POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN

LITHGOW SOLID WASTE FACILITY

September 2023

Contents

1 INTRODUCTION 4
1.1 Purpose 4
2 LEGISLATIVE REQUIREMENTS 4
3 SITE DETAILS 6
3.1 Site overview 6
3.2 Site characteristics 7
3.3 Site supervision and control 8
3.4 Waste received 9
4 RISKS TO ENVIRONMENT AND HUMAN HEALTH (INCLUDING PRE-EMPTIVE ACTIONS) 11
4.1 Introduction 11
4.2 Pre-Emptive Actions 11
4.3 Potential pollution incidents 12
4.4 Likelihood, impact and contributing factors to pollution incidents occurring 13
5 INVENTORY OF PULLUTANTS AND MAXIMUM QUANTITIES 16
6 SAFETY EQUIPMENT 17
7 KEY PERSONNEL 18
8 NOTIFICATION OF POLLUTION INCIDENT 20
8.1 Incidents requiring notification 20
8.2 Notification timeframe 20
8.3 Relevant authorities to be notified 20
8.4 Information to be notified 21
9 COMMUNICATION TO NEIGHBOURS 22
9.1 Identification of neighbours 22
9.2 Notification of neighbours 22
10 MINIMISING HARM TO PERSONS ON THE PREMISES 23
11 ACTIONS TO BE TAKEN DURING OR IMMEDIATELY AFTER A POLLUTION INCIDENT 23
12 STAFF TRAINING 23
13 PIRMP TESTING AND UPDATE 24

Tables

Table 1 Legislative Requirements

Table 2 Useful Contractor Contacts

Table 3 Inventory of Pollutants

Table 4 Key Personnel

Table 5 Relevant Authorities to be Notified

Table 6 Register of Testing and Updating

Appendices

Appendix A - Site Drawings

Appendix B – PIRMP Response Flowchart

Appendix C – Incident Notification Form

1 INTRODUCTION

1.1 Purpose

This Pollution incident response Management Plan (PIRMP) provides an emergency response and preventative strategy to effectively manage all significant safety and environmental emergencies at the **Lithgow Solid Waste Facility, 68 Geordie St, Lithgow**.

The PIRMP details:

- Procedures for notifying a pollution incident to relevant persons;
- Actions to be taken to reduce and/or control pollution; and
- Procedures for co-ordinating those notified and any action taken in combating the pollution.

The document has been prepared in accordance with:

- Part 5.7A of the *Protection of the Environment Operations Act 1997* (POEA Act);
- Part 3A of the *Protection of the Environment Operations (General) Regulation 2009* (POEO Regulation); and
- Environmental Guidelines: Preparation of pollution incident response management plans (NSW EPA, March 2012)

The PIRMP also considers the document *Guideline: Pollution Incident Response Management Plans* (NSW EPA) that is currently a draft for public consultation.

2 LEGISLATIVE REQUIREMENTS

The requirements for a PIRMP are set out in clause 153 of the POEO Act and clause 98 of the POEO Regulation.

Table 1 summarises the legislative requirements and references the relevant section in the PIRMP.

Table 1 Legislative Requirements

Clause	Requirement	Section in Plan
POEO Act		
153C(a)	the procedures to be followed by the holder of the relevant environment protection licence, or the occupier of the relevant premises, in notifying a pollution incident to: (i) the owners or occupiers of premises in the vicinity of the premises to which the environment protection licence or the direction under section 153B relates, and (ii) the local authority for the area in which the premises to which the environment protection licence or the direction under section 153B relates are located and	Section 8 Section 9

Clause	Requirement	Section in Plan
	any area affected, or potentially affected, by the pollution, and (iii) any persons or authorities required to be notified by Part 5.7,	
153C(b)	a detailed description of the action to be taken, immediately after a pollution incident, by the holder of the relevant environment protection licence, or the occupier of the relevant premises, to reduce or control any pollution,	Section 11
153C(c)	the procedures to be followed for co-ordinating, with the authorities or persons that have been notified, any action taken in combating the pollution caused by the incident and, in particular, the persons through whom all communications are to be made,	Section 8 Section 9
153C(d)	any other matter required by the regulations.	See POEO Regulation
POEO Regulation		
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 4
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 4
98 C (1) (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,	Section 4
98 C (1) (d)	an inventory of potential pollutants on the premises or used in carrying out the relevant activity,	Section 5
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 5
98 C (1) (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,	Section 6
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 (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,	Section 7
98 C (1) (h)	the contact details of each relevant authority referred to in section 148 of the Act,	Section 8.3
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 on,	Section 9

Clause	Requirement	Section in Plan
98 C (1) (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,	Section 10
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,	Appendix A
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 warnings, updates and the action to be taken during or immediately after a pollution incident to reduce that risk,	Section 4 Section 9 Section 11
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 13
98 C (1) (o)	the dates on which the plan is updated,	Section 13
98 C (1) (p)	the manner in which the plan is to be tested and maintained.	Section 13

3 SITE DETAILS

3.1 Site overview

The site details are:

Lithgow Solid Waste Facility
68 Geordie St
LITHGOW NSW 2790

The Lithgow Solid Waste Facility (LSWF or the 'facility') has been operating since 1940 and is owned by City of Lithgow Council. The site is operated by Lithgow City Council.

The LSWF does not have Development Consent as the operation pre-dates planning instruments. The Environment Protection Authority (EPA) has issued Environment Protection Licence 6004 in accordance with Section 5.7 of the *Protection of the Environment Operations Act 1997*. The licence requires that the total quantity of waste disposed at the premises must not exceed 50,000 tonnes per annum, including no more than 5 tonnes per annum of clinical and related waste.

As a condition of the licence, a Landfill Environmental Management Plan (LEMP) has been prepared, which details the procedures to manage and operate the LSWF to meet the relevant Environmental Goals specified in the Environment Protection Authority's Environmental Guidelines: Solid Waste Landfills, 2016.

The LSWF accepts solid wastes including putrescible wastes and other wastes approved by the EPA. The facility may also receive inert waste. Excluded waste types and permitted waste types are detailed in Section 3.4.

