STP (Sewage Treatment Plant) Pollution Incident Response Management Plan

Document Control					
SEMS 3.4.2.10 STP Pollution Incident Response Management Plan					
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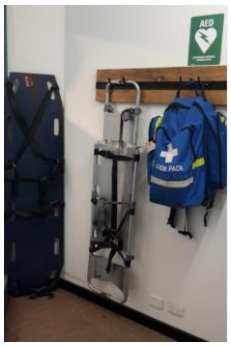
Contents

7 Safety and Spill Response Equipment

The tables below outline the safety equipment, PPE and spill response equipment kept onsite at the STP.

Staff training in the safe and effective use of this equipment is addressed in *Section 10*.

Table 7.1 Safety equipment kept at Bullocks Flat

Safety Equipment	Purpose	Location	Image
Code Pack	Code Pack for use in Code Emergencies	Administration Office, Skitube Terminal Building (near kronos clock)	
Draeger gas detector x 1 MSA Altair x 1	Monitoring gas discharge of confined space areas and chemical areas. Note: Gas detectors are maintained under a service contract with Draeger Australia and serviced and calibrated every 6 months in accordance with Australian	STP Lab	

Safety Equipment	Purpose	Location	Image
	Standards and records held on a company database.		
Draeger self-contained breathing apparatus (S.C.A.B.A) sets x 2	To allow workers to enter oxygen depleted atmospheres. Note: S.C.A.B.A are maintained under a service contract with Draeger Australia and serviced and calibrated every 6 months in accordance with Australian Standards and records held on a company database.	Workshop / storage area behind STP	
First aid kits	Initial first aid response	STP La[illegible] on wal[illegible]	
Rescue tripod and hand winch	*Confined Space Rescue*	*Workshop / storage area behind STP*	
Rescue tripod mast	Tank Rescue Operations	Workshop / storage containers behind STP	
Safety harnesses x 2 sets	Confined Space and Tank access operations	STP Lab	

Safety Equipment	Purpose	Location	Image
Eye wash station shower	Initial first aid treatment where hazardous contaminants have come into direct contact with part of the body – to wash away contaminants	Chemical shed	
Water trailer (not operable during winter)	Firefighting	Bullocks Flat.	

Table 7.2 PPE kept onsite

Equipment	Location	Image
Disposable overalls	Blue box in lab	
Rubber and general-purpose gloves	Blue box in lab	
Rubber boots and waders	STP Plant Room cupboard	 
Safety glasses / goggles	Blue box in lab	
Face shields	STP Lab	

Equipment	Location	Image
Face masks	Blue box in lab	
Hearing protection	Blue box in lab	
Respirators	Blue box in lab	
Hard hats x 5	STP Lab	
Wet weather coats and pants	STP Lab	

Table 7.3 Spill response equipment kept onsite

Spill Equipment	Location	Image
Spilmax 240ltr spill kit	Located at chemical shed area	
120L hydrocarbon spill kit	Located at the rear of the STP Control Room beside the chlorine drum	
Other spill kits	One hydrocarbon spill kit located at Skitube Maintenance and one 20 litre spill kit located at the Freight shed.	3 mini boom bags, 5 absorbent pads, and 1 poly bag at Maintenance.
Suction trailer – 1000 litres with pumping capacity	Located on Penisher premises as needed operationally. Furthest distance from STP 48km.	

8 Notifications

8.1 When does notification need to be given of a pollution incident?

Notification is required if a pollution incident causes or threatens to cause 'material harm to the environment'. Material harm is defined in section 4 of this plan.

8.2 Communicating with Neighbours and the Local Community

The following parties must be promptly notified of any overflow or discharge from the STP that may pose a risk to public health:

- Mountain Office (*typically will notify the following*) -
- Call 000 in the case of an emergency;
- Internal stakeholders, including the relevant Supervisors/Managers, see Table 8.1. The relevant personnel will then communicate with the appropriate external stakeholders and authorities as listed in Table 8.2.

