

Pollution Incident Response Management Plan (PIRMP)

Hume Power Station



meridian

**Version 4.2
June 2019**

Revision History

Date	Version	Prepared By	Amendments
31 October 2014	1.0	Nicola Foran	Updated various sections to reflect change in licence holder
17 July 2015	2.0	Nicola Foran	Updates various sections to include additional detail resulting from EPA Audit.
21 October 2016	3.0	Nicola Foran	Minor amendments to reflect changes in terminology.
10 August 2018	4.0	Shaun Coffey	Updated various sections to reflect change in parent company and general administrative and formatting changes.
14 November 2018	4.1	Shaun Coffey	Added sections 3 and 4 and made minor administrative changes.
25 June 2019	4.2	Shaun Coffey	Review following oil spill event

1. Introduction

This Pollution Incident Response Management Plan ('PIRMP') has been developed in accordance with Chapter 7, Part 3A of the Protection of the Environment Operations (General) Regulations 2009, hereafter referred to as the Regulations.

One of the requirements of the Regulations is that PIRMPs be prepared by the holders of Environment Protection Licenses in relation to the activities carried out under such Licenses. In particular, it specifies the additional information that is required in a plan, the manner in which it is to be made available to stakeholders and the occasions on which it is to be tested.

This PIRMP is for GSP Energy Pty Ltd's ('GSP Energy') Hume Power Station which holds Environmental Protection License 10675. The PIRMP references GSP Energy's existing documentation and provides a summary outlining how the existing documentation satisfies each requirement in the Regulations.

2. PIRMP Reference Table

The table below summarises how GSP Energy is meeting the requirements of the Regulations, and provides references for relevant documentation.

Clause Number	Requirements	GSP Energy Compliance Assessment
98B	<p>Form of Plan</p> <p>(1) A plan is to be in written form.</p> <p>(2) A plan may form part of another document that is required to be prepared under or in accordance with any other law so long as the information required to be included in the plan is readily identifiable as such in that other document.</p>	<p>This document will be the PIRMP.</p> <p>This table references existing documentation to satisfy the requirements.</p>
98C (note)	<p>Additional matters to be included in plan</p> <p>The note refers to Section 153C (a-c) of the Protection of the Environment Operations Act 1997 (the Act). The plan must include the following:</p>	
	<p>153C (a)</p> <p>The procedures to be followed in notifying a pollution incident to:</p> <p>(i) Owners or occupiers of premises in the vicinity; and</p> <p>(ii) The local authority; and</p> <p>(iii) Persons or authorities required to be notified by Part 5.7 of the Act.</p>	<p>Section 9.3 of the Hume Emergency Response Plan details contact numbers of adjacent facilities.</p> <p>Section 3.2 of the PIRMP details contact numbers for local authorities and authorities required to be notified by Part 5.7.</p> <p>The Pollution Incident Response Flow Chart in Section 4 of the PIRMP gives contact details for EPA, Emergency Services and the local Council.</p>
	<p>153C (b)</p> <p>Detailed description of actions to be taken immediately after a pollution incident, to</p>	<p>Section 7 of the Hume Emergency Response Plan gives an overview of the emergency response process at the site. The Pollution Incident Response Flow Chart (Appendix J)</p>

Clause Number	Requirements	GSP Energy Compliance Assessment
	reduce or control pollution.	gives more specific detail on pollution incident responses.
	<p>153C (c)</p> <p>Procedures for co-ordinating with authorities any action in combating the pollution caused by the incident, and the persons through whom all communications are to be made.</p>	<p>Section 9.3 of the Hume Emergency Response Plan details contact numbers of adjacent facilities.</p> <p>Section 3.2 of the PIRMP details contact numbers for local authorities and authorities required to be notified by Part 5.7.</p> <p>The Hume Emergency Response Plan details procedures for coordinating with authorities, dealing with pollution and communication protocols.</p>
98C	<p>Additional matters to be included in plan</p> <p>(1) General</p> <p>The matters required under section 153C (d) of the Act to be included in a plan are as follows:</p>	
	(a) a description of the hazards to human health or the environment associated with the activity to which the licence relates (the relevant activity)	The Environmental Risk Register in Section 6 of the PIRMP lists the hazards to human health and the environment relating to the relevant activity.
	(b) the likelihood of any such hazards occurring, including details of any conditions or events that could, or would increase that likelihood	The Environmental Risk Register in Section 6 of the PIRMP lists the conditions and events that could result in hazards to human health and the environment.
	(c) details of the pre-emptive action to be taken to minimise or prevent any risk of harm to human health or the environment arising out of the relevant activity	The Environmental Risk Register in Section 6 of the PIRMP lists the pre-emptive control measures which have been implemented to minimise the risks to human health and the environment.
	(d) an inventory of potential pollutants on the premises or used in carrying out the relevant activity	Section 3.4 of the PIRMP lists the possible sources of pollution including substance(s), location and quantity.
	(e) the maximum quantity of any pollutant that is likely to be stored or held at particular locations (including underground tanks) at or on the premises to which the licence relates	See (d) above.
	(f) a description of the safety equipment or other devices that are used to minimise the risks to human health or the environment and to contain or control a pollution incident	Appendix E of the Hume Emergency Response Plan lists safety and environment emergency response equipment.
	(g) the names, positions and 24-hour	Section 7 of the Hume Emergency Response