3.2 Site characteristics

The Lithgow Solid Waste Facility (SWF) incorporates all areas under EPL 6004 including:

- Gatehouse and weighbridge;
- Access roads;
- Landfill;
- Stockpile areas;
- Pollution control infrastructure (e.g. stormwater dam, clean water diversion drains); and
- Resource Recovery Centre (RRC).

The LSWF is located approximately 4 km north-west of Lithgow (see drawing 07A_EV01). It comprises DP 1109194 (Lot 102), DP 190934 (Lot 1), DP 751655 (Lot 44), DP 947828 (Lot 1) and a section of Crown Land.

The area surrounding the facility to the north, south, east and west is dense native forest and the edge of the Blue Mountains. Council owned infrastructure, the Lithgow Sewage Treatment Plant (STP) exists directly to the south-west and is downgradient of landfill operations.

The nearest residential property to the facility is located approximately 230m from the south-western corner of the boundary.

Access to the LSWF is via Geordie Street, which is a two lane sealed road. From Geordie Street the facility is accessed by Up Road, a primary sealed road. Within the site, sealed roads and formed gravel access roads lead to the various defined tipping areas and processing pads. The central portion of the site is currently used for landfilling with small transportable office and maintenance shed located around the site entrance to the west.

The RRC is accessed from the landfill Up Road.The LSWF is gated at the intersection between Up Road and Geordie Street and this gated entrance is shared with the Animal Shelter and waste & recycling contractor. The southern boundary is private residential blocks. Part of the western boundary is shared with the adjacent Sewage Treatment Plant (operated by Lithgow Council) and secured with a fence. The remaining western boundary is private land with a farm fence. The northern and eastern boundaries are adjacent to steep bushland that can only be accessed from behind. The steep bushland and presence of steep sided diversion drains provide a natural boundary to the site.

Previous and current landfilling practices have altered the local topography significantly, creating numerous rises, as such, the current landfill area no longer retains the natural

topography but is designed to channel surface water and minimise off site impact of the landfill operations.

The site topography and drainage have been engineered to try to ensure that there is negligible stormwater runoff into the site, thus reducing any off-site impact. Most site generated surface water is channelled through the centre via a run-off control pond towards a sedimentation basin in the north-west corner of the site. The surface water then flows into the adjacent creek channel which flows around the edge of the site and directly to Farmers Creek approximately 500m downstream.

With high average annual rainfall and the sheer quantum of surface run-off from the steep slopes of the adjacent Blue Mountains, clean surface water generated from outside the premises avoids the landfill site itself by filtering into the adjacent creek channel which flows around the site boundary. The surface water then flows directly through to Farmers Creek approximately 500m downstream (see drawing 07A_EV02).

Groundwater is routinely monitored through a system of 6 piezometers at six locations around the landfill, one surface water monitoring point & one leachate monitoring point (see drawing LCC-MONIT_PLAN).

There is no remnant natural vegetation over the site. The dense native forest of the Blue Mountains directly adjacent to the north, south, east and west site boundaries act as visual and wind buffers.

3.3 Site supervision and control

The LSWF is open to the public between 8:00 am and 5:00 pm seven days a week (the last vehicle access is 4.45 pm). The facility is closed on Good Friday and Christmas Day. Access to the site outside of these hours (e.g. for special circumstances and emergency waste disposal) is subject to the approval of the Waste & Recycling Manager.

Heavy earthmoving and landfilling equipment only operate between 7:00 am and 7:00 pm Monday to Friday, 7:00 am – 5:00 pm Saturday and 8:00 am – 5:00 pm on public holidays. Operation of such equipment outside these hours is subject to approval from the Waste & Recycling Manager.

Waste deposited in the active landfill cell is immediately spread and compacted and is covered with a Tarp Deployment System (TDS) and cover material where required at the end of daily operations. The cover material is sourced from excavation of a former quarry located in the north-eastern corner of the site or from certified material delivered to site.

LSWF is supervised at all times when open for the receival of wastes. The facility is staffed by qualified and experienced personnel employed by Council. These include a Site Supervisor, up to three Resource Recovery Officers and a Gatehouse Attendant. Two Operators are generally present during normal operation. One to two officers operate the main tipping area, and a minimum of two officers are based at the RRC.

All vehicles enter the site via the gatehouse and weighbridge. Loads undertake an initial inspection at this point and customers are then directed to the appropriate area on site.

Further inspection occurs at the entrance to the RRC area, and vehicles unloading at the tipping area are monitored by staff.

CCTV is used at the gatehouse to monitor traffic and waste types. CCTV cameras throughout the RRC facility and tip face camera are to monitor illegal activity, fires, and vehicle movements. All CCTV cameras are used for afterhours security. Lockable security gates are in place both at the gatehouse compound and at the access point to the facility on Geordie Street. These gates are locked outside opening hours.

No members of the public are permitted to scavenge anywhere on site.

3.4 Waste received

Council holds Environment Protection Licence (EPL) No. 6004. The licence authorises for following scheduled activities:

- Waste disposal (application to land)
- Waste processing (non-thermal treatment)
- Waste storage (Community Recycling Centre)

The site accepts a maximum of 50,000 tonnes per annum including no more than 5 tonnes per annum of clinical and related waste. The facility includes a Community Recycling Centre (CRC). (The CRC accepted wastes don't contribute to maximum tonnes per annum refer to EPL L3.1.)

The site can accept the following wastes under EPL No. 6004:

- general solid waste (putrescible)
- general solid waste (non-putrescible)
- clinical and related waste
- asbestos waste
- sewage products (Biosolids)
- tyres
- liquid waste
- restricted solid waste
- hazardous waste

In addition to the above wastes the facility accepts domestic quantities of waste oil. The oil is stored in a lockable 3,000L self-bunded storage unit and the waste oil removed as needed for recycling by a licensed contractor.