8.3 Contact Details

Table 8.1 Internal Personnel Contact Details

STP Emergency Procedure Perisher Internal Notifications			
Mountain Office	6459 4408 Channel 1 (Mountain network)	Phone 2 way radio	Notified by: Time/Date: Signed:
Skitube Control Room	4564 Channel 1 (Skitube network)	Phone 2 way radio	Notified by: Time/Date: Signed:
Operations Director / Emergency Incident Coordinator – Michael Fearnside	6459 4408 3006	Phone Speed Dial Mobile	Notified by: Time/Date: Signed:
Civil and Building Manager – David Rowson	6459 4407 3077	Phone Speed dial Mobile	Notified by: Time/Date: Signed:
Sewage Treatment Plant Operator – Ben D'Helin	6459 4571	Phone Mobile	Notified by: Time/Date: Signed:
Skitube Manager – Luke Rickards	6459 4565 3061	Phone Speed dial Mobile	Notified by: Time/Date: Signed:
Skitube Maintenance Manager – Garth Bush	6459 4574	Phone	Notified by: Time/Date: Signed:
Health, Safety & Environment Director – Sheri Mikus	6459 4497	Phone Speed Dial Mobile	Notified by: Time/Date: Signed:
VP & GM – Nathan Butterworth	3014	Phone Speed Dial Mobile	Notified by: Time/Date: Signed:
Environment Manager – Tanya Bishop	6459 4504 3049	Phone Speed Dial Mobile	Notified by: Time/Date: Signed:
Health, Safety & Environment Manager – Garth Willmott	6459 4414 3015 6457 2338	Phone Speed dial Mobile Home	Notified by: Time/Date: Signed:
Environmental Officer – Bethany Davies	6459 4487	Phone Speed dial Mobile	Notified by: Time/Date: Signed:

Table 8.2 External Stakeholders and Relevant Authorities

EPA Reporting Hotline (Refer Table 8.3)	13 15 55	Notified by: Time/Date: Signed:
For immediate EPA advice: Queanbeyan EPA Office	(02) 6229 7002 or Queanbeyan@epa.nsw.gov.au.	Notified by: Time/Date: Signed:
Department of Planning, Industry and Environment (DPIE), Regional (name tbc)	(02) 6450 5501	Notified by: Time/Date: Signed:
Department of Planning, Industry and Environment (DPIE) – Perisher Valley (Ryan Petrov)	(02) 6450 5629	Notified by: Time/Date: Signed:
Snowy Monaro Regional Council Notify SMRC Enviro Health Officer, will notify residents	(02) 6451 1195 1300 345 345	Notified by: Time/Date: Signed:
Greater Southern Public Health Unit (Albury) - Infectious Disease Outbreak After hrs number diverts to Albury Base Hospital - ask for on call Public Health Officer	(02) 6080 890	Notified by: Time/Date: Signed:
Safework NSW Reporting Hotline	13 10 50	Notified by: Time/Date: Signed:
NSW Fire and Rescue (If 000 already called, do not ring)	1300 729 579	Notified by: Time/Date: Signed:
NSW Local Land Services - Cooma	(02) 6455 7200	Notified by: Time/Date: Signed:
Lake Crackenback Resort General Manager (Anthony Cleary)	(02) 6451 3000	Notified by: Time/Date: Signed:
Snowy Hydro (Safety and Environment Incidents Line) Manager Environmental Services	1800 766 333	Notified by: Time/Date: Signed:
DPI / Gaden Trout Hatchery General Manager Assistant Manager	(02) 6451 3400 (02) 6451 3401	Notified by: Time/Date: Signed:

Notifications to media will be made in accordance with the Reportable Events Policy (SEMS 3.8.1)

8.4 Incident Information to provide to the EPA

STP Bullocks Flat	
Date	Time
Nature of spill	Duration of spill
Estimated quantity	Concentration of any pollutants
Discharge point	
Cause of the spill and any circumstances	
Action taken or proposed to be taken	
Any resulting pollution or threatened pollution from the action	

8.5 Additional Resources

8.5.1 Laboratory, Fyshwick

Contact for coordinating delivery and analysis of samples:

ALS Water Resources Group Client Services **2/33 Couranga Crescent, Hume, ACT, 2620** (02) 6202 5404	24-hr contact Joel Nicholson Laboratory Manager

8.5.2 Liquid Pumping and Transport

Contact Southeast Waste Recovery (6456 4657 or Steve Field 0428 409 669) if assistance is required for any pumping.

Contact Cleanaway (Liquids and Industrial Services) in Queanbeyan is further assistance is needed with pumping and liquid transport (02 6297 8185).

