



Heron Resources Limited
Tarago Operations Pty Limited

Woodlawn Mine

SML 20

Pollution Incident Response Management Plan

March 2017

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1. Introduction

1.1 Objectives

This document details Woodlawn Mine's Pollution Incident Response Management Plan. It provides a management plan designed to outline an appropriate response to a pollution event either on the surface or within the underground workings.

This plan ensures compliance with the requirements of NSW's Protection of the Environment Legislation Amendment Act 2011 (POELA Act) and is a requirement for all licensed mine premises in NSW. This plan forms part of the Environmental Management Strategy at the Woodlawn Mine and the Safety Management Plan prepared under the Mines Health and Safety Act 2002 Part 5, Division I, Subdivision 5, Clause 47.

1.2 Document Purpose

The purpose of this Plan is to assure compliance of Woodlawn Mine in terms of management of pollution events and notification requirements in NSW in case of pollution incidents that cause or threaten to cause material harm to people or environment.

1.3 Document Definitions

Term	Definition
<i>Act</i>	A legal document created from the results of deliberation of a legislative body. In Australia, Acts are passed by State and Commonwealth Parliaments
<i>ARA</i>	Appropriate Regulatory Authority. This includes EPA, relevant Local Authority, Fire Brigade, WorkCover and a local Public Health Unit plus any other Public Authority that is a statutory authority for the matter in question, if different from above
<i>Material harm</i>	In terms of the POEO Act, <i>material harm</i> caused by a pollution incident relates to "actual or potential harm to the health or safety of people or ecosystems that is not trivial, or loss or property damage exceeding \$10,000, either offsite or onsite". The \$10,000 threshold includes any investigation costs associated with the pollution incident.
<i>POELA Act</i>	Protection of the Environment Legislation Amendment Act 2011, issued by NSW Government to regulate environmental incident reporting and disclosure of environmental monitoring data
<i>PIRMP</i>	Pollution Incident Response Management Plan. A detailed emergency response plan that needs to be implemented at all EPA-licensed sites in NSW by 1 September 2012
<i>SOP</i>	Standard Operating Procedure. A formal procedure for undertaking complex and recurring tasks where neither physical nor environmental layout will change

1.4 Mandatory Requirements

The minimum mandatory requirements for compliance to this Plan are outlined in the table below:

Requirement	Examples of Evidence/Verification
The Mine Manager and Environmental Officer for Woodlawn Mine share responsibility to notify immediately the relevant Authorities and community as specified in this document following a serious environmental incident	Details of notifications summarised in the Incident Report

1.5 Key Personnel and Responsibilities

Management responsibility for the Woodlawn Mine will be as follows.

Table 1 - Key Mine Personnel

Position	Personnel	Company	Responsibility	Contact Details
Managing Director	Wayne Taylor	Heron Resources Limited	Overall responsibility for the construction and operation of the Woodlawn Project	02 9119 8111
Chief Operating Officer	Andrew Lawry	Heron Resources Limited	Responsible for project delivery and operations	02 9119 8111
Manager Mining Engineering	To be appointed	Heron Resources Limited	Mine Planning and Design	02 9119 8111
Mine Manager	Brian Hearne	Heron Resources Limited	Conduct of mining operations	02 9119 8111
Exploration Manager, Chief Geologist	David von Perger	Heron Resources Limited	Resource evaluation	02 9119 8111
Environmental Manager	Robert Byrnes	IEC	Conduct of environmental management and compliance	02 4878 5502

The personnel will be updated from time to time as changes occur.

2. Legislation

2.1 NSW Regulations

The *Protection of the Environment Legislation Amendment Act 2011* (POELA Act) requires:

- Immediate notification of an expanded list of relevant statutory authorities in case of a pollution incident.
- Establishment of a Pollution Incident Response Management Plan (PIRMP).
- Making publicly available any Licence related monitoring data.

This document addresses the immediate notification requirements for pollution incidents at the Woodlawn Mine.