The LSWF ***does not accept*** the following types of wastes:

- Liquid wastes of any description (other than cement batching plant effluent, stone cutting slurry waste, and waste permitted to be disposed at the CRC);
- Radioactive material, sharps, cytotoxic waste, bulk blood, body fluids, recognisable body parts, infectious waste, microbiological and pathological wastes, laboratory chemicals, poisons and pharmaceutical waste;
- Any inflammable liquid material derived from grease, oil, tar, petroleum, shale or coal;
- Any sludge or material (unless proven to be innocuous or harmless) being the refuse from any industrial process carried out in any tanning or leather processing plant, any petroleum or petrochemical plant, any chemical plant, any metal treatment plant, any paint-manufacturing plant;
- Any material containing arsenic, cyanide or sulphide;
- Any toxic soluble salt of barium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, silver, zinc;
- Any pesticide or herbicide and in particular chlorinated hydrocarbons (organochlorins), fluorinated hydrocarbons, organophosphates, phenols; and
- Any soluble acid or alkali, acidic or basic compounds.

There is a certain percentage of bycatch received through the CRC and these products/chemicals are stored in lockable dangerous goods cabinets and collected by waste contractors on a regular basis.

If an excluded waste was to be discovered on the site, the Site Supervisor would be notified immediately. The first action is to identify the person who delivered the material (using a combination of gatehouse CCTV, vehicle registration and source of waste forms) and have them remove the material for disposal at a suitably licensed facility. Should the person who delivered the material be unable to be identified or return to site, the Site Supervisor would arrange for removal of the material by a contractor licensed to remove that material. The incident would be recorded on the daily diary kept by the Site Supervisor.

If the waste is leaking, the local fire brigade would be contacted and requested to bring a drum for the containment of hazardous materials.

Any of the above wastes may only be disposed of at the LSWF following EPA approval. Signs defining excluded wastes and penalties for the deposition of excluded wastes are prominently displayed at the point of entry to the site. The excluded waste is recorded on the

Daily Checklist including details of the type of waste, the source of waste and vehicle and driver identification.

4 RISKS TO ENVIRONMENT AND HUMAN HEALTH (INCLUDING PRE-EMPTIVE ACTIONS)

4.1 Introduction

The following section outlines current operational procedures and design intended to minimise and manage risk. Members of staff working on site are responsible for being aware and notifying the Site Supervisor of any potential pollution incidents on the premises. All management procedures detailed within the LEMP must be adhered to.

4.2 Pre-Emptive Actions

4.2.1 Identifying non-domestic quantities of hazardous substances

The following practices apply to screening of incoming wastes.

- Public access is only permitted during opening hours;
- Drivers are asked to describe the type of waste to be deposited on entry to the facility;
- Inspections of waste loads are made when required;
- Drivers are directed to the correct area of the facility for disposal of specific loads (e.g. builder's wastes, green waste, whitegoods, tyres, scrap metal etc.);
- Wastes are monitored and inspected as they are being discharged to ensure excluded non-approved wastes are not being disposed; and
- Wastes are monitored and inspected during spreading, compaction and covering.
- The following steps are undertaken if non-domestic quantities of hazardous wastes are identified:
    - If identified at point of entry the vehicle is refused entry and the driver advised to contact the EPA for advice on proper disposal of the hazardous waste. The incident is reported as described in Section 2.4;
    - If identified during waste deposition the Operators immediately advise the Site Supervisor. The supervisor advises the driver that the waste is not acceptable and organises for the waste to be loaded back onto the vehicle, where practicable and safe to do so. The supervisor then escorts the load off-site and advises the driver to contact the EPA for advice in the proper disposal of the excluded waste. The incident is reported as described in Section 2.4; and
    - If identified during waste spreading and compaction the Operators immediately notify the Site Supervisor. The supervisor makes all practicable efforts to identify the source of the waste (e.g. labelling, waste type). The supervisor is then responsible for contacting the EPA for advice on the proper disposal of the hazardous waste and will dispose of the hazardous waste in accordance with the EPA's requirements. In the event that the EPA cannot be contacted, the wastes will be relocated to the domestic hazardous waste lock up cage.

4.2.2 Surface or sub-surface fires

The potential for fires to occur at the site are controlled by:

- A security entrance gate to prevent unauthorised access and acts of vandalism;
- Maintaining machinery in good working order to minimise risk of sparks;
- Smothering immediately with soil;
- Water cart always full and accessible
- Adequately compacting and covering waste;
- Mulched green waste has the capacity to spontaneously combust. This risk is minimised via shaping into divided windrows (i.e. small cones) to isolate/contain any fires;
- Regular litter patrols;
- Ensuring fire breaks are maintained around any temporary stockpile of combustibles;
- Access to on-site fire fighting equipment;
- Having good visual monitoring of waste being delivered; and
- Accepting only permitted wastes.

4.2.3 Mixing of leachate and stormwater or waste and stormwater

The potential for the mixing of leachate and stormwater or waste and stormwater is controlled by ensuring that the leachate return system is regularly checked and maintained.

4.2.4 Confirmation of surface gas

Surface gas monitoring is undertaken on a monthly basis. If detected at a concentration that exceeds the threshold limit the EPA is notified within 24 hours, the piezometer is re-sampled and the EPA notified of the re-sample within 14 days of the incident in accordance with the EPA's Solid Waste Landfill Guidelines, January 1996.

4.2.5 Confirmation of gas accumulated in buildings

Gas accumulation monitoring of buildings is undertaken on a monthly basis. If detected at a concentration that exceeds the threshold limit the EPA is notified within 24 hours, the piezometer is re-sampled and the EPA notified of the re-sample within 14 days of the incident in accordance with the EPA's Solid Waste Landfill Guidelines, January 1996. Any buildings which are built within the site are designed so as not to accumulate methane gas.

4.2.6 Acts of vandalism or target of terrorist activity

The site entrance gates at the intersection between Up Road and Geordie Street to some extent limits unauthorised access outside operational hours. All staff are required to be vigilant and aware that the site is a potential target for vandalism, particularly by arsonists. CCTV throughout the facility allows the site to be monitored regularly. Twice nightly drive over security patrols are conducted.