8.5.3 Portable Toilets

For Portable toilets, where required, contact local Council (Table 9.2) or Events Hire contacts (eg. TFH Cooma 0418 666 663). Local builders may also be able to assist.

8.5.4 Expert Systems Advice

Adrien Ridgley, Senior Process Specialist, Aspect Process Systems (Narooma), 02 4476 7606 / .

Simmonds & Bristow, 1800 620 690 (QLD)

9 STP Site Maps

10 Staff Training

Relevant staff will be trained / familiarised with this Plan through the following means –

- Attendance at annual Plan review / testing;
- Responsibility for review / approval of Plan after Annual review; and / or
- Toolbox Talks / Workshop meetings.

Records of relevant training will be stored in sems 3.7.35 Sewage Treatment Plant.

11 Plan Review and Testing

The Environmental department and/or C&B Manager will:

1) Initiate a review of this Plan annually or within one month after Notification of a Pollution Incident, whichever occurs first;
2) Consult with, and make recommendations to the Health, Safety & Environment Director and the Operations Director regarding suggested amendments to the Plan; and
3) Administer authorised changes to the Plan in accordance with Perisher's SEMS 3.13 Document Control and Records Management Plan and arrange for its distribution to all relevant parties.

As outlined in Section 10, this Plan and emergency response will be tested annually. Alternate with a field based simulated incident response or desktop review each year.

Testing of Plan reviews will be recorded in SEMS 3.4.3 STP Emergency Testing.

ATTACHMENT 1 -

POLLUTION

INCIDENT ACTION

PLAN

Attachment 1 - Bullocks Flat Sewage Treatment Plant, Pollution Incident Response Management Plan

1 Initial Response – STP Operator or Attendant

Name	
Position	
Date	Time
Description of Incident	
Location of Incident	

Checklist	**Time Completed**
Assess the situation and identify action plan	
Notify – (*ONLY if immediate threat to health, property or environment, phone 000 OR request Mountain Office (ext 4408) call 000*)	
In all instances, Ring Mountain Office (02 6459 4408 ext 4408) □ Notify of incident □ Request internal notifications (section 8) □ Request additional assistance / resources	
PPE - Put on all required PPE - suit, gloves, boots, face mask, etc	
Stop the spill at the source if possible. Isolate points at central switch board in lab and at the external point.	
Contain any spills with booms from spill kits or sand bags. Prevent spill from entering stormwater drains or water courses. Close isolation valve at end of holding pond (ie. discharge to channel, see Figure 9.1 Site Map).	
To control inflow to STP, phone the C&B Manager's mobile (and the Skitube Manager by radio/phone ( ) □ request stop/slow inflow to STP (toilets, wash areas, water supply) □ request additional assistance / resources	
Control the flow within the STP if necessary - move sludge between tanks using pumps. Control water inflow into ponds if necessary using available valves.	
Preserve the scene and take photos	
Clean Up - Assist with clean-up when appropriate	
Signature	

2 Emergency Incident Coordinator (Operations Director or delegate)

If appropriate, refer to SEMS 3.4.2.1.1 Major Incident Management Plan - developed for major incidents which fall outside the definition of a Code Red or Blue. It may be utilised in the event of a major environmental incident, public disturbance or other emergency requiring a resort response.

1) Identify and set up a safe control point at the entrance to the site with barriers and signage.
2) Identify a person to manage the control point
3) Set up additional barriers and signage around the contaminated site.
4) Identify a process for registering persons entering or leaving the site.
5) Ensure all staff have appropriate PPE before entering the site.
6) Organise jobs for staff attending the incident. Ensure only staff who are vaccinated are involved in clean-up of sewage.
7) Ensure all media requests are directed to the Sales and Marketing Director or in his absence the COO (refer to the PBPL POL 023 Reportable Events within Perisher Policy and Procedure).
8) Identify the extent of the incident and clean up as required (if it is safe to do so)
   - ⇒ Determine if it is possible and safe to recover the spilled substance (e.g. sewage);
   - ⇒ Subject to safety considerations, use the suction trailer and equipment to recover the spillage, and or engage a local approved contractor to assist with the recovery and the clean-up;
   - ⇒ Assess the need for removal of activated sludge. Contact the National Parks and Wildlife Service Perisher Team Leader to request transfer of activated sludge to Sawpit and or Perisher STP as available.
9) Contact the EPA for advice on managing pollutants which have entered waterways.
10) Carry out water and soil sampling – refer to Appendix C of the SEMS 3.4.2.4 Pollution and Environmental Incident Response and Reporting Procedure. Ensure a chain of custody occurs when sampling. Take photos of the samples. Ensure there are enough sample containers available for a minimum of 24 hours of testing.

