It is readily available to those responsible for its implementation and to an authorised officer on request.
- Required sections of the plan are publicly available within 14 days of each review and are available on the Bega Valley Shire Council website. The plan includes procedures for contacting the relevant authorities including the EPA, NSW Ministry of Health, WorkCover NSW, and Fire and Rescue NSW and other stakeholders such as shellfish producers.

12. TESTING OF PLANS

- This plan shall be tested routinely once every 12 months, where incident frequency does not require use of the plan within a shorter time period.
- This plan will be tested within one month of any pollution incident occurring in the course of an activity to which a licence relates to assess, in the light of that incident, whether the information included in the plan is accurate and up to date, and the plan is still capable of being implemented in a workable and effective manner.

Date	How plan was tested	Names
7/12/22	Scenario of sewer spill leaving STP premises. Tested onsite	J Darcy, T Rogers, B Chapman

13. IMPLEMENTING PLANS

- All operations staff responsible for the operations and maintenance of Sewer assets within the catchment area prescribed by the Environmental Protection licence to which this PIRMP pertains, are reminded of their responsibilities under the POEO Act, as follows –

“If a pollution incident occurs in the course of an activity at the premises so that material harm to the environment (within the meaning of section 147) is caused or threatened, the person carrying out the activity must immediately implement any pollution incident management response that was developed to meet the requirements of the POEO Act”.