4.3 Potential pollution incidents

The potential main hazards to human health or the environment – i.e. 'Pollution Incidents' - associated with the activity undertaken at this site include the following:

- Identifying non-domestic quantities (more than 200 millimetres per tonne or 200 grams per tonne) of hazardous substances among waste;
- Surface or subsurface fires;
- Mixing of leachate and stormwater or waste and stormwater;
- Identification of any failure of an environmental protection system;
- Identification of a significant difference in groundwater indicator parameters;
- Confirmation of surface gas at the landfill at greater than 1.25 per cent methane (volume for volume);
- Confirmation of gas accumulated in buildings at greater than 1.25 per cent methane (volume for volume);
- Acts of vandalism or target of terrorist activity; or
- Any other incident or observation that could potentially pose an immediate environmental hazard outside normal operating conditions.

It is possible that dumping of hazardous waste may occur outside the boundary, but in close visual proximity to the LSWF outside of normal operational hours. In this instance, if the pollution is a risk of material harm to the environment and/or human health then the local fire brigade should be contacted immediately. The initial response to the pollution and assessment of the situation thereafter will be managed by the local fire brigade. Refer to Appendix B - Pollution Incident Decision Flow Chart for details. The table below refers to useful contractor contacts.

Table 2 Useful Contractor Contacts

Contractors	
Cleanaway - Emergency clean-up	1300 785 003
Cleanaway – Motor oil (Greg Booth)	[redacted]
Environmental Treatment Solutions – Safe Chemical disposal	1300 133 583

4.4 Likelihood, impact and contributing factors to pollution incidents occurring

Incidents can be classified as being of low, medium or high risk of occurring (likelihood) based on the past history of the facility, an assessment of management procedures, staff training and site layout.

The impact of an incident can be classed as low, medium or high based on the potential extent of offsite harm to humans and/or the environment.

4.4.1 Identifying non domestic quantities of hazardous substances

Medium Likelihood – Non-domestic quantities of hazardous waste could be discovered at point of entry into the site, during waste deposition, and/or during waste spreading, sorting and compaction.

Low Impact – The site has a protective system of drainage and holding ponds which are likely to contain and prevent the immediate spread of hazardous substances outside of the premises.

Contributing Factors – Human errors made during waste screening.

4.4.2 Surface or sub-surface fires

4.4.2.1 Active Waste Receival Areas (landfill and RRC)

The LSWF often deals with the sorting and deposition of combustible waste, coupled with the storage and use of some highly combustible chemicals and fuels.

Medium Likelihood – The likelihood of a fire within the active landfill area is relatively high, for example kerbside collection can include household fire embers and mulch can self combust.

Medium Impact – It is probable that a fire of this nature could be contained due to the procedures and equipment in place. Therefore, the impact is classed as Medium.

Contributing Factors – Factors which may increase fire risk include high winds, dry weather, prolonged periods of high temperatures and low humidity, spontaneous combustion and hot embers in waste deliveries. Human errors made during waste screening and the poor maintenance of plant and equipment which may spark a fire.

4.4.2.2 Maintenance and Inactive Areas

Low Likelihood – The storage of potential accelerants such as maintenance chemicals and fuels is undertaken on-site, however as these are located in secure facilities and only utilised by trained staff, the risk is considered minimal.

High Impact – If a fire were to initiate within the chemical storage area, or in an inactive area of the site, there is a high risk of spread off-site and to susceptible surrounding forested areas.

Contributing Factors – Factors which may increase fire risk include high winds, dry weather, prolonged periods of high temperatures and low humidity.

4.4.3 Mixing of leachate and stormwater or waste and stormwater

Low Likelihood – the site has a protective system of drainage, holding ponds and leachate return system which contains some surface water, leachate and waste sufficient to manage a 1 in 10 year, 24 hour duration storm event. Stormwater run-off is fed through a drainage pipe beneath the active landfill area and out into the sedimentation basin. On-site roads are designed to channel and capture runoff.

Medium Impact – the site has a protective system of drainage, holding ponds and leachate return system which is likely to contain and prevent the immediate spread of surface water, leachate and waste outside of the premises. However the impact is considered to be medium due to the close proximity of the western creek and Farmers Creek to the site. Any

pollutants which manage to reach the creek could cause harm to properties and environmental habitats for some distance downstream.

Contributing Factors – Prolonged periods of heavy rain and lack of surface water pond and site maintenance may increase risk.

4.4.4 Identification of any failure of an environmental protection system

Low Likelihood – the site has a protective system of drainage and holding ponds, and the surface water, groundwater, surface gas, accumulated building gas and leachate of the premises is regularly monitored.

Low Impact – the site has a protective system of drainage and holding ponds and the surface water, groundwater, surface gas, accumulated building gas and leachate of the premises is regularly monitored which means any failure in this environmental protection system is likely to be identified well before there is potential for impact outside of the site.

Contributing Factors – Prolonged periods of heavy rain and/or a mechanical failure of the pump of the leachate return system may result in the leachate flowing directly into the adjacent western creek and Farmers Creek system without first being deposited back onto the active landfill cell.

4.4.5 Identification of a significant difference in groundwater indicator parameters

Low Likelihood – the site has a protective system of drainage and holding ponds, and the surface water, groundwater, surface gas, sub-surface gas and leachate of the premises is regularly monitored.

Low Impact – the site has a protective system of drainage and holding ponds and the surface water, groundwater, surface gas, sub-surface gas and leachate of the premises is regularly monitored which means any significant difference in groundwater indicator parameters is likely to be identified well before there is a potential impact outside of the site.

Contributing Factors – Prolonged periods of heavy rain may increase risk.

4.4.6 Confirmation of surface gas at the landfill

Low Likelihood – the possible build up of surface gas at the site is regularly monitored.

Low Impact – the possible build up of surface gas at the site is regularly monitored which means any significant surface gas emissions are likely to be identified well before there is a potential impact outside of the premises.

Contributing Factors – N/A.

4.4.7 Confirmation of landfill gas accumulated in buildings

Low Likelihood – the possible accumulation of landfill gas in buildings at the site is regularly monitored.

Low Impact – the possible accumulation of landfill gas in buildings at the site is regularly monitored which means any significant methane gas emissions are likely to be identified well before there is a potential impact outside of the premises.

Contributing Factors – on-site buildings which have not been designed to prevent accumulation of methane gas.

