

Glenlee Site



Document No: Pollution Incident Response Management Plan 2013

Revision No: V1 20 November 2013

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Reviewed 22/9/2015



Reviewed 4/5/18

Table of Contents

1	Introduction	3
1.1	Key Aspects of the Pollution Incident Response Management Plan.....	3
1.2	Background to Glenlee Site	3
1.3	Site Facilities.....	3
1.4	Other Operations Within or Adjacent to Glenlee Site	3
	Camden Soil Mix.....	4
	TRN Earthmoving	4
1.5	Pollution Control.....	4
2	Requirement to Prepare the PIRMP	4
2.1	Legislative Requirement.....	4
2.2	Structure of PIRMP.....	5
3	Definition of a Pollution Incident.....	7
3.1	Notifiable Pollution Incidents.....	7
4	Immediate Notification of Pollution Incident.....	7
5	Description and Likelihood of Hazards and Pre-emptive Actions.....	7
6	Inventory of Potential Pollutants	9
7	Inventory of Safety Equipment.....	9
8	Minimising Harm to Persons on the Premises	9
9	Actions to be Taken Before, During or Immediately After a Pollution Incident.....	10
9.1	Actions to Minimise a Pollution Incident	10
9.2	Actions During a Pollution Incident	10
9.3	Pollution Incident Emergency Response.....	11
9.4	Procedure for Calling Emergency Services	12
9.5	Evacuation Procedures	12
9.6	Action Following a Pollution Incident	13
10	Contact Details	13
10.1	Key Contacts/Positions	13
10.2	Appropriate Regulatory Authorities.....	13
11	Communication with Neighbours and the Local Community	14
12	Staff Training	15
13	Availability of PIRMP	15
14	Testing of PIRMP	15
15	Refereneces	16

1 Introduction

1.1 Key Aspects of the Pollution Incident Response Management Plan

This Pollution Incident Response Management Plan (PIRMP) covers the key actions to minimize occurrence of a pollution incident and manage a pollution incident if one occurs (during and after a pollution incident). The PIRMP does not have procedures for the treatment of injured persons or the remediation of the environment following a pollution incident.

The PIRMP has been prepared for managing the impact to human health (employees and nearby neighbours) and the environment (both onsite and offsite).

1.2 Background to Glenlee Site

Glenlee Site was originally established in the late 1950s as a rail loading facility, Washery and stockpile area to receive coal transported by road from the Burragorang Valley Mines. The washing process is basically a mechanical separation of the higher quality coal from the shales and low carbonaceous materials. The product coal was then loaded onto trains for transport to either the Balmain or Port Kembla coal loaders. The remaining material, referred to as reject was then emplaced on site. There were two sizes of reject, the first is a coarse grade and represents stone and shale and a fine reject which contains sand and clay.

To support the Washery, a small workshop was established for general equipment maintenance while a fuel storage facility and truck wash was established to support the truck transport fleet. The vast majority of the site was used for reject emplacement.

The original plant washed up to 3 Million tonnes per annum of coal between 1973 and 1982. Between 1986 and 1993, most of the Washery throughput was from reprocessing the existing reject emplacement. Reprocessing averaged 785,000 tonnes per annum with a maximum of 1.05 Million tonnes per annum. The reprocessing operation recovered the remaining coal from the earliest operation of the site. All washing and reprocessing operations ceased in 2007 and the plant for these operations has been dismantled and removed.

The site is currently used to store product coal from Wollondilly Washery prior to transport to Port Kembla and the receipt and emplacement of reject from Metropolitan Colliery.

Other activities on site include equipment storage and maintenance, a transportation business, administration and associated activities.

The Glenlee Site currently operates under Environmental Protection Licence (EPL) 1596.

1.3 Site Facilities

The Glenlee Site covers an area of approximately 72 ha which includes an office and car parking area, coal handling and processing infrastructure, product coal stockpiles, reject disposal areas, access roads, truck wash, train loading infrastructure and fuel storage facilities. A general site layout is shown on Annexure 1, which also shows the current pollution control system.