2.2 Pollution Incidents Causing Material Harm

Any pollution incident that cause or threaten material harm to the environment must be notified by a person to a site specific list of government authorities immediately upon becoming aware of the incident. In case new information comes to hand following the initial notification, this information must also be reported immediately. The failure to do so incurs the maximum penalty to \$2,000,000 for a corporation, with \$240,000 for each day the offence continues.

The definition of "material harm" caused by a pollution incident relates to "actual or potential harm to the health or safety of people or ecosystems that is not trivial, or loss or property damage exceeding \$10,000, either offsite or onsite".

The \$10,000 threshold includes any investigation costs associated with the pollution incident. As such, the incident need not be a significant one as this threshold could be quite easily exceeded within the context of a relatively minor environmental impact if it requires investigation and remediation. This also includes environmental harm caused only on site.

3. Potential Pollution Incidents and Responses

3.1 Possible Pollution Incidents at the Woodlawn Mine

The potential, albeit not necessarily likely, pollution incidents at the Woodlawn Mine include:

- Fire, explosions and smoke on the surface or within the underground workings.
- On-site spills or leaks of fuel, oil or hydraulic fluid that cause or threaten environmental harm, property damage or personal injury.
- Bushfire near or around the site which threatens the safety of the workforce or nearby residents.
- Truck spills on public 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.
- Pipe burst resulting in contaminated water and/or tailings going off site.
- Dam overtopping resulting in contaminated water going off site.

This Pollution Incident Response Management Plan covers events and activities which may cause pollution incidents involving material harm. The main areas and issues covered in this plan are:

- Existing controls to prevent pollution incidents.
- Incident response actions to mitigate potential incidents.
- Immediate reporting of pollution incidents to relevant statutory authorities.
- Maintaining communications with Appropriate Regulatory Authorities during incident response.
- Reporting of incidents to stakeholders including local communities.
- Site specific roles and responsibilities in incident response and reporting.

3.2 Pollution Incident Emergency Response

In the event of a pollution incident the risk of harm to human health will be minimised by engaging an appropriate pollution response as outlined below:

1. **Isolate the area:** In the event of oil, fuel or hydraulic fluid spill or leak, the area should be isolated and barricaded if required to reduce the risk of exposure to people. This must occur without exposure to danger.
2. **Stop the source:** If it safe to do so, stop the process causing the spill/leak or other environmental incident.
3. **Commence early notification:** The Mine Manager or Environmental Manager must be notified immediately of the environmental incident. Should the incident

threaten environmental harm, they in turn must immediately proceed with the notification of Authorities as detailed in this Plan. If the environmental incident threatens off site impacts or involves the township of Tarago, the nominated person implements early notification procedures to the relevant Authorities including emergency services and alerts potentially affected residents, with regular updates provided as needed.

4. **Provide a 1st aid response (if required):** First aid kits including instruction on use are available at the Contractors Office and designated underground first aid stations. Appropriate PPE is worn by all staff during periods of potential exposure as outlined in relevant MSDS.
5. **Identify the release to the greatest extent possible:** Do so without being at risk. This includes identifying:
 - a. the type of material released, e.g.
 - i. Class 2 Gases - compressed, liquefied or dissolved under pressure.
 - ii. Class 3 Flammable Liquids
 - iii. Solid material spill
 - b. The label and Material Safety Data Sheet for the product should give information on safe cleanup.
 - c. The size of the release and whether the release has stopped;
 - d. Whether chemicals involved may be potentially incompatible; and
 - e. Any unusual features such as foaming, odour, smoke, etc.
6. **Determine the level of emergency:** review chemical risk assessments, seek internal advice from area specialists, review MSDSs and seek professional advice from the fire brigade and/or hazardous material specialists.
7. **Determine if evacuation is required** and consider the impact that wind, rain, local geographical features such as hills and stormwater drainage systems may have in exposing persons at emergency assembly points. The Mine Manager or Construction Contractor Manager is to determine if evacuation of the site is to occur.
8. **Stop further release (if not done prior):** prevent further release by isolating the source of the release. (Trained personnel only with suitable PPE).
9. **Stop the release from spreading (if safe to do so):** deploy spill kits to prevent further contamination dispersal:
 - a. **Liquid spills.** Use appropriate absorbent/containment materials such as socks (land) and booms (water), plug drains to prevent contamination of stormwater.
 - b. **Ensure** that pollution control ponds remain as nil discharge by checking levels and pumps.
 - c. **Powdered solid spills:** cover drains to prevent contamination of stormwater
 - d. **Large spills:** Summon specialist spill emergency response contractors (e.g. Transpacific Industrial Solutions, 1800 SPILLS). Although the quantities of materials stored on site are minor, this procedure is relevant