4.4.8 Acts of vandalism or target of terrorist activity

Medium Likelihood – The site is not enclosed by secure fencing or monitored by CCTV, and during hours of closure is not patrolled by security guards. Although the site is of limited strategic value as a potential target for terrorism, the premises may prove attractive to arsonists as it is isolated from habited areas, has inadequate security and deals with the sorting and deposition of combustible waste, coupled with the storage and use of often highly combustible chemicals.

High Impact – the site is surrounded by dense forest susceptible to fire.

Contributing Factors – Increased risk during hours of closure and during sustained periods of hot and dry weather.

4.4.9 Any other incident or observation that could potentially pose an immediate environmental hazard outside normal operating conditions

Low Likelihood – The site has significant and advanced environmental protection measures and monitoring schedules.

Low Impact – The site has significant and advanced environmental protection measures and monitoring schedules which are likely to identify, contain and prevent the immediate spread of environmental hazards outside of the premises even outside of normal operating conditions.

Contributing Factors – N/A.

5 INVENTORY OF PULLUTANTS AND MAXIMUM QUANTITIES

A list of pollutants and the maximum quantity stored on site is provided in Table 3 below.

Table 3 Inventory of Pollutants

Pollutant	Quantity	Storage Location
Plant oil	80L	Maintenance shed
Oil (waste oil, engine oil and lubricants)	3,000 L	Oil storage unit RRC
Stormwater (sediment laden water)	Up to 3.2 ML	Stormwater Dam
Leachate (leachate impacted groundwater)	<1 kL	Leachate collection pit

Lead acid Batteries	Up to 30	Pallet storage within CRC
Paint – Water and oil based	2,500L oil based no limit water based	CRC bunded storage containers
Fire Extinguishers	10,000L	CRC within storage cage
Gas Cylinders	5,000L	CRC within storage cage
Fluorescent light globes and tubes	2,500kg	CRC within storage container
Smoke detectors	No limit	CRC stored in buckets
Other oils	2,500L	CRC bunded storage containers
Household batteries	No limit	CRC stored in buckets

NOTE – dangerous goods storage cabinets located inside first bay of RRC shed closest to entrance

Lithgow Council offers an annual Household Chemical Collection event at the RRC for items not accepted through the CRC. For example household quantities of herbicide or pesticides.

6 SAFETY EQUIPMENT

A water cart is used on site for dust suppression and fire control in case of emergency.

Spill Sorb or similar is present on site to manage fuel and oil spills. The used Spill Sorb is then deposited in the landfill. In the event of a chemical spill, PPE is provided for on-site staff which consists of safety goggles and protective gloves.

The site has two clean water diversion drains (eastern and southern) that divert clean water away from all site operations. Water coming into contact with waste (e.g. active landfill working face) is managed through the leachate collection system. All other surface water on the landfill site flows to the landfill Stormwater Dam. This dam has an outlet valve that is locked for security reasons. In the event of a chemical spill, any contaminants collected in the stormwater dam would remain in the stormwater dam for clean-up without release to surrounding waterways.

Waste at the RRC is collected and transported in various receptacles and skip bins. All surface water runoff is collected through the stormwater management system that flows to the RRC stormwater dam. In the event of a chemical spill, there are various points, depending on the spill, where contaminants could be contained. It is noted that the volumes of chemicals collected on site are minor and are stored in covered and bunded areas.

7 KEY PERSONNEL

The names, positions, contact details and responsibilities of key personnel responsible for managing a pollution incident are provided in Table 4.

Table 4 Key Personnel

Position	Organisation	Name	24 hour contact details	Responsibility
Site Supervisor	Lithgow Council	Jim Wilkins	[redacted]	• First point of contact on site for any incident • Assisting emergency services on site when required • Assessing incident and ensuring site procedures followed. • Managing emergency response • Notifying incident to Council where PIRMP response triggered or likely to have been triggered.
Waste & Recycling Manager	Lithgow Council	Nigel Campbell	[redacted]	• Liaison between site and Council • Notification of relevant authorities (under delegation) • Activating PIRMP
Executive Manager Water & Waste Water	Lithgow Council	Matt Trapp	[redacted]	• Notifying relevant authorities (or delegating notification)
Customer Service	Lithgow Council	N/A	6354 9999	• Back up contact.

8 NOTIFICATION OF POLLUTION INCIDENT

8.1 Incidents requiring notification

The definition of a pollution incident is:

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.

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 1997:

> *"(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."*

8.2 Notification timeframe

The requirement for notification of a pollution incident has changed from '*as soon as practicable*' to '*immediately*'. In short, '*immediately*' means '*promptly without delay*', but it does not mean undertaking notification ahead of doing what is necessary to make safe.

8.3 Relevant authorities to be notified

Where the pollution incident causes or threatens material harm to the environment or human health, all the following authorities must be notified by the Executive Manager Water & Waste Water (or delegate) in accordance with Table 5.

Table 5 Relevant Authorities to be Notified

Contact	Phone No.
Emergency Call Services	
Emergency Hotline Number (24 hours)	000*
City of Lithgow Council	
Waste & Recycling Manager	[redacted]
Executive Manager Water & Waste Water	[redacted]
Council Emergency contact number (after hours)	' 02 6354 9999
Environment Protection Authority (EPA)	
Emergency Hotline Number (24 hours)	131 555
Ministry of Health (via Public Health Units)	
Bathurst Regional Office	[redacted]
Public Health Officer on Call (24 hours)	[redacted]
SafeWork NSW	
Hotline Number	131 050
Fire and Rescue NSW	
Lithgow Rural Fire Service	1300 729 579**

*The Site Supervisor or Manager should call 000 if the incident presents an immediate threat to human health and/or property and a combat agency is required (i.e. NSW Fire and Rescue, NSW Ambulance Service, NSW Police Force) and then notify Council to commence notification process under the PIRMP.

**If there is no immediate threat to human health and/or property i.e. a combat agency is not required, then the site supervisor is still required to follow that outlined above except for dialling 000.

A summary of the above pollution incident notification procedure is provided as a flowchart in Appendix B.