1.4 Other Operations Within or Adjacent to Glenlee Site

There are two other land owners who lie within the Glenlee Site's drainage system which need to be considered within this plan. These landowners, Camden Soil Mix Pty Limited and TRN Earthmoving occupy portions of the original Glenlee Washery site as described below. These sites are important to note as they may contribute or at least be key neighbours for notification in the event of a pollution incident or event.

Camden Soil Mix

Camden Soil Mix operate a composting operation on their site. The operation produces soil mixes and topdressing material for the horticultural and landscape industries. Product material is produced from a combination of raw material blending and composting. All products are sold in bulk form with no on-site retail sales or bagging operations. This operation drains into the main pollution control system for the Glenlee Site.

TRN Earthmoving

TRN is located on the north eastern end of the original Washery property. TRN currently use the site as their main administration, servicing and parking area for their truck and earthmoving equipment fleet.

1.5 Pollution Control

Drainage from the site, adjacent Camden Soil Mix site and TRN truck depot is controlled by a perimeter channel surrounding the site. This drain discharges into several sedimentation basins before entering the main water storage dam. The Glenlee site has a total of 54.5 ML of pollution control storage with spillway capacity for storms up to a 1 in 20 year return interval.

The two main dams located on the western perimeter of the site provide the majority of non-potable water demands. There are two additional sedimentation control dams located along the south perimeter of the site.

The current water management system on site was developed and implemented to contain and treat dirty water generated as runoff from the site. The main aims of the system are:

- To contain all dirty water within the approved site;
- To control sediment – use of pollution control ponds allow sufficient settling time for dirty water so that clear water can be discharged off site as required; and
- To treat water held on site so that it is of sufficient quality to be discharged into the Nepean River in accordance with EPA licence conditions.

All runoff from disturbed land is treated in one or more pollution control dams and is held on site. The principal components of the water management system are as follows:

- Workshop and Service areas currently drain to the centre of the site;
- Truck Wash has a fully enclosed waste water system with make up water provided from the raw water system;
- Diesel tanks and drum storages are fully bunded and dewatered as required. All bunded areas have been designed to contain at least 110 % of tank capacity. There would be normal levels of hydrocarbon contamination within the bunded area; and
- Effluent generated from toilets is piped to a septic tank system. Solid material is removed from the tanks as required by a licensed contractor.

2 Requirement to Prepare the PIRMP

2.1 Legislative Requirement

The specific requirements for the PIRMP are set out in Part 5.7A of the *Protection of the Environment Operations Act 1997* (POEO Act) and the *Protection of the Environment Operations (General) Regulation 2009* (POEO (G) Regulation). In summary, this provision requires the following:

- All holders of environmental protection licences must prepare a Pollution Incident Response Management Plan (section 153A, POEO Act);
- The plan must include the information detailed in the POEO Act (Section 153C) and be in the form required by the POEO(GO Regulation (clause 98B);
- Licensees must keep the plan at the premises to which the environment protection licence related or, in the case of trackable waste the transporters and mobile plant, where the relevant activity takes place (section 153D, POEO Act);
- Licensees must test the plan in accordance with the POEO(G) Regulation (clause 98E); and
- If a pollution incident occurs in the course of any activity so that the material harm to the environment is caused or threatened, licensees must immediately implement the plan (section 153F, POEO Act).

2.2 Structure of PIRMP

Table 1 outlines the structure of the PIRMP, as per the requirements of the POEO(G) Regulation.

Table 1: Requirement to Prepare PIRMP

Clause Number	Requirement	Section in Plan
98 C (1) (a)	A description of the hazards to human health or the environment associated with the activity to which the licence relates (the relevant activity)	Section 5
98 C (1) (b)	The likelihood of any such hazards occurring, including details of any conditions or events that could, or would, increase that likelihood	Section 5
98 C (1) (c)	Details of the pre-emptive action to be taken to minimize or prevent any risk of harm to human health or the environment arising out of the relevant activity	Section 9.1
98 C (1) (d)	An inventory of potential pollutants on the premises or used in carrying out the relevant activity	Section 6
98 C (1) (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	Section 6
98 C (1) (f)	A description of the safety equipment or other devices that are used to minimize the risks to human health or the environment and to contain or control a pollution incident	Section 7
98 C (1) (g)	The names, positions and 24 hour contact details of those key individuals who: (i) Are responsible for activating the plan, and	Section 10.1