Clause Number	Requirements	GSP Energy Compliance Assessment
	<p>contact details of those key individuals who:</p> <ul style="list-style-type: none"> (i) are responsible for activating the plan; and (ii) are authorised to notify relevant authorities under section 148 of the Act; and (iii) are responsible for managing the response to a pollution incident. 	<p>Plan states that the Hydro Operations Manager is the Chief Warden. Therefore, this person is responsible for activating the plan and managing the response to a pollution incident.</p> <p>Section 9.2 of the Hume Emergency Response Plan lists contact details for all site staff and various senior staff that may be of assistance for emergency response.</p> <p>Section 3.2 of the PIRMP gives details of notification of external authorities (including the EPA).</p>
	(h) the contact details of each relevant authority referred to in section 148 of the Act	Section 3.2 of the PIRMP details contact numbers for authorities required to be notified under Section 148 of the Act.
	(i) details of the mechanisms for providing early warnings and regular updates to the owners and occupiers of premises in the vicinity of the premises to which the licence relates or where the scheduled activity is carried on.	Section 9.3 of the Hume Emergency Response Plan details the mechanisms for notifying the adjacent facilities.
	(j) the arrangements for minimising the risk of harm to any persons who are on the premises or who are present where the scheduled activity is being carried on	Sections 11, 12 and 13 of the Hume Emergency Response Plan detail Rescue, First Aid and Evacuation procedures.
	(k) a detailed map (or set of maps) showing the location of the premises to which the licence relates, the surrounding area that is likely to be affected by a pollution incident, the location of potential pollutants on the premises and the location of any stormwater drains on the premises	<p>Appendix G of the Hume Emergency Response Plan contains maps of areas relevant to incident response.</p> <p>SDS and location maps are located in repositories around site in the vicinity of potential pollutants.</p>
	(l) a detailed description of how any identified risk of harm to human health will be reduced, including (as a minimum) by means of early warnings, updates and the action to be taken during or immediately after a pollution incident to reduce that risk.	Section 7 of the Hume Emergency Response Plan details the Emergency Response Procedure. Appendices I and K of the Hume Emergency Response Plan details the Emergency Response Scenarios, and the procedures for managing these.
	(m) the nature and objectives of any staff training program in relation to the plan	Section 20 of the Hume Emergency Response Plan details the nature and objectives of training for staff.
	(n) the dates on which the plan has been tested and the name of the person who carried out the test	Section 5.1 of the PIRMP includes this information.

Clause Number	Requirements	GSP Energy Compliance Assessment
	(o) the dates on which the plan is updated	<p>The revision history on page 2 of the PIRMP includes this information.</p> <p>Section 18.1 of the Hume Emergency Response Plan lists the timeframes for updates to various sections of the Hume Emergency Response Plan.</p>
	(p) the manner in which the plan is to be tested and maintained	<p>Section 5.1 of the PIRMP includes this information.</p> <p>Section 18.1 of the Hume Emergency Response Plan lists the timeframes for updates to various sections of the Hume Emergency Response Plan and Section 19 details the test frequency for the Plan.</p>
98D	<p>Availability of plan</p> <p>(1) A plan is to be made readily available:</p> <p>(a) to an authorised officer on request; and</p> <p>(b) at the premises to which the relevant licence relates, or where the relevant activity takes place, to any person who is responsible for implementing the plan</p>	<p>The PIRMP is available on the Meridian Energy Australia (on behalf of GSP Energy) website.</p> <p>Hard copies of the PIRMP are located within the Hume Power Station and Site Office.</p>
	<p>(2) A plan is also to be made publicly available in the following manner within 14 days after it is prepared:</p> <p>(a) in a prominent position on a publicly accessible website of the person who is required to prepare the plan</p> <p>(b) if the person does not have such a website – by providing a copy of the plan, without charge, to any person who makes a written request for a copy</p>	<p>The PIRMP is available on the Meridian Energy Australia (on behalf of GSP Energy) website.</p>
	<p>(3) Subclause (2) applies only in relation to that part of a plan that includes the information required under:</p> <p>(a) section 153C (a) of the Act, and</p> <p>(b) clause 98C (1) (h) and (i) or (2) (b) and (c) (as the case requires)</p>	<p>The full PIRMP has been made available on the Meridian Energy Australia (on behalf of GSP Energy) website.</p>
	<p>(4) Any personal information within the meaning of the Privacy and Personal Information Protection Act 1998 is not required to be included in a plan that is made available to any person other than a person referred to in subclause (1).</p>	<p>The PIRMP is publicly available. Personal information will not be included in the PIRMP.</p>