8.4 Information to be notified

Under section 150 of the POEO Act 1997, the information about a pollution incident that must be notified is:

- The time, date, nature, duration and location of the incident;
- The location of the place where pollution is occurring or is likely to occur;

- The nature, the estimated quantity or volume and the concentration of any pollutants involved, if known;
- The circumstances in which the incident occurred, including the cause of the incident, if known;
- The action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution, if known; and
- Other information prescribed by the regulations.

Notification is required immediately after a pollution incident becomes known. Any information required that is not known at the time the incident is notified must be provided when it becomes known.

A Pollution Incident Reporting Form is produced in Appendix C to assist the Site Supervisor in correctly recording and notifying the relevant authorities detailed in Section 4.2.2 above.

9 COMMUNICATION TO NEIGHBOURS

9.1 Identification of neighbours

The nearest residential neighbours are located approximately 230m from the site boundary in Chivers Close (see Appendix A – Site Locality Plan). It is noted that people are also likely to be present at the Council Sewage Treatment Plant (STP).

9.2 Notification of neighbours

Where a pollution incident causes or threatens material harm to the environment or human health, the EPA is notified in accordance with Section 4.2.

Once the EPA is notified, it is then for the EPA to determine whether commercial, industrial and residential neighbours of the site need to be contacted by Council and informed of the circumstances of the incident and what action is being taken in response to it. If deemed necessary, the EPA then has powers to formally direct Council to notify the neighbours of the site. This procedure would provide for early warning of any potential off-site impacts.

Depending on the nature and scale of the incident, emergency services (e.g. Fire and Rescue NSW) notified under the PIRMP will manage the notification process as needed.

Irrespective of whether the EPA directs Council to notify neighbours and depending on the circumstances of the particular pollution incident, Council may at their own discretion voluntarily choose to notify neighbours.

Council would notify STP staff by calling the site mobile on [redacted]

Notification will also include regular updates as required.

10 MINIMISING HARM TO PERSONS ON THE PREMISES

In the event of a pollution incident occurring, all members of the public, site contractors and other Council staff will be mustered by site staff to the Emergency Assembly Point adjacent to the site office (identified on Site Locality Plan within Appendix A), after which they will be safely evacuated from site where appropriate. It is a condition of entry that in the event of an emergency, both the public and staff must adhere to directions given by the Site Supervisor.

11 ACTIONS TO BE TAKEN DURING OR IMMEDIATELY AFTER A POLLUTION INCIDENT

All site personnel with relevant training must make every effort to contain the pollution incident on site, without putting themselves at risk of harm.

In the case of a fire and where safe, attempts must be made to extinguish or contain the fire immediately. This could be through the use of a fire extinguisher or smothering with cover material.

In the event of a chemical spill that is not contained by bunding, Spill Sorb (or similar) must be used to restrict the spread of the chemical.

If pollution is identified through groundwater or surface monitoring, procedures as identified in the LEMP will be followed.

12 STAFF TRAINING

New members of staff at the facility should be inducted. This induction must cover the purpose, requirements and responsibilities detailed in this PIRMP.

All staff should receive sufficient training to enable them to carry out their assigned duties in a competent and safe manner. In particular:

- Staff must be capable of using the fire-fighting equipment;
- Staff must be capable of identifying excluded wastes;
- Staff must be capable of identifying potential pollution incidents; and
- Staff must be familiar with the requirements and procedures contained within this PIRMP.

Staff competency will be monitored through audits, public complaints and pollution incident reports.

Regular site briefings and toolbox meetings should be held when considered appropriate to draw attention to potential pollution incidents and identify improvements to on-site safety procedures.

13 PIRMP TESTING AND UPDATE

In accordance with clause 98E of the POEO Regulation, the PIRMP will be tested at least annually or within 1 month of a pollution incident occurring.

At least once every year staff should undertake a simulated pollution incident response exercise, including with emergency services where appropriate, to familiarise site personnel with the requirements of this management plan.

As part of the annual testing the PIRMP will be reviewed and updated as required.

A register of testing and updating is provided in Table 6 below.

Table 6 Register of Testing and Updating

Date tested	Personnel	Date PIRMP updated	Version No.
02/11/2015	[redacted]	22/10/2015	1
14/10/2016		14/10/16	2
31/08/2017		1/9/2017	3
21/9/2018		12/10/2018	4
Updated following EP/		31/07/19	5
23/09/2019			6
8/09/2020		11/09/2020	7
13/09/2021		16/09/2021	8
5/09/2022		5/09/2022	9
14/09/2023		14/09/2023	10

Appendix A - Site Drawings

1. Site Locality Plan
2. Landfill Site Plan
3. Stormwater Concept Plan RRC
4. Monitoring Plan LCC MONIT_PLAN

Locality Plan – Lithgow Solid Waste Facility

SITE PLAN – LITHGOW SOLID WASTE FACILITY

Base Plan: Survey 14th September 2022

REV.	DATE	DFTD.	APPD.	DETAILS
A	18/12/17	GT	AW	FOR ISSUE
B	30/01/18	GT	AW	FOR ISSUE
C	12/02/18	GT	AW	FOR ISSUE
D	28/02/18	GT	AW	FOR ISSUE-FOR DA APPROVAL
E	08/10/18	GT	AW	FOR ISSUE-FOR DA APPROVAL

	FILE	INITIALS	DATE
SURVEY	-	-	-
DESIGN	-	-	-
DRAINS/ HEC-RAS MODELLING	-	-	-
ENGINEERING/ SURVEYING APPROVAL		-	-

DRAWING SCALE

SCALE 1:500 (A1)

0 10 20 30 40 50

SCALE 1:1000 (A3)

0 10 20 30 40 50

DO NOT SCALE FROM THESE DRAWINGS. ALL MEASUREMENTS SHALL BE CONFIRMED ON SITE AND WITH GEOLYSE PTY. LTD. PRIOR TO CONSTRUCTION

APPROVAL AUTHORITY: LITHGOW CITY COUNCIL-

CLIENT: LITHGOW CITY COUNCIL

PROJECT: RESOURCES RECOVERY CENTRE CONCEPT DESIGN

GEOLYSE
ORANGE
154 PEISLEY STREET
P.O. BOX 1963
ORANGE, NSW 2800
orange@geolyse.com
Ph. (02) 6393 5000
www.geolyse.com
Fx. (02) 6393 5050

