ARMIDALE Regional Council

POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN

ARMIDALE WASTE MANGEMENT FACILITY LONG SWAMP ROAD

REVISION 8 – UPDATED 29 JULY 2025

ARC16/0666 – AI/2025/16318

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REVISION HISTORY

REVISION	DATE	AUTHOR / REVIEWER	DETAILS
DRAFT 1	3/10/12	LOGICUS Environmental Management	Provided to ADC for comment
FINAL	31/10/12	LOGICUS Environmental Management	Updated with comments from ADC
REVISION 2	08/07/15	Craig Smith	ADC Waste Services Coordinator
REVISION 3	19/12/17	Chris Foley	ARC Waste Service Officer
REVISION 4	21/06/2019	Craig Wilson	Project Officer Waste Management
REVISION 5	29/09/2021	ARC	ARC internal review
REVISION 6	27/11/2024	LOGICUS Environmental Management	Updated with comments from ARC
REVISION 7	27/03/25	Madeline Tomlinson	Updated Exercise/test history
REVISION 8	29/07/25	Madeline Tomlinson	Updated Exercise/test history

EXERCISE / TEST HISTORY

DATE	EXERCISE CONTROLLER	SUMMARY OF EXERCISE / TEST
29/04/13	*LOGICUS* Environmental Management	Discharge and facility evacuation scenarios. Refer to exercise report dated 02/05/13.
01/09/17	*Chris Foley Consulting*	Fire response scenario. Refer to exercise report dated 03/11/17.
06/08/19	*LOGICUS* Environmental Management	Fire response scenario. Refer to exercise report dated 08/08/19.
20/10/20	*LOGICUS* Environmental Management	Chemical spill response scenario. Refer to exercise report dated 28/10/20.
29/09/21	*LOGICUS* Environmental Management	Asbestos response scenario (incidental finds). Refer to exercise report dated 09/10/21.
13/06/23	*LOGICUS* Environmental Management	Asbestos response scenario (incidental finds). Refer to exercise report dated 06/08/23.

27/05/25	*LOGICUS* Environmental Management	Leachate overflow management. Refer to exercise report dated 15/06/25.
25/07/24	*LOGICUS* Environmental Management	Fire response scenarios (various). Refer to exercise report dated 02/09/2024.
29/07/25	*LOGICUS* Environmental Management	Leachate overflow management. Refer to exercise report dated 15/06/2025.

DISTRIBUTION

Control copies of the Pollution Incident Response Management Plan, modified in accordance with the details in APPENDIX 1: PIRMP AMENDMENT NOTIFICATION FORM, were distributed according to the table below.

FORWARDED TO	COPY	DATE
File		
Manager Regional Waste	Master Copy	27/03/2025
Waste Operations Supervisor	Control Copy #1	27/03/2025
Innovative Waste Services	Control Copy #2 updated	27/03/2025
Armidale Recycling Services	Control Copy #3 updated	27/03/2025
Landfill Office/Weighbridge	Control Copy #4 updated	27/03/2025
City to Soil processing area	Control Copy #5 updated	