Clause Number	Requirements	GSP Energy Compliance Assessment
98E	<p>Testing of Plan</p> <p>(1) The testing of a plan is to be carried out in such a manner as to ensure that the information included in the plan is accurate and up to date and the plan is capable of being implemented in a workable and effective manner.</p> <p>(2) Any such test is to be carried out:</p> <p>(a) routinely at least once every 12 months; and</p> <p>(b) within one month of any pollution incident occurring in the course of an activity to which the licence relates so as 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.</p>	<p>Section 5 of the PIRMP and Section 19 of the Hume Emergency Response Plan outline the testing requirements.</p>

3. Pollution Incident Response and Notification

Under the Protection of the Environment Operations Act 1997 (POEO Act), a pollution incident means an incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise.

3.1 Duty to Notify

Under the POEO Act, the following people have a duty to notify a pollution incident occurring in the course of an activity that causes or threatens material harm to the environment:

- a. an employee carrying on the activity relating to the pollution incident
- b. an employer after becoming aware of a pollution incident
- c. the occupier of the premises where the pollution incident occurs.

Notification must be given immediately, i.e. promptly and without delay, after the person becomes aware of the incident.

You do not have to report if you know that all relevant authorities have already been notified. 'Relevant Authority' means:

- the appropriate regulatory authority (ARA)
- the Environment Protection Authority (EPA) if they are not the ARA
- the Ministry of Health
- SafeWork NSW
- Fire and Rescue NSW.

Refer to Section 14.2 for contact details.

3.2 Pollution Incident External Authority Notification

After a Pollution Incident the Chief Warden is responsible to ensure that the relevant authorities have been notified.

External Authority	Contact Number
Environmental Protection Authority (EPA)	131 555
Fire and Rescue NSW	000
Albury City Council	02 6023 8111
SafeWork NSW	13 10 50
SES Albury	02 6058 5300
NSW Ambulance	000
NSW Police	000
WaterNSW (Hume)	(02) 6026 4332 – Duty Officer

Ministry of Health – ask for Public Health Officer	1300 066 055
NSW National Parks and Wildlife	1300 361 967
NSW Office of Environment and Heritage	131 555

3.3 Pollution Incident Response

In the event of a Pollution Incident from the Power Station or its associated plant the flow chart outlined in Appendix J should be applied.

3.4 Possible Sources of Pollution

Store	Location	Substance(s)	Quantity (litres)
2 x 11kV/66kV/132kV transformers	Switchyard	Transformer Oil (FR3 Vegetable Based)	43,500 each
2 x unit governor systems	Power Station	Hydraulic Oil	7,000 each
2 x unit generator bearing systems	Power Station	Lubricating Oil	6,680 each
2 x 11kV/415V auxiliary transformers	Switchyard	Transformer Oil	1,200 each
2 x turbine bearing systems	Power Station	Lubricating Oil	1,000 each
2 x main intake gates	Dam Wall	Hydraulic Oil	750 each
Standby generator	Power Station	Diesel	600
Mobile diesel pump	Mobile	Diesel	450
Miscellaneous oils, lubricants, flammables, etc.	Power Station	Various	<200