3 Sewage Spill - Clean up

3.1.1 PPE to Minimise Risks

To minimise the risks to human health associated with exposure to sewage, personnel are to ensure the appropriate PPE is used in any clean-up, including:

- Ensure vaccinations are up to date for all workers undertaking the clean-up, specifically Tetanus, Diphtheria and Hepatitis A and B.
- Eye protection (goggles are recommended if using a hose and/or any chemicals);
- Face mask;
- Rubber boots;
- Rubber gloves;

- Impervious coveralls;
- Breathing apparatus (only if trained and competent in its use); and
- Thorough full body wash immediately after the clean-up is completed.

3.1.2 Other Safety Considerations

The following safety measures must be observed when handling sewage or contaminated materials:

- Have all unnecessary personnel vacate the area immediately;
- Determine whether professional help or other assistance is required.
- Conduct a risk-based approach to determine a safe work procedure. This includes (but is not limited to):
  - an initial site assessment,
  - confined space assessment. Do not enter confined spaces that have been contaminated with sewage, as toxic, flammable or asphyxiating gases may be present. Implement confined space entry procedures;
  - monitoring and permits (if required),
  - dealing with electrical hazards. Be aware of electrical hazards when dealing with floodwater,
  - removal of materials,
  - review of SDS (if required). Read labels on hazardous goods and other chemicals, observe the appropriate safety precautions and follow the manufacturer's directions,
  - the transfer and disposal of sewage and contaminated materials,
  - site sanitation. Always assume that floodwater is contaminated with sewage, and
  - decontamination of workers.
- Contact a doctor immediately if an illness is suspected.

3.1.3 Clean-up and disposal

The following safety measures must be observed when cleaning up the contaminated area, and disposing of contaminated objects:

- Assess and manage the hazards that are present;
- Ensure all necessary and appropriate PPE is used;
- Clean all contaminated objects and surfaces immediately to reduce the risk of infection and to prevent further microbial growth. The longer that contaminated water remains unattended the greater is the risk of an infection occurring. Cleaning should be carried out before the sewage dries out to avoid contaminated dust (airborne pathogens) being dispersed into the air;
- Remove any gross contamination and dispose of in the sewage treatment facility and not into storm drains or landfill;
- Clean hard surfaces such as paving, concrete and tarmac with a detergent solution then disinfect. **Use only approved disinfectants**, as failure to do so can have adverse effects on the operation of the STP;

- Do not allow waste water to enter drains or water courses it may be necessary to construct a bund using sandbags or other available material, e.g. embankment of earth, brick, stone or other suitable material to retain liquid;
- Dispose of liquids to a suitable collection pit;
- Allow contaminated soil, sand or lawn to degrade naturally as microbes will be inactivated within several days of exposure to UV radiation from sunlight. Bacterial numbers on grass are generally reduced to background levels within 20 days. Place barriers and signs to restrict access to the area during this time;
- Clean all equipment and PPE used with a detergent then a disinfect (or use a combined product) or discard if possible (eg mop heads);
- Immediately wash and disinfect any wound that comes into contact with sewage; and
- Shower and change out of work clothes before leaving. If the STP shower is not able to be accessed; there are showers at the railway workshop and the Bullocks Flat terminal. Do not keep soiled work clothes with other clothes. Launder work clothes separately or discard.

4 Incident Debrief

As soon as possible after the emergency response and not more than 7 days, the C&B Manager should convene a meeting of all relevant personnel to consider:

- The cause and implications of the pollution incident;
- Aspects relative to:
  - The root cause, the contributing factors and any other matters affecting safety;
  - The effectiveness of the notification, coordination and management approach;
  - The effectiveness of the first response and the implementation of pollution control measures; and
  - The effectiveness of the subsequent emergency response and recovery,
  - A review of this Plan.
- The scope and conduct of the investigation, including the writing of a report; and
- The distribution of the investigation report to stakeholders.

