CMB- ENV- PLN - 001 (V 2.1.1)

Pollution Incident Response Management Plan (PIRMP)

Responsible Officer: Health and Safety Manager

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1 Purpose

The purpose of this Pollution Incident Response Management Plan (PIRMP) is to ensure that any environmental incident is managed in a manner that will prevent harm to the environment or people and to provide for the notification of pollution incidents at the Broadwater or Condong Cogeneration Power Plants as defined in the Protection of the Environment Operations Act 1997 (POEO Act) and the Protection of the Environment Operations (General) Regulation (2009).

This PIRMP includes the procedures to be followed by in notifying a pollution incident to:

i. the owners or occupiers of premises in the vicinity of Broadwater or Condong,
ii. the local authority for the area, and
iii. Regulatory authorities including the EPA, the Ministry of Health, SafeWork NSW, and Fire and Rescue NSW, and their contact details.

This PIRMP also includes details of the mechanisms for providing early warnings and regular updates to the local community and owners and occupiers of premises in the vicinity of the Broadwater and Condong Cogeneration Power Plants.

2 Scope

This PIRMP applies to all Cape Byron Management operations at Baraang Drive Broadwater, NSW and McLeod Street Condong, NSW.

The PIRMP applies to all Cape Byron Management employees, visitors and contractors at the Broadwater and Condong sites and associated premises.

If a pollution incident occurs in the course of an activity so that material harm to the environment (within the meaning of Section 4.5 below) is caused or threatened, the person carrying on the activity must immediately implement the PIRMP in relation to the activity.

This PIRMP is intended to act alone for matters related to pollution incident response management, and also as a sub-plan of the overarching Emergency Response Plans for Condong Cogeneration Plant and Broadwater Cogeneration Plant.

Figure 1. Site Layout of Condong Cogeneration Plant indicating primary Chemical Storage Areas in red.

Figure 2. Site Layout of Broadwater Cogeneration Plant indicating primary Chemical Storage Area in red.

3 Health and Safety

At all times during an environmental incident, the health and safety of all personnel, contractors, visitors and members of the public must take priority over the prevention of environmental contamination or harm.

4 Definitions

4.1 Pollutant

Any solid, liquid or gaseous matter that if released would change the physical, chemical or biological condition of the local environment.

4.2 Environment

The surroundings in which an organisation operates, including air, water, land, natural resources, flora, fauna, humans, and their interrelation

4.3 Environmental Incident

An unauthorised incident that will or potentially lead to Environmental Harm

4.4 Hazardous Substance

Any chemical that is suspected of producing adverse health, safety or environmental effects. Includes acids, lubricants, alkalis, etc.

4.5 Material harm to the environment

Material harm to the environment is described in Part 5.7 of the POEO Act as follows:

(a) harm to the environment is material if:

i. it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or
ii. it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding $10,000 (or such other amount as is prescribed by the regulations), and

(b) loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.

For the purposes of Part 5.7 of the POEO Act, it does not matter that harm to the environment is caused only in the premises where the pollution incident occurs.

5 Description and Likelihood of Hazards

Potential pollution incidents identified which present hazards to human health or the environment include:

Air Pollution Incident: Emission of significant dust, smoke, or chemical fumes to the atmosphere.

Water Pollution Incident: Discharge of significant sediment, leachate, effluent water, fuel, or chemicals to a watercourse.

Land Pollution Incident: Escape of significant sediment, leachate, chemicals, or fuel to off-site land.

Each licenced site covered under this PIRMP was assessed using a risk assessment for all identified possible aspects which could be classified as one or more of the above incidents, and the outcomes recorded in an Environmental Aspect Register for each site. Specific controls are described in each site's Air Pollution Management Plan, Wastewater Management Plan, and Stormwater Management Plan.

With the controls implemented on each site the likelihood of the above incidents occurring at each site has been assessed and is shown in Table 1.

Table 1. Likelihood of Incidents.

Likelihood	Broadwater Cogeneration Plant	Condong Cogeneration Plant
Air Pollution Incident	Possible	Possible
Water Pollution Incident	Possible	Possible
Land Pollution Incident	Possible	Possible

With the controls implemented on each site residual risk from such incidents has been assessed for each site and is shown in Table 2.

Table 2. Assessed Risk from Incidents.