-
-
- if there is an incident involving a delivery truck.
 - e. **Dispose** of contaminated spill clean materials and wastes using a licensed contractor
 - f. If required, **remediate** the site.

10. Fire on the Surface: Call 000 and report fire.

- a. In the event of an equipment fire the operator should activate the fire suppression system on the equipment and disembark carrying any portable fire extinguisher with them. If safe to do so the operator should attempt to extinguish the fire using a portable fire extinguisher. Battery isolator should be turned off if safe to do so.
- b. Portable fire extinguishers are located around the site and should be used to extinguish fires if they start within fixed plant. Any energy source should be isolated if safe to do so.
- c. Evacuate surface personnel and assemble in the carpark
- d. Evacuate underground workforce and assemble in the carpark
- e. Once all personnel are accounted, evacuate the mine site if safe to do so

11. Fire Underground:

- a. Call emergency internal number to report incident to the Mine Manager
- b. Check number of persons on shift
- c. Check mine monitoring system
- d. Is the power still on underground
- e. Is the main fan still running
- f. Note reports from any witnesses
- g. Determine level of incident
- h. Mine Manager to determine evacuation
- i. Evacuate mine and assemble in Carpark
- j. Determine contact list and reporting
- k. Contact Mines Rescue on 4284 4218
- l. Contact Mines Inspector on 4222 8333

Further procedures in the event of underground fire is provided below

3.3 Emergency Procedure In The Event Of Fire Underground

In the event of an equipment fire the operator should activate the fire suppression system on the equipment and disembark carrying any portable fire extinguisher with them. If safe to do so the operator should attempt to extinguish the fire.

Contact and inform the senior mining official of the situation and the status at the mine. Write down any instructions you may be given in response.

Summon trained persons around the mine surface to assist.

Refer to "Mine Telephone" list and contact personnel in work areas of fire location.

Briefly advise them of the situation and instruct them to commence evacuation procedures.

- a) Telephone the work area nearest to the fire first.
- b) Messages to be as short as possible and ensure they are clearly understood.

- c) Mark off telephone list as contact is made.
- d) If you have assistance use additional telephones to speed up this procedure.
- e) Record name of persons contacted.

Dispatch assistance if required. Assistance may be received from: -

- a) Surface personnel
- b) Work areas unaffected by the fire.

Dispatch equipment if required. This can be done by: -

- a) Men carrying the equipment.
- b) Any available underground vehicle,

Contact Mines Rescue Station and put them on stand-by after briefing them on situation.

Arrange an underground transport to be on standby.

Keep a log of all vehicle locations, phone calls and instructions.

FIRE UNDERGROUND NOTES CHECK LIST

Item	Done	Time
Assistance on the surface.		
Contact inbye of fire areas		
Contact officials at the mine.		
Dispatch assistance		
Dispatch equipment.		
Make necessary phone calls.		
Transport to surface on stand-by.		
Keep a log.		

