

# **Charlotte Pass Snow Resort**

## **Pollution Incident Response Management Plan**

**for**

## **Sewerage Treatment Plant**

*Amended 10/07/2020*



## **Background**

On the 29<sup>th</sup> Feb 2012 an amendment to the Protection of the Environment Operations Act 1997 introduced a requirement for all licensees to prepare and implement a Pollution Response Management Plan (PIRMP) for each of its licensed activities in accordance with the requirements set out in part 5.7A of the PEOA Act 1997. The amendment included the provision that licensees may link individual PIRP to their existing Emergency Response Plans.

## **Definition of a 'Pollution Incident'**

A 'pollution incident' means an incident or set of circumstances during or as a consequence of which there is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving noise.

## **Licence Holder:**

Charlotte Pass Snow Resort under the regulation of the Environment Protection Authority (EPA)

## **The CPSR wastewater system is made up of:**

- a) Wastewater Treatment Facilities-section 1
- b) Pumping Stations-section 2
- c) Reticulation System- as attached; drainage

Individual PIRMP's have been developed to address the specific hazards, risks and response required for each major asset of the schemes.

## **Objective of the plan:**

The objective is to,

- Make sure that serious environmental consequences are negated by ensuring that appropriate pollution prevention measures are in place or immediately available CPSR staff and Emergency Services through a comprehensive pollution incident response management plan (PIRMP)
- Ensure that CPSR staff are appropriately trained to manage and undertake pollution incident response and remediation measures in the event of a spill or sewerage discharge
- Ensure that all affected parties are notified

## **Section 1 – The Charlotte Pass Snow Resort Sewerage Treatment Plant (CPSRSTP)**

Charlotte Pass Village

Kosciuszko Road

Charlotte Pass

NSW 2624

### **Over view of the activities on site:**

The CPSRSTP collects and treats wastewater from the village to standards required by the EPA, NSW & Office of water (NOW) for the discharge of treated effluent, under licence, to Spencers Creek Bog.

A failure of CPSRSTP has the potential to cause major environmental, to impact Spencers Creek, but with insignificant public health consequences. Whilst the facility has physical containment and pollution control measures in place that will minimise the risk of a pollution incident occurring, it is recognised that there are residual effects of spillage/discharge to Spencers Creek that could have major environmental consequences.

### **Operating Hours:**

The facility is monitored 7 days a week, 24 hours a day by trained wastewater treatment plant operators or technicians. Any faults are alerted through a pager that monitors the automatic operations.

It should be noted that CPSR is a largely seasonal operation, with the busiest time being from June through to September. The rest of the year would see average village populations drop to below 15 people.

### **Description of Surrounding Area:**

The CPSRSTP is located on leasehold land within the boundaries of Kosciuszko National Park (KNP). It is on the edge of a valley surrounded by hills located a short distance away from several dwellings and a hotel. It is a stand-alone plant with snow gums and mountain heath being the predominant vegetation in the area.

It discharges into the Spencers Creek Bog which is located below the Plant. The wastewater (raw sewerage) is pumped underground to the plant from a collection well some 200 metres away.

### **Likelihood of a Pollution incident occurring:**

Rare but with major environmental consequences. The combination of design, construction, contingency planning and long-term maintenance for this facility should result in a facility where overflows occur only in exceptional circumstances. E.g. a catastrophic electrical or equipment failure, massive inundation due to environmental factors such as flooding rain combined with large scale snow-melt or the unlikely event of an earthquake damage the storage tanks or concrete lagoon walls.

Even in the result of a spill over, the natural perched bog would act as a major dampener to slow the flow of wastewater before it reaches Spencers Creek. Through natural biological processes as well as prolonged exposure to UV radiation from sunlight, any or all of the waste would be most likely reduced to 'in-licence' levels before it reached the creek.

### **Hazards to human health and the environment at this site as a result of a failure of the STP and discharge of waste to the environment:**

Risk assessments of the facility have concluded that in the event of a discharge or spillage of wastewater to the environment there would be insignificant consequences to public and operational staff health but could have major environmental consequences

<b>Hazard</b>	<b>Risk Rating Estimates</b>		<b>Event</b>	<b>Action</b>
	<b>Likelihood</b>	<b>Environmental consequences</b>		
Untreated or raw sewerage discharged to Spencers Creek Bog	Rare	Major	Major failure of the electrical energy or electricity supply or associated cabled and equipment	Activate emergency power. Activate spill cleanup procedure
Untreated or raw sewerage discharged to Spencers Creek Bog	Rare	Major	Major failure of equipment due to mechanical problems	Activate emergency power. Activate spill cleanup procedure
Untreated or raw sewerage discharged to Spencers Creek Bog	Rare	Major	Major structural failure, damaged wastewater structures or underground pipes	Activate emergency power. Activate spill cleanup procedure
Untreated or raw sewerage discharged to Spencers Creek Bog	Rare	Major	Massive inundation of water as a result of flooding rain and major snowmelt	Mitigate by activating wastewater allocation procedure prioritising tank-space

## Emergency and Early Warning Systems

The CPSRSTP has 12 separate process and equipment alarms linked to a 24-hour alarm system that notifies CPSR staff in the event of a system failure. In the event of a failure the system will keep attempting to make contact until such time as the call is answered.