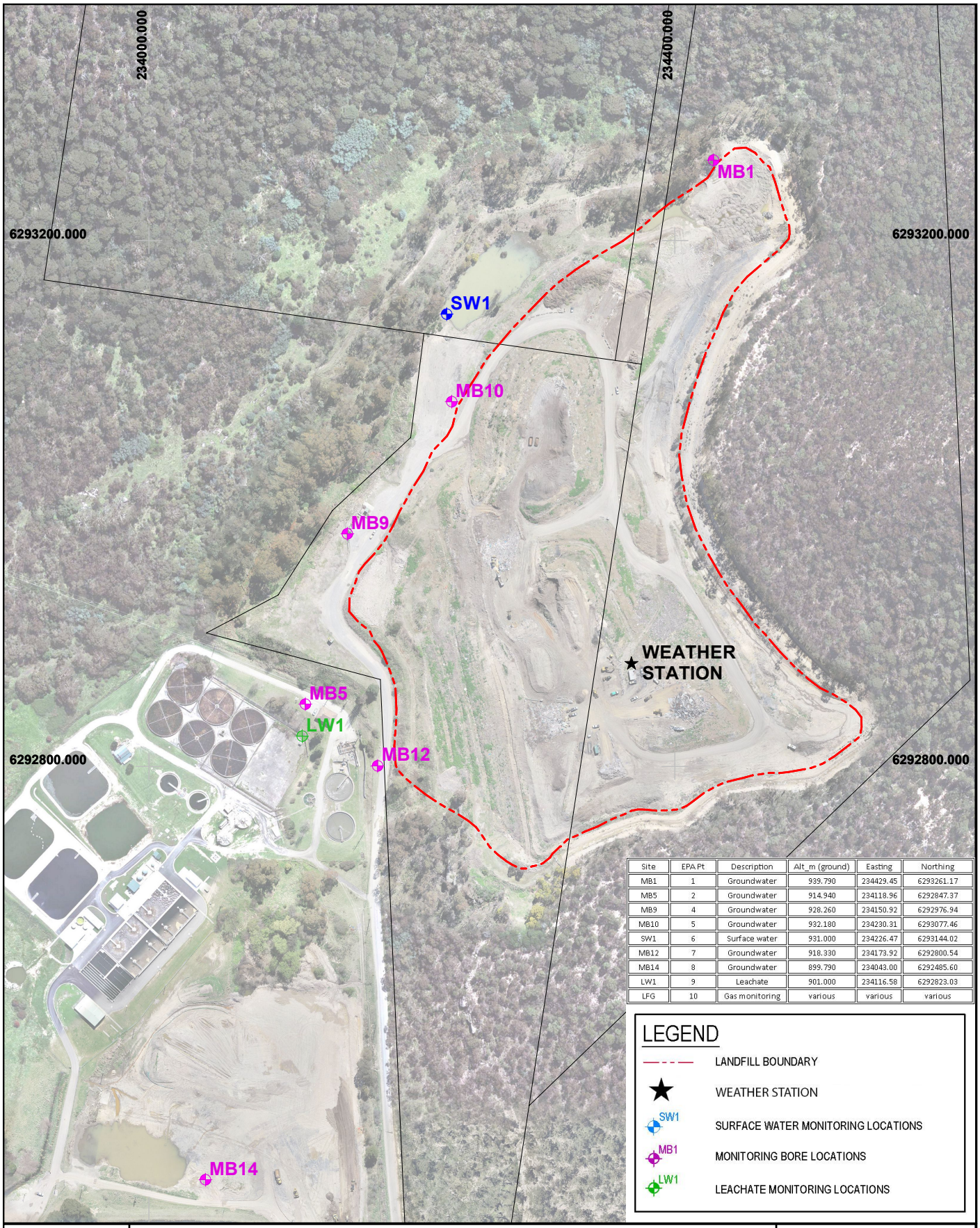
DRAWING: RESOURCE RECOVERY CENTRE STORMWATER CONCEPT PLAN

PROJECT NUMBER 218001 | DRAWING FILE 218001_01F-C001-C008.dwg | ORIGINAL A1

SURVEY MARK - | R.L. - | DATUM A.H.D.

IMAGE SOURCE -

STATUS FOR REVIEW | SHEET C004 OF C008 | SET 01



Site	EPA Pt	Description	Alt_m (ground)	Easting	Northing
MB1	1	Groundwater	939.790	234429.45	6293261.17
MB5	2	Groundwater	914.940	234118.96	6292847.37
MB9	4	Groundwater	928.260	234150.92	6292976.94
MB10	5	Groundwater	932.180	234230.31	6293077.46
SW1	6	Surface water	931.000	234226.47	6293144.02
MB12	7	Groundwater	918.330	234173.92	6292800.54
MB14	8	Groundwater	899.790	234043.00	6292485.60
LW1	9	Leachate	901.000	234116.58	6292823.03
LFG	10	Gas monitoring	various	various	various

LEGEND

- LANDFILL BOUNDARY
- WEATHER STATION
- SW1 — SURFACE WATER MONITORING LOCATIONS
- MB1 — MONITORING BORE LOCATIONS
- LW1 — LEACHATE MONITORING LOCATIONS

DRAWING No:

LCC-MONIT_PLAN

CLIENT: LITHGOW CITY COUNCIL
CEH REF: 3/668TH
SURVEY: MONITORING PLAN
PROPERTY: LITHGOW SOLID WASTE DEPOT
LOCALITY: 62 GEORDIE STREET, HERMITAGE FLAT, NSW

0 50 100

SCALE: 1:4000(A4)