4. Procedures for Calling Emergency Services

Dial 000

Ask for Ambulance/ Fire Brigade/Police. Be prepared to state:

Woodlawn Mine calling

Collector Road

Tarago

Nature of Emergency:

Fire

Serious Injury — number of injured and nature of injury

Entrapment — number of personnel

Mine Telephone Number:

02 9119 8111

Give your name

Directions to the mine:

Approaching from Bungendore:

Turn left on Collector Road.

Mine Entrance is 5.3 km but before the Veolia Bioreactor entrance.

Approaching from Tarago:

Proceed past the Crisps Creek Intermodal rail facility

Turn right on Collector Road

Mine Entrance is 5.3 km but before the Veolia Bioreactor entrance.

GPS Coordinates

35° 03' 36.33" S

149° 35' 02.20" E

Ask for estimated time of arrival at the mine and log same: ETA.....

5. Notification

5.1 Internal Notification

Any pollution incident satisfying the material harm threshold must be immediately reported to relevant statutory authorities by either the Mine Manager or the Mine Environmental officer.

In cases where “material harm” level cannot be immediately assessed or insufficient information comes to hand on the severity of the incident, the general advice is to err on the side of caution and notify the Relevant Authorities with a qualification that the situation could not yet be fully assessed.

Although the listed personnel are authorised to contact the relevant agencies, as always, it is every employee’s responsibility to immediately call 000 in the event of emergency particularly if there is injury or rescue is required.

5.2 Internal Contact List

Position	Name	Phone
Heron Resources Limited	Sydney Office	02 9119 8111
Managing Director	Wayne Taylor	02 9119 8111
COO	Andrew Lawry	0411 873 356
Mine Manager	Brian Hearne	0409 680 084
Environmental Manager	Robert Byrnes	0417437120
OH&S Representative	Alexandra Bonner	0422 169 365
Veolia Reception	Bioreactor	02 4844 6262
Veolia Facility Manager	Henry Gundry	02 4844 6351
Veolia Operations Manager	David Figueiredo	02 4844 6352

5.3 Notification Details

The Mine Manager or Environmental Manager is authorised to enact the necessary notification and must be done immediately upon becoming aware of the pollution incident.

The initial notification should include as much of the following information (if known) as possible:

- location and time of the pollution incident
- type of the incident (spill, fire, unlicensed harmful discharge, etc)
- assessed level of incident gravity and extent

- whether the Emergency Services have been required to attend.

All notifications must be documented in the Notification Log (form attached) with the details of time of notifications and the persons who took to the call.

5.4 Pollution Incident Authority Contact List

The following contact list includes compulsory notification and a supplementary list which require notification depending on the nature of the incident.

Government Authority - Compulsory Notifications	Emergency notification phone number
EPA – Environment Line	131 555
NSW Police and Ambulance	000
NSW Fire and Rescue	1300 729 579
Goulburn Mulwaree Council	4823 4444
Palerang Shire Council	1300 735 025
Emergency Services	132500
WorkCover	131050 Company ABN asked: 62 008 528 523
Public Health Unit (Sydney South West) – Camperdown Office	BH: 9515 9420 AH: 9515 6111 Ask for Public Health Officer on call
Government Authority – If Relevant	Emergency notification phone number
Mines Rescue	4286 5499
Sydney Catchment Authority	1800 061069
Roads and Maritime Services (road spills)	132 701
NSW Office of Water	8838 7885
Bush Fire Control Officer	1800 049933
Poisons Information Centre	131 126
Goulburn Hospital	4827 3111
Goulburn Police	4824 0799
Tarago Police	02 4849 4411 (not 24 hrs)
Endeavour Energy (power line emergencies)	131 003

5.5 Resident Contact List

In case of pollution incidents that may potentially pose a threat to health or safety of the neighbours the nearby residents need to be urgently notified. As it is likely that not all residents can be contacted by phone, it will be the responsibility of the Mine Manager or Environmental Officer to make arrangements for available employees to door knock around the village of Tarago.