Clause Number	Requirement	Section in Plan
	(ii) Are authorized to notify relevant authorities under section 148 of the Act, and (iii) Are responsible for managing the response to a pollution incident	
98 C (1) (h)	The contact details of each relevant authority referred to in section 148 of the Act	Section 10.2
98 C (1) (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 out	Section 11
98 C (1) (j)	The arrangements for minimizing the risk of harm to any persons who are on the premises or who are present where the scheduled activity is being carried on	Section 8
98 C (1) (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	Annexure 1
98 C (1) (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 warning, updated and the action to be taken during or immediately after a pollution incident to reduce that risk	Section 9
98 C (1) (m)	The nature and objectives of any staff training program in relation to the plan	Section 12
98 C (1) (n)	The dates on which the plan has been tested and the name of the person who carried out the test	Section 14
98 C (1) (o)	The dates on which the plan is updated	Front page
98 C (1) (p)	The manner in which the plan is to	Section 14

Clause Number	Requirement	Section In Plan
	be tested and maintained	

3 Definition of a Pollution Incident

The POEO Act 1997 defines a pollution incident as:

'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 Notifiable Pollution Incidents

A pollution incident is required to be notified if there is a risk of 'material harm to the environment', which is defined in section 147 of the POEO Act as:

- (a) Harm to the environment as 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.

Harm to the environment includes any direct or indirect alteration of the environment that has the effect of degrading the environment and, without limiting the generality of the above, includes any act or omission that results in pollution.

4 Immediate Notification of Pollution Incident

Pollution incidents are required to be notified *'immediately'* (section 148 POEO Act). This means that all Appropriate Regulatory Authorities (contact details can be found in Table 5) must be notified of the incidents without delay. These authorities include:

- Environment Protection Authority (EPA);
- Ministry of Health;
- WorkCover Authority;
- Local Council; and
- Fire and Rescue NSW.

5 Description and Likelihood of Hazards and Pre-emptive Actions

This section has been prepared to meet the requirements of clause 98 C (1) (a), (b) and (c) of the POEO(G) Regulation.

The identified potential hazards that may occur at Glenlee Site are outlined in Table 2, including the likelihood or otherwise of these hazards occurring and the existing controls and pollution response measures relating to the hazards.

Table 2 Identified Potential Hazards

Potential Hazards	Likelihood of Hazard Occurring	Existing Controls	Pollution Response Measures
On-site spills or leaks of fuel, oil or hydraulic fluid	Unlikely – workshop located remote from perimeter drain. Several storage structures exist to enable capture before release.	<p>Diesel tanks and drum storages are fully bunded and dewatered as required. All bunded areas have been designed to contain at least 110 % of tank capacity.</p> <p>Workshop and Service areas currently drain to the centre of the site</p> <p>Truck Wash has a fully enclosed waste water system with make up water provided from the raw water system</p>	Containment of fluids within existing bunding, cleanup using pumpout or absorption material as necessary depending on volume of spill.
Nutrient loaded water being discharged offsite	Moderate – although Glenlee Site does not use or handle nutrient rich materials the neighbouring operation does. Management of this site is outside the control of SADA.	<p>Drainage from the site and adjacent Camden Soil Mix is controlled by a perimeter channel surrounding the site which discharges into several sedimentation basins before entering the main water storage dam. The Glenlee site has a total of 54.5 ML of pollution control storage with spillway capacity for storms up to a 1 in 20 year return interval, and is designed to treat water held on site so that it is of sufficient quality to be discharged into the Nepean River in accordance with EPA licence conditions</p>	<p>Containment where appropriate, internal investigation to determine cause. If there is the likelihood of the discharge polluting the Nepean River implement the notification procedure outlined in section 9.3</p> <p>Triggers for notification include discolouration of the Nepean River, odorous water being released, or visible algal blooms being created or occurring.</p>
Fire, explosions and smoke on the site	Low	Existing fire management systems on site.	Implement notification procedures in the event of fire or explosions on site.
Personal injury resulting from a pollution event on site	Low	Existing OH&S plans in place.	Implement notification procedures if personal injury is the result of environmental factors which could affect neighbouring properties or individuals.
Property damage caused by erosion or slumping of	Low	Rehabilitation Plan approved which includes	Implement notification procedures if property