4. Pollution Incident Response Flow Chart

Version 9: 27 February 2019

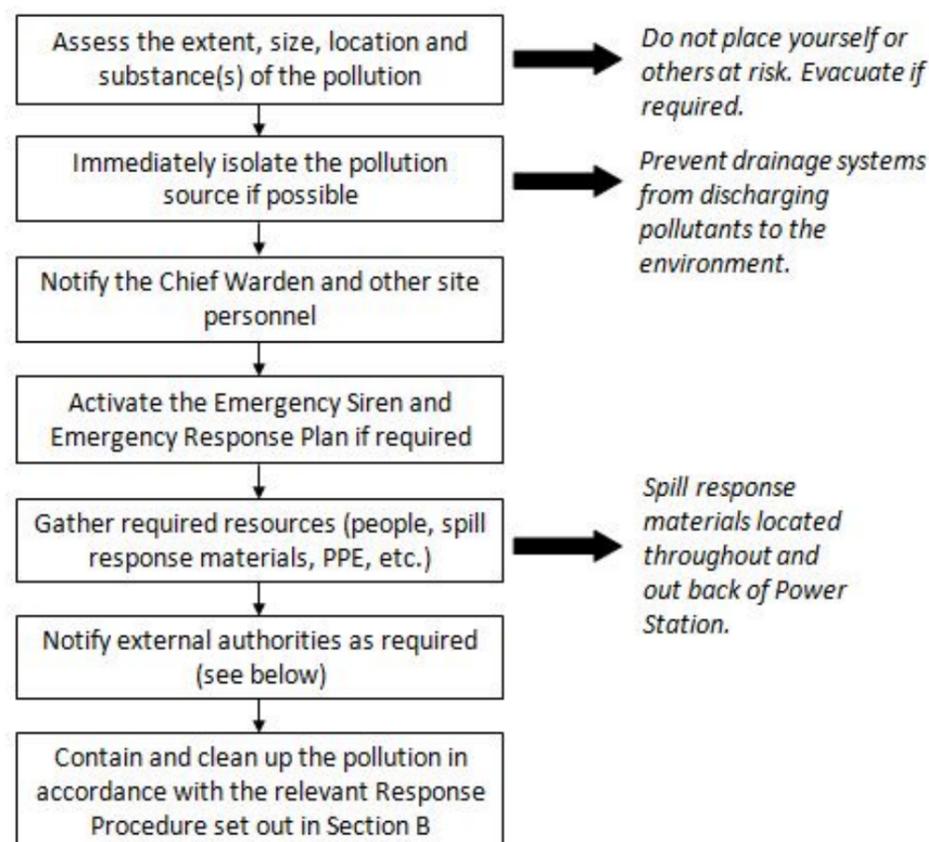


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POLLUTION INCIDENT RESPONSE FLOW CHART – HUME POWER STATION

A. Overview

In the event of a pollution incident the following procedure should be undertaken:



B. Specific Response Procedures

MINOR SPILLS – Spills of small volume

- Place absorbent material around the spill area to prevent the spread of the spill.
- Spread loose absorbent material or soaker pads over the entire area and allow them to absorb as much of the spill as possible. Repeat process until all the pollutant has been absorbed.
- Shovel the contaminated absorbent materials into an appropriate receptacle.
- Dispose of all contaminated material in the approved manner.

MAJOR SPILLS – Spills of Large Volume

- Place sandbags or absorbent materials around the spill area to prevent the spread of the pollutant.
- Do not allow any captured pollutants (e.g. in Power Station sumps or switchyard containment tanks) to be released to the environment.
- After containing the spill in a satisfactory manner arrange for an appropriate tanker to pump out.
- Dispose of all contaminated material in the approved manner.

SPILLS TO WATERWAYS

- All spills to waterways must be notified immediately (see Section C).
- To prevent the spread of pollutants downstream, generation from the Power Station should cease (where practicable) to limit flows in the Murray River.
- The spill response trailer at the back of the Power Station holds containment booms for use on waterways. These materials should be made available to Emergency Services to contain the spread of pollutants downstream. Employees are not to enter the River.

C. External Authorities

Environmental Protection Authority	131 555 000	NSW Police	000
Fire and Rescue NSW	000	Albury Police	02 6023 9299
Albury City Council	02 6040 6093	WaterNSW	02 6026 4332
SafeWork NSW	13 10 50	Ministry of Health – ask for Public Health Officer	02 9391 9000
SES Albury	02 6058 5300	NSW National Parks & Wildlife	1300 072 757
NSW Ambulance	000	NSW Office of Environment and Heritage	02 9995 5000

5. Testing Requirements for the PIRMP

Testing of the PIRMP is required to be undertaken once annually during the Annual Return period, being 1st November to 31st October. The testing can either be undertaken as a desktop simulation, practical exercises or drills.

Practical exercises and drills should be undertaken as part of the testing of the Hume Emergency Response Plan.