5 Investigation (Internal)

Health, Safety & Environment staff will thoroughly investigate the incident, in accordance with Perisher's SEMS 3.8.1 Incident Investigation Management Plan to first determine and then analyse the facts, identify the root cause and contributing factors and to make recommendations for improvements to safety and the operation of the STP. The investigation report will be forwarded to the Health, Safety & Environment Director, the Operations Director and the VP & GM Perisher.

ATTACHMENT 2 -

COLLECTING

SOIL OR WATER

SAMPLES

(Attachment 2 - Bullocks Flat Sewage Treatment Plant, Pollution Incident Response Management Plan)

Water Samples

Advice may be sought on the parameters relevant to the pollution incident from suitably qualified consultants/experts or the EPA (if notified).

Where an incident has impacted, or has the potential to impact a waterway, the Emergency Incident Coordinator is to arrange for the following to be bought to site to conduct water sampling:

- 3 x 1 litre plastic bottles;
- 3 x bacterial sample bottles;
- bottle labels and a pen; and
- disposable gloves.

Sample bottles are available at the Bullocks Flat Sewage Treatment Plant office, the Smiggin Holes Civil and Building Maintenance office or from the Environment Manager.

Sampling will be conducted as follows:

1. Ensure bottles are clean.
2. Wear disposable gloves to prevent cross-contamination.
3. Use a new set of gloves for taking each sample. Dispose of gloves between samples.
4. Take the following samples;
   a. One sample in each bottle type of the pollutant from the spill location.
   b. One sample in each bottle type of river water approximately fifty (50) metres (m) upstream of the spill.
   c. One sample in each bottle type of river water approximately fifty (50) m downstream of the spill.
5. Seal and label all bottles with date, time and location of sample.
6. Store the samples in accordance with this Procedure (*section 12.3*).

Soil Samples

Advice may be sought on the parameters relevant to the pollution incident from suitably qualified consultants/experts.

Where an incident has impacted, or has the potential to impact soil, the Emergency Incident Coordinator is to arrange for the following to be bought to site to conduct soil sampling:

- at least two bacterial sample bottles;
- bottle labels and a pen; and
- disposable gloves.

Sample bottles are available at the Bullocks Flat Sewage Treatment Plant office, the Smiggin Holes Civil & Building Maintenance office and from the Environment Manager

Sampling will be conducted as follows:

1. Ensure bottles are clean.
2. Wear disposable gloves to prevent cross-contamination.
3. Use a new set of gloves for taking each sample. Dispose of gloves between samples.
4. Take a minimum of two (2) samples of the pollutant from soil in and around the spill location.
5. Seal and label all bottles with date, time and location of sample.
6. Store the samples in accordance with this Procedure (*section 12.3*).

Storing Samples

Sample bottles are kept in the blue esky marked “SAMPLES” in the office at the Bullocks Flat sewage treatment plant and the Civil and Building Maintenance office at Smiggin Holes.

Store samples in fridge/ice/snow (samples must be stored below 4 degrees) and arrange testing for the following parameters as soon as possible with the testing contractor (advice may be sought on the parameters relevant to the pollution incident from suitably qualified consultants/experts or the EPA):

- Faecal coliforms – 1 bacterial sample bottle to be used for testing purposes
- Ammonia
- Total Nitrogen
- Total Phosphorus
- Biological Oxygen Demand
- Suspended Solids
- Total Hydrocarbons

Send Samples to:	ALS Global 16B Lithgow Street PO Box 1834 Fyshwick ACT 260[illegible] Contact: Client Services Phone: 02 [illegible] 5433 Fax: [illegible]2 6202 [illegible]452 Email: ecowiseresults@alsglobal.com

Chain of Custody

The Emergency Incident Controller will need to complete the Chain of Custody form (attached) for each sample. Alternatively, use a Chain of Custody form provided by the laboratory.

Specimen Details ☐ Water sample ☐ Soil Sample	
Name of Person collecting samples	Container Serial #
Position:	
Requesting Authorised Testing Officer	
Name	Contact Number
I certify that the specimen identified on this form is that provided to me by the person name above and this specimen has been collected, labelled and sealed in accordance with Perisher's Environmental Incident Response and Reporting Procedures.	
Signature	Date
Collection Certification	
Collection Location	
Date	Time
Collection Comments	

ATTACHMENT 3 - RISK ASSESSMENT

(Attachment 3 - Bullocks Flat Sewage Treatment Plant, Pollution Incident Response Management Plan)