Potential Hazards	Likelihood of Hazard Occurring	Existing Controls	Pollution Response Measures
the coal reject emplacement, internal tailings dams or external drainage system.		design of emplacement and drainage systems	damage is likely to result from a pollution incident
Truck spills on internal roads within or near the site premises which may cause fuel, lubricants or other products to enter the site or threaten to enter water ways	Low	Truck management plans in place.	Implement notification procedures if material is likely to pollute offsite waterways or cause personal harm.

6 Inventory of Potential Pollutants

The following materials are stored on site:

- Bulk diesel stored in above ground licensed storage tanks;
- Engine and gearbox oils;
- Hydraulic oils and fluids; and
- Lubricants, solvents and cleaners in small quantities.

The only Hazardous Substances or Dangerous Goods stored on site at is diesel. All other materials area stored in small quantities.

7 Inventory of Safety Equipment

Table 3 outlines the safety equipment kept on site.

Table 3 Inventory of Safety Equipment

Safety Equipment Item	Location	Maintenance Requirement
Fire extinguisher	Office and workshop	Inspections and maintenance as per manufacturer requirements.
Spill kit	Workshop	Monthly
PPE	Office and workshop	Monthly
First aid kit	Office, workshop and site vehicles	Monthly
MSDSs	Workshop	All new substances at site to be accompanied by a MSDS.
Safety Signage	Office and workshop	Monthly

8 Minimising Harm to Persons on the Premises

All staff and contractors are to be appropriately inducted before completing any work on site. The induction covers procedures for minimizing the chance of a pollution incident occurring, managing a pollution incident and actions following a pollution incident.

Minimizing the impact to persons at Glenlee Site during a pollution incident must be the highest priority. In the event that a pollution incident requires the evacuation of the site, actions will be completed in accordance with

the site evacuation procedure. All staff are informed of the location of muster locations through site inductions, signage and ongoing training. As part of the preparation of the PRIMP, the key aspects of the plan will be provided to staff and contractors. The PIRMP will be tested every 12 Months as detailed in Section 14.

9 Actions to be Taken Before, During or Immediately After a Pollution Incident

9.1 Actions to Minimise a Pollution Incident

Some general controls which are in place to reduce the likelihood of a pollution incident occurring include:

- Site Environmental and Safety Management Plans;
- Regular inspections and maintenance;
- Environmental monitoring;
- Correct storage of chemicals and hazardous substances;
- Waste management
- Training and awareness; and
- Testing of the PIRMP as detailed in Section 14.

The site will make all attempts to prevent pollution incidents, but in the situation where a pollution incident is imminent and may potentially cause detrimental impacts to human health or the environment, the site will contact the necessary stakeholders (employees, contractors, neighbours, appropriate regulatory authorities) to provide as much early warning as possible.

9.2 Actions During a Pollution Incident

During the site induction, staff and contractors are informed of muster locations. If an evacuation is required, this shall be completed in accordance with Section 8. In the event that a pollution incident requires the evacuation of the site, actions will be completed in accordance with the site Evacuation Procedure. All staff are informed of the location of muster locations through site inductions, signage and ongoing training.

Licensees are required to report pollution incidents '*immediately*' (without delay) to appropriate regulatory authorities as listed in Section 10.2.

In the event of a pollution incident, the person who has identified the incident should immediately contact the Glenlee Site Manager. The person reporting the pollution incident should provide the following key details:

- Location of the pollution incident/ emergency;
- Nature of the pollution incident/ emergency;
- His or her name and contact details; and
- Details of any assistance required.

The details of any emergency call or incident reporting will be recorded.

Some general controls for managing a pollution incident include:

- Visually assessing the situation. Undertake emergency response if required;
- Contacting the appropriate regulatory authorities in accordance with the PIRMP (details in Table 5);
- If safe and possible to do so, undertake immediate measures that prevent further impacts from the pollution incident;
- Take direction from the appropriate regulatory authorities as required; and
- If required seek assistance from specialist consultants/contractors.