NOTES:
MGA COORDINATES AND AHD DATUM
BOUNDARIES HAVE NOT BEEN SURVEYED

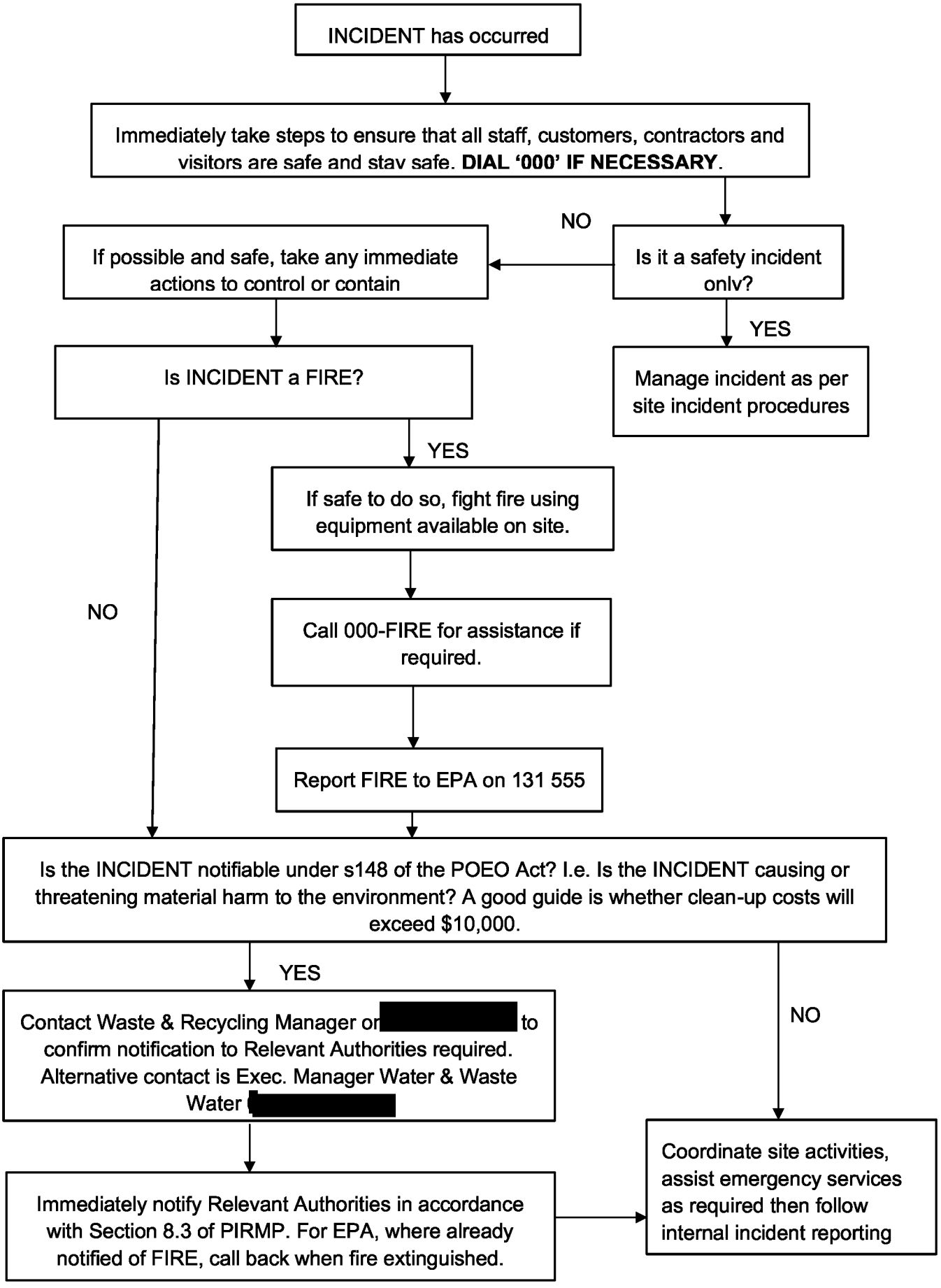
Border size = 185mm x 272mm on A4 paper.

MGA56

CEH SURVEY
CONSULTING LAND, ENGINEERING AND MINING SURVEYORS
"Astrolabe" 1 Rutherford Lane, LITHGOW 2790
ABN: 68 056 544 551 Office: (02) 6351 2281
Email: survey@ceh.com.au Website: www.ceh.com.au

DATE	18-03-2022
AMENDED	
SURVEYOR	TH
DRAWN	TH
CHECKED	

Appendix B – PIRMP Response Flowchart



Appendix C – Incident Notification Form

Pollution Incident reporting Form

INCIDENT NO:	**TIME:**
DATE:	**DURATION OF INCIDENT:**

NATURE OF INCIDENT:

TEMPERATURE: ……^{o}C	**WIND DIRECTION & SPEED:** ……KM/HR
RELATIVE HUMIDITY: …… %	**RAINFALL SINCE 9AM:**……MM
FIRE DANGER RATING: ……	

THE LOCATION OF THE PLACE WHERE POLLUTION IS OCCURRING OR IS LIKELY TO OCCUR:

THE NATURE, THE ESTIMATED QUANTITY OR VOLUME AND THE CONCENTRATION OF ANY POLLUTANTS INVOLVED (IF KNOWN):

THE CIRCUMSTANCES IN WHICH THE INCIDENT OCCURRED, INCLUDING THE CAUSE OF THE INCIDENT (IF KNOWN):

THE CORRECTIVE ACTION TAKEN OR PROPOSED TO BE TAKEN TO DEAL WITH THE INCIDENT AND ANY RESULTING POLLUTION OR THREATENED POLLUTION (IF KNOWN):

HAS COUNCIL BEEN NOTIFIED?	YES NO	
HAS ENVIRONMENT PROTECTION AUTHORITY (EPA) BEEN NOTIFIED?	YES NO	
HAS NSW MINISTRY OF HEALTH (VIA PUBLIC HEALTH UNITS) BEEN NOTIFIED?	NO	YES
HAS WORKCOVER NSW BEEN NOTIFIED?	YES NO	
HAS LOCAL FIRE AND RESCUE NSW BEEN NOTIFIED?	YES NO	

HAS EPA DIRECTED COUNCIL TO NOTIFY NEIGHBOURS?	YES	NO
IF NOT, HAS COUNCIL VOLUNTARILY NOTIFIED NEIGHBOURS?	YES	NO

Signature: ..... **Date:** .....

Signature: ..... **Date:** .....

Team Leader Environment, City of Lithgow Council