Desktop simulations should involve checking that the details in the PIRMP are sufficient to meet the requirements of the Act and Regulations and that the cross references to the Hume Emergency Response Plan are accurate. The Hume Emergency Response Plan should also be checked at the same time, to insure information is correct, particularly around staff personnel and roles, and contact phones numbers. A desktop simulation should also involve physically ringing some phone numbers to ensure that they work and that correct and appropriate people can be contacted through those numbers.

This PIRMP is also required to be tested within one month of any pollution incident occurring. In light of that incident, the PIRMP should be tested to confirm that the information included in the PIRMP is still accurate and up to date, and that the plan is capable of being implemented in a workable and effective manner.

5.2 Plan Test History

Date	Conducted By	Test Type	Recommendations	Next Test Due
9 – 13 October 2014	Nicola Foran	Desktop Simulation	Updated various sections to reflect change in licence holder	September 2015 (Practical Exercise)
28 June –17 July 2015	Nicola Foran	Desktop Simulation	Update various sections to include additional detail.	August 2015 (Practical Exercise)
23 September 2015	Robert Sigmund	Practical Exercise	In conjunction with testing of the Hume Emergency Response Plan. No changes required.	September 2016 (Desk Top Simulation)
21 October 2016	Nicola Foran & Julz Lawrence	Desktop Simulation		March 2017 (Practical Exercise)
18 October 2017	Thurgoona Training Academy	Practical Exercise	In conjunction with testing of the Hume Emergency Response Plan. No changes required.	Prior to 31 October 2018
28 August 2018	Thurgoona Training Academy	Practical Exercise	In conjunction with Warden training	Prior to 31 October 2019
25 June 2019	Shaun Coffey	Desktop Simulation	Reviewed all content following recent oil spill event	Prior to 31 October 2020

6. Environmental Risk Register

Activity / Apparatus	Risk	Substance(s)	Impacts	Control Measures
Switchyard transformers	Transformer cooling water contaminated with oil leading to pollution of waters	Oil	Compliance Lane Water Reputation	Transformer design Gravel in pit Inspections Primary and secondary containment systems EPA Licence monitoring requirements
	Transformer leak	Oil	Compliance Land Water Reputation	Alarms Bunding Primary and secondary containment systems Regular routine inspections
	Transformer explosion and fire	Oil	Air Compliance Financial implications Health and Safety Land Reputation Water	Gravel in pits Hume Emergency Response Plan Explosion walls Routine checks for leaks Maintenance procedures Primary and secondary containment systems Transformer design
General Contractor activities	Contractor undertaking an activity which causes an	Various	Air	Contractor contracts and clauses

Activity / Apparatus	Risk	Substance(s)	Impacts	Control Measures
	environmental impact		Compliance Flora and fauna Health and safety Land Reputation Water	Contractor management by GSP Energy staff Supervision Risk assessment process Site induction
Compliance with EPA Licence	Breach of licence conditions	Oils Particulates	Compliance Land Reputation Water Financial implications	Modification of secondary containment system to minimise risk of external impact Compliance audits Policies and procedures Routine inspections EPA Licence monitoring requirements Training
	Failure of systems (e.g. separation and containment systems) leading to an externally reportable incident	Oil	Compliance Land Reputation Water Financial implications	Alarms for instrument failure Backup instruments operational Bunding Contaminated water system Drains to contaminated water pits Emergency response Routine inspections Oil / water separator

Activity / Apparatus	Risk	Substance(s)	Impacts	Control Measures
				Training
Hume Power Station Operations	Fire in Hume Power Station	Oil Particulates Smoke	Air Compliance Financial Implications Reputation Water	Automatic fire suppression systems Hume Emergency Response Plan Water mist system Monthly inspections of fire suppression and alarm systems
	Oil releases within Hume Power Station not contained therefore impacting on river	Oil	Compliance Financial Implications Flora and Fauna Reputation Water	Oil spill materials available throughout Hume Power Station Training Drainage pit Oil escape detectors Routine checks & restocking skimmers monthly
	Turbine failure results in uncontrollable release of oil	Oil	Compliance Financial Implications Flora and Fauna Reputation Water	Routine inspections by GSP Energy staff Local / specialised understanding of the system (risk) Oil spill materials available throughout Hume Power Station Training
Weed Management	Inadequate weed control resulting in breach of Noxious Weeds Act	Noxious weeds	Compliance Flora and Fauna	Training Appropriate weed control practices

Activity / Apparatus	Risk	Substance(s)	Impacts	Control Measures
Mercury Switches	Mercury Spill	Mercury	Compliance Health and Safety Water Reputation	Oil spill materials available throughout Hume Power Station Specific mercury spill kit available in Hume Power Station Hume Emergency Response Plan