The response time by CPSR staff in the event of failure is less than one (1) hour.

<b>Chemical Product inventory and Material Handling Sheets</b>				
Trade name substance	Solid/liquid/gas/powder	Maximum vol of storage	location	Type of containment
Ferrous Chloride Solution	Liquid – Dangerous Goods Code: NOHSC 10005	1000l	Bunded Area	Concrete Bund area

<b>Safety Equipment and Personal Protective Equipment (PPE)</b>		
<b>Equipment</b>	<b>Location</b>	<b>Trained Personnel</b>
Sets of Breathing Apparatus	STP plant office	Wastewater supervisor 0407 706 663 Asst. Supervisor 0418 439 026
Confined spaces equip. Harnesses, lanyards, lifelines	STP plant office CPV workshop	Wastewater supervisor 0407 706 663 Asst Supervisor 0418 439 026

## Emergency Power/Diesel Generator Hire:

We have our own diesel generator with 17KvA capacity, this will operate the plant for 12 hours continuously

<b>Pollution Prevention Equipment Inventory/ (on &amp; off-site)</b>			
<b>Type</b>	<b>Amount</b>	<b>Location</b>	<b>Contact</b>
Spill Sock	40 m	STP & workshop	Wastewater Supervisor 0407 706 663
Sewer cleaning equipment	1	STP	Wastewater Supervisor 0407 706 663
Waste water pumps	2	STP & workshop	Wastewater Supervisor 0407 706 663
Pressure washers	1	Workshop	Wastewater Supervisor 0407 706 663
Portable Generators (towable)	1	Workshop	Wastewater Supervisor 0407 706 663
Backup generator (fixed)	1	Electrical Shed	Wastewater Supervisor 0407 706 663
Snow Gun	5	Tennis Court	Wastewater Supervisor 0407 706 663
Snow cat	2	Workshop	Wastewater Supervisor 0407 706 663
Crane cat	1	Workshop	Wastewater Supervisor 0407 706 663
Spill kits	3	STP, workshop and pump well	Wastewater Supervisor 0407 706 663

<b>External Resources</b>			
<b>Provider</b>	<b>Provider's Address</b>	<b>Service supplied/available</b>	<b>Contact Details</b>
Simmonds & Bristow	Brisbane QLD	Operational support, specialist engineering advice	07 33434 3800
Aspect Process Services Pty Ltd	Narooma	Wastewater treatment processes advise and support.	Adrian Ridgley 0407 663 008
Previous CPSR STP Operations Employee	QLD	Wastewater treatment process & specific CPSR STP treatment and mechanical operations support.	Rolf Klicker 0467 238 640
Snowfields Plumbing	Jindabyne	Truck mounted vacuum pump 9m <sup>3</sup> capacity, blocked drain 'jetta', excavator, skilled labour	Tod Preston 0421 110 780
VanGlen seVICES	PO box 457 Jindabyne 2627	Truck mounted vacuum pump	02 64567037 0429 809 995
Fieldtech Industries	Basalt Street Berridale 2628	Truck mounted vacuum pump	Steve Fields 02 64564110 0428409669
NPWS	Jindabyne	Advice and help	Ryan Petrov 02 6457 4444
ALS Environmental Division water resources group	16B Lithgow St, Fyshwick 2609	Water sampling and reporting	02 6202 5401

### **Staff Responsible for the STP:**

- Damien Berkery – Supervisor of plant and wastewater.  
Ph 0407 706 663
- Mick Hopkins (Didj) – Assistant supervisor  
Ph 0418 439 026
- Didj is the live-in caretaker of CPSR and monitors the plant 24 hours/day on weekends from Fri-Mon



## **Procedures to be followed by CPSR (the licence holder) in notifying pollution incident:**

Immediate notification of relevant authorities by the Emergency Response & Crisis Management Plan authorised officer – Damien Berkery, wastewater manager.

1. (i) Call 000, 'notify only' Fire and Rescue, no immediate threat to life or serious threat to property. No emergency response required  
(ii) Call 000 if the incident presents an immediate threat to health or property. Emergency response required. (Fire and rescue NSW, the NSW police and the NSW ambulance service are the first responders, responsible for controlling and containing incidents)
2. The Environment Protection Authority (EPA), NSW – Ph 131 555
3. Ministry of Health – Emergency Ph 02 4842 1840
4. Workcover - 131050
5. NPWS Jindabyne – Ph 02 6450 5531
6. NSW Fire and Rescue - 000

## **SEASONAL STAFF TRAINING and PIRMP Testing**

An annual field training and testing exercise will be conducted with staff responsible for the management and operation of the PIRMP just prior to each winter season.

Testing occurs during the normal operations of CPSR's environmental risk reduction procedures when we are carrying out higher risk activities including the annual fuel transfers and sludge removal process prior to the commencement of our winter operations.

The support contractors/clean-up companies listed in the exercise will be invited to participate in the exercise. A record of the exercise including the names of participants and issues raised will be maintained for each exercise and used to initiate improvements in the PIRMP.