Site/Residual Risk	Broadwater Cogeneration Plant	Condong Cogeneration Plant
Air Pollution Incident	Low	Low
Water Pollution Incident	Low	Low
Land Pollution Incident	Low	Low

6 Roles and Responsibilities

6.1 Operations Manager

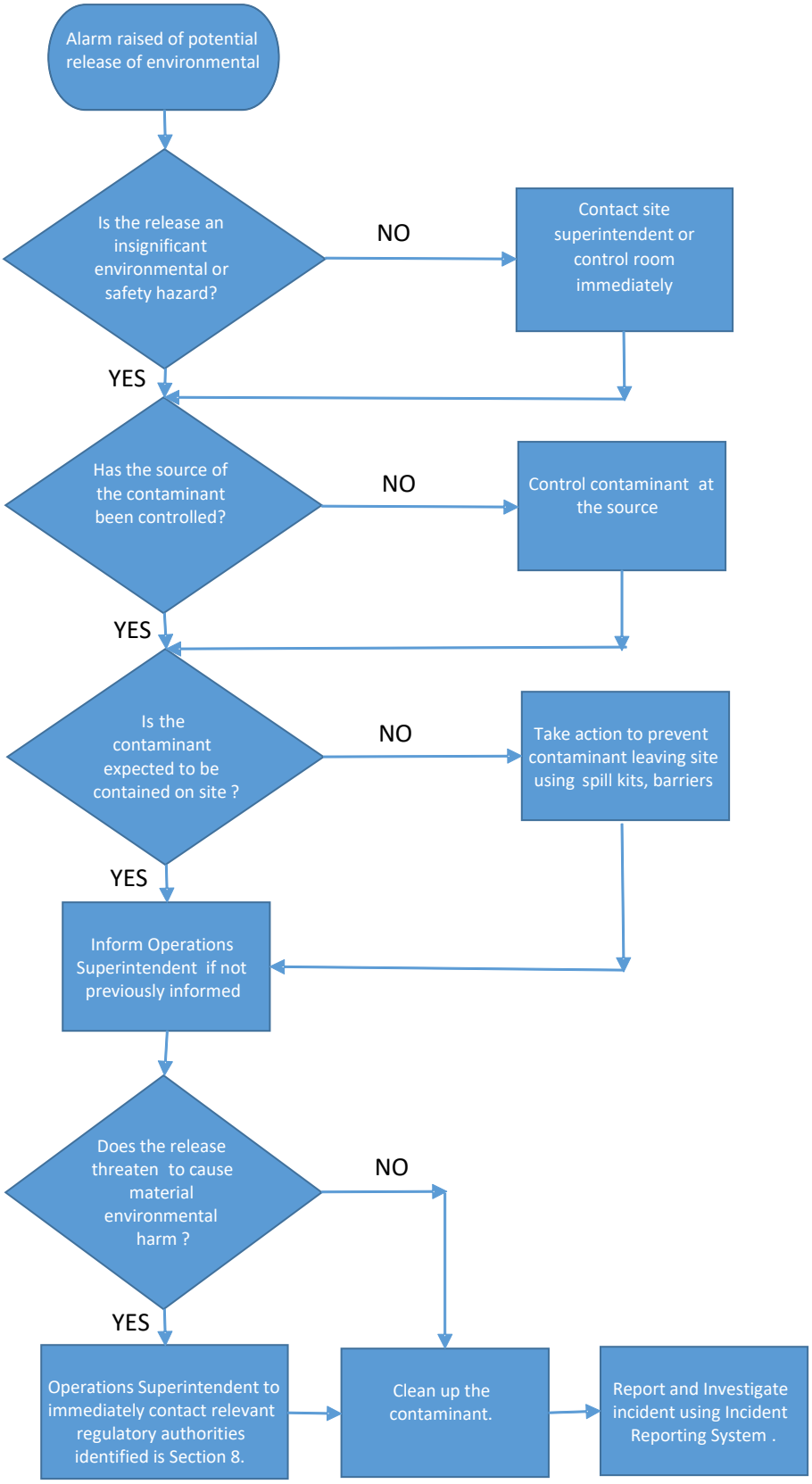
The Operations Manager is to ensure that:

(a) the requirements of this document are enforced with all employees operating at the Cape Byron Management premises, and

(b) all relevant employees are trained in its contents.

Health Safety and Environment Manager is to review, and if required, update this document annually.

7 Environmental Incident Flowchart



8 Environmental Incident Management Plan

The unauthorised release of Pollutants to the environment is not acceptable to Cape Byron Management or the Community. All staff will respond immediately to incidents that may cause a release of contaminants to the environment and will do everything possible to control the source of the spill/discharge, contain any contaminants and prevent adverse effects on the environment.

This Plan corresponds to the Flowchart in Section 7.