The Environmental Officer will undertake the early warning of the neighbourhood in the first instance by phone. The current contact list for neighbours is provided below. The initial notification should be brief and contain only a description of the environmental threat together with instructions what to do. For example:

- Due to a fire on site or bushfire nearby, we are experiencing elevated dust emissions from the site. Please keep your doors and windows closed until further notice.
- An accidental discharge occurred from the site. There maybe emergency vehicles using the Collector Road.
- Due to a diesel spillage onto a street from the site, a cleanup operation is being organised. Please be watchful for road closures in relation to this operation.

Follow up information on the resolution of emergency situation would be timely conducted also on the phone. If required, further information would be disseminated by means of leaflets in a letterbox drop.

5.6 Implementation and Training Requirements

The mine's Environmental Officer is responsible for dissemination and training of the requirements of this Plan to all site staff and contractors.

Any changes to the document are to be communicated to personnel in a timely manner.

Audits and checks will verify that the implementation and compliance to this Plan are monitored.

5.7 Record Keeping

An accurate record of immediate notifications is to be kept in all cases. A Notification Log format as attached is preferable. Other proforma record cards are attached.

All training and induction records are to be kept at the mine by the Training Manager and entered into the training register. Records of any toolbox talks are to be maintained by the relevant supervisor using the toolbox talk meeting minutes' proforma. Record of incident review and corrective action is to be generated and retained to provide evidence of complying with this Plan.

Appendix A - Attachments

Pollution Incident Immediate Notification Log

Person undertaking notification (Name/Function):		
Date and time when first become aware of the incident:		
Incident type:		
Comments:		

Initial immediate notification log				
Appropriate Regulatory Authority	Time of call	Respondent's name/function	Approximate call duration	Comments
EPA				
Public Health Unit				
NSW Fire Brigade				
Police/Ambulance 000				
Emergency Services				
Mines Rescue				
Sydney Catchment Authority (WaterNSW)				
Goulburn Mulwaree Council				
WorkCover				
Other:				
Other:				
Summary of initial communication:				

Person undertaking notification (Name/Function):		
Date and time when additional information become available:		
Comments:		

Immediate notification of further pertinent information (if applicable)				
Appropriate Regulatory Authority	Time of call	Respondent's name/function	Approximate call duration	Comments
EPA				
Public Health Unit				
Emergency 000				
Local Council				
Tarago Township				
Other:				
Other:				
Summary of additional communication				

Heron Resources

Location: Woodlawn Mine

Communications Officer

On becoming aware of an emergency the Communications Officer will take the following actions

- Ascertain the nature and location of the incident
 - Identify problems/ solutions to effective communications
 - Notify the appropriate personnel
 - Transmit and record instructions between Chief Warden and others
 - Request outside emergency assistance if instructed by Chief Warden
 - Notify any other parties i.e. neighbours etc
-

NATURE OF EMERGENCY?

ARE THERE PERSONS INJURED?-----

LOCATION? **Date**/...../..... **Time**

Communications Officer Name

Supervisor Name

Alarm sounded Yes / No Time

Supervisor Notified

Area Supervisor Name

Other Name

Evacuation Status

Prepare for evac Yes / No Time

Evacuate Yes/No Time.....Evacuation areas

Communication Method

Radio

Runner(s)

Phone Mobile/Landline Ph No.....

Action Taken

None

Fire Suppression Extinguisher Fire Hose

Other

Outside Assistance Required Time requested by Chief

Agency(s) contacted

Fire Brigade Time contacted Name.....

Ambulance Time contacted Name.....

Police Time contacted Name.....

SES Time contacted Name.....

SES Time contacted

Heron Resources

Neighbours contacted

Person

Time

- Other
- Other

Management Contacted

Who Time

.....

.....

.....

Message Log

From To Details of Message Time

.....

.....

.....

.....

.....

.....

.....

Stand Down

Stand down by Supervisor Time

All Parties Notified of stand down Time of completion