<b>Action Plan - in response to possible or actual effluent overflow</b>		
<b>CPV Staff</b>	<b>Actions</b>	<b>Notes &amp; contacts</b>
operator	-obtain detail of spill & location -obtain contact detail of person reporting spill	Report details of spill to wastewater operator 0407 706 663
Wastewater operator on call	Notify wastewater supervisor	Report details to w/water manager Damien or Didj
Wastewater Supervisor	Carry out worksite risk assessment to identify: -Assess incident/take photos to document the spill -determine the cause of failure/spill <ul style="list-style-type: none"> <li>• Electrical failure</li> <li>• Mechanical Failure</li> <li>• Blockage</li> <li>• Structural Failure</li> </ul> -Estimate of time to return plant to service -Possible environmental concerns Extent of work to be carried out and if any hazards exist e.g. phone/power cables, gas &/or water, storm water drains, etc - if additional resources/materials are required e.g. personnel, barricades, sandbags, sludge pump, etc.. - Conduct Work Health Safety risk assessment - Hand out PPE - Deal with manual handling issues - Traffic control issues - Note prevailing weather and obtain 5 day forecast - Complete appropriate paperwork e.g. Confined Space Entry Permit, traffic control plan, safe work methods statement and Environmental Control Plan	
Wastewater Supervisor	Carry out site induction and/or toolbox meeting for all workers involved with the incident on the site so everyone is aware of their responsibilities and what work is to be carried out	
Wastewater Supervisor	Notify the Manager of Water & Wastewater that the system failure/spill could have major environmental consequences - Confirm minor incident that can be managed by CPSR staff and local contractors - Confirm major incident requiring the services of an accredited emergency pollution incident management company	Contact Damien Berkery 0407 706 663
Manager of Water and Wastewater	In the event of a <b>major incident</b> notify - the EPA, NSW	EPA 131555 24hr emergency

	<ul style="list-style-type: none"> <li>- an emergency pollution incident management company. E.g. Transpacific Industries Group ( Canberra</li> <li>- NPWS, Ryan Petrov 6457 4444</li> </ul>	spills response 1800774557
Wastewater Supervisor	<ul style="list-style-type: none"> <li>- Implement Traffic Control Plan and pedestrian management plan at CPSRSTP</li> <li>- Implement environmental controls by placing absorption/containment barriers, sandbags between the STP and environment</li> <li>- Implement sampling and testing plan</li> </ul>	
Wastewater Supervisor/ Manager Water and Wastewater	<p><b>General Procedure</b></p> <p><b>Minor Incident</b></p> <ul style="list-style-type: none"> <li>- Engage a local contractor from the list of clean up companies if required and commence pollution prevention/mitigation measures as required. Continue the process until such times as the surcharge ceases and the failure is corrected. Then commence clean up, disinfection and incident reporting procedures.</li> </ul> <p><b>Major Incident</b></p> <ul style="list-style-type: none"> <li>- In the event that local resources are unable to contain and manage the spill, maintain all reasonable attempts to use available vacuum pumps to remove waste from the pump well and drainage system and continue with spill containment and clean up until an external resource is engaged and arrives on site</li> </ul> <p><b>Minor and Major Incident</b></p> <ul style="list-style-type: none"> <li>- At the completion of clean up and remediation works undertake a site inspection to confirm successful decontamination</li> <li>- Remove all temporary works and traffic control signs</li> <li>- Undertake a debriefing with all staff and contractors and provide NPWS with an incident report form for approval and forwarding to the EPA as required.</li> </ul>	

## **Communicating with the community**

During the winter months the tenants of the lodges and all staff living on premises will be notified of an incident directly affecting them, they will be directed by the waste supervisor on duty to comply with all instructions given by emergency services and other environmental agencies. The same would be applicable during summer months although the tenancy of the village is much lower and communication will be faster and easier.

Communication will be by means of a door-to-door operation by the management team (general manager, lifts manager, hotel manager and slopes manger). As this is a small area to cover it will be easy to direct the communication between the managing parties

## **List of possible pollutants on site**

1. Ferric Oxide – max 800L
2. Lime – max 10 x 20kg bags
3. DAP
4. Urea
5. Blood and Bone
6. Diesel Tanks – Located in bunding outside

These pollutants are found on the site of the STP, located inside the building. They are stored above the settling tanks containing the raw sewerage so even in the event of a spill then there is certainly no direct or immediate harm to the environment

## **Charlotte Pass External Contact List for PIRMP**

The EPA, NSW	131 555
EPA, South East Regional Office	02 6229 7002
NPWS	02 6450 5531
Simmonds & Bristow	07 33434 3800
Dept of Health	02 4824 1840 02 6080 8900
Workcover	131 050
Police, Fire, Ambulance	000
Police, local command	6452 0099
Rural Fire Service, Emergency management centre	000 6455 0455
SES	132 500
Essential Energy	132 080
NSW Health Department	02 9646 0222
Snowy Hydro	02 9278 1888
Catchment Management Authority	6452 1455
Dept of Primary Industries	6452 3411