8.1 Priorities

1. Avoidance
2. Immediate Action
3. Communication

8.2 Response Procedure

The Operations Manager (or their nominee) must be advised of the incident as soon as is practicable.

At all times the safety of staff members remains the highest priority. If the incident involves significant quantities of Hazardous Substances, the SDS should be obtained, and the emergency services contacted on 000. Fire services should be requested. The information provided to the emergency services should include:

- The chemical name;
- UN code (if applicable);
- Approximate amount of substance, and
- Description of circumstances.

Immediate efforts must be employed to:

- address and control the source of the contaminant;
- contain the contaminant, and
- protect the local environment.

All efforts must be employed to prevent pollutants from escaping to the environment. If it is likely that liquid contaminants may reach the stormwater system, the Operations Superintendent (or their nominee) is to organise staff to prevent this occurrence utilising suitable spill control equipment.

In the event of contaminant material escaping to the environment or a Hazardous Substance release that resulted in contacting the Emergency Services, staff are to:

- Contact one of the following staff members:
  i. Operations Manager
  ii. HSE Manager or delegate
- In the case of the release of liquid contaminant to stormwater, undertake spill material sampling and local environment sampling (e.g., river at the point of the spill, upstream and downstream). All samples are to be refrigerated until analysis can be coordinated;

- Initiate clean-up activities as required, and
- Collect witness statements from those present at the time of the incident.

The Operations Superintendent (or their nominee) must report the incident as an Environmental Incident using the Cape Byron Management Incident Reporting System.

In the event of an emergency or pollution incident that causes or threatens to cause material harm to people or the environment, the site Operations Manager and /or the HSE Manger or delegate must immediately contact each of the relevant regulatory authorities identified below.

Authority	**Telephone Number**
Fire and Rescue NSW (Hazmat)	1300 729579
Ambulance/Emergency	000
EPA	131555
SafeWork NSW	131050
Ministry of Health (northern NSW)	(02) 6620 2125
Local Councils Broadwater – Richmond Valley Shire Council Condong – Tweed Valley Shire Council	 (02) 6660 0300 (02) 6670 2400

9 Inventory of Potential Pollutants on Site:

Table 3 and Table 4 list the potential pollutants and their relevant details for the Broadwater and Condong sites respectively.

Table 3. Potential Pollutant Inventory for Broadwater Cogeneration Plant.

Chemical Name	Maximum Quantity on-site (L)	DG Class	Packaging Group (I, II or III)	UN No.	Poison Schedule	Storage Location
sodium hypochlorite 13%	2,500	8	3	1791	S6	As marked on Figure 2
compressed oxygen	200	2.2	n/a	1072	n/a	
caustic soda liquid 32%	5,000	8	2	1824	S6	
acetylene	200	2.1	n/a	1001	n/a	
ammonia aqueous solution 25%	1,200	8	3	2672	S6	
sulphuric acid	1,000	8	2	1830	S6	
hydrochloric acid 33%	2,000	8	2	1789	S6	
biocide 512/ Hydrex 4129	1,000	8	2	3265	n/a	
Sodium metabisulphite	2,000	8	3	2693	n/a	
diesel	90,000	C1 Combustible Liquid				

Table 4. Potential Pollutant Inventory for Condong Cogeneration Plant.

Chemical Name	Maximum Quantity on-site (L)	DG Class	Packaging Group (I, II or III)	UN No.	Poison Schedule	Storage Location
sodium hypochlorite 13%	2,500	8	3	1791	S6	As marked on Figure 1
compressed oxygen	200	2.2	n/a	1072	n/a	
caustic soda liquid 32%	5,000	8	2	1824	S6	
acetylene	200	2.1	n/a	1001	n/a	
ammonia aqueous solution 25%	2,000	8	3	2672	S6	
sulphuric acid	4,000	8	2	1830	S6	
hydrochloric acid 33%	3,000	8	2	1789	S6	
Belclene 400	3,000	8	3	3265	n/a	
Sodium metabisulphite	3,500	8	3	2693	n/a	
diesel	69,000	C1 Combustible Liquid				

Further to the above chemicals, woodchip, bagasse, ash, tyres and dust are also potential pollutants on site. Below is a list of the main locations and maximum quantities of these potential pollutants.

Broadwater:

- Wood fuels (Includes: Saw milling residues, woodchip, shredded wood, logs)
    - Stockpile (ponderosa): 50,000 tonnes
    - On site: 3,000 tonnes
    - Logs: 40,000
- Bagasse
    - On site: 3,000 tonnes
- Ash
    - On site: 500 tonnes
- Repurposed Concrete Filled Tyres (used to secure stockpile coverings)
    - On site: up to 1,200 tyres

Condong:

- Wood fuels (Includes: Saw milling residues, woodchip, shredded wood)
    - Stockpile (adjacent to site): 40,000 tonnes
    - On site: 1,000 tonnes
- Bagasse
    - On site: 1,000 tonnes
- Ash
    - On site: 500 tonnes
- Repurposed Concrete Filled Tyres (used to secure stockpile coverings)
    - On site: up to 500 tyres

10 Safety Equipment and Other Devices used to Minimise Risk to Human Health and Environmental Incidents:

- All personnel are required to wear protective clothing (long sleeves or overalls), safety shoes, safety glasses and hardhats when on-site;
- When transferring or moving chemicals on-site personnel must wear appropriate Personal Protective Equipment ;
- Spill containment kits are located at the chemical storage and dosing areas and contain absorbent pads and temporary bunds for containing the spill, and
- Special transfer pumps and hoses are used to decant chemicals on site.

11 Communicating with Neighbours and Local Community

Each site has signage indicating the contact details for community feedback and the company website also has these details for collecting feedback from neighbours and local residents.

In the unlikely event, an incident occurs that poses any threat to human health or the property of neighbouring residents Hazmat, Fire and Rescue NSW or police will engage with and provide updates to those residents and the community. Should there be an immediate threat to human health or

property and no Emergency Services personnel in attendance the Operations Manager with the assistance of the HSE Manager or delegate will ensure those residents are door knocked and advised on the situation.

The Broadwater and Condong Cogeneration Plants are surrounded by residents and the nature and direction of the incident will determine the most appropriate properties to be notified by Cape Byron Management.

Local residents of the Broadwater or Condong community who have questions regarding the PIRMP or want to express environmental concerns about either co-generation facility are to call (02) 6672 9200 or email environment@cbpower.com.au.

12 Minimising Harm to Persons on Premises

To minimise the risk of harm to a person or environment for a high-risk activity a Job Safety and Environmental Analysis (JSEA) is to be completed before the said activity to identify risks and implement controls to prevent an incident.

In the unlikely event an incident occurs refer to Emergency Response Plan for the site, Cape Byron Management stresses safety is paramount in responding to an incident.

13 Training, Testing and Review

The PIRMP is to be tested at least annually by an emergency drill, the results of this drill are to be recorded and used to review and update the PIRMP. This PIRMP is also to be tested within one month of a pollution incident occurring in the course of an activity to which the licence relates.

The PIRMP is to be made available to all staff and all staff are to undertake training on the PIRMP to ensure they can respond appropriately to an incident to minimise harm to persons and the environment. Initial training on the PIRMP is to be provided and follow up training is to occur annually as part of the emergency drill for testing.

Training, review and testing records are to be maintained for a period of 4 years.

Document History

Issue Date	Nature of Changes
11/08/2016	Draft (v1.0)
12/12/2017	Initial version issued (v1.6)
25/11/2019	Full Review
06/10/2022	Update (v2.1)
06/05/2023	Update Activity Log (v2.1.1)

Document Approval

Issue Date	19/10/2022
Prepared By	HRL Consultants
Reviewed By	Greg Smith
Reviewer signature	
Approved By	Anthony Lount
Approver Signature	

Test Activity Log

Date	Reason	Site	Details
09/02/2016	Test		Toolbox Training
21/04/2016	Test		Toolbox Training
04/12/2017	Test		Toolbox Training
02/05/2018	Test		Toolbox Training
18/11/2019	Test		Toolbox Training
05/01/2020	Activated	Condong	Fuel Bin Fire
05/05/2020	Test	Broadwater	Sequence of Events Exercise
11/05/2020	Test	Condong	Sequence of Events Exercise
11/09/2020	Activated	Broadwater	Ash Water into Stormwater Drain
11/12/2020	Activated	Broadwater	Fuel Bin Fire
14/02/2021	Activated	Condong	TTE Spill
06/08/2021	Activated	Condong	Fire Water Tank Overflow
03/11/2021	Test	Condong	Split Training across workforce
04/11/2021	Test	Broadwater	Split Training across the workforce
05/11/2021	Test	Condong	Split Training across the workforce
08/11/2021	Test	Broadwater	Split Training across the workforce
16/05/2022	Test	Condong	Theory refresher
16/05/2022	Test	Broadwater	Theory refresher
09/05/2023	Test	Broadwater	Toolbox and theory
09/05/2023	Test	Condong	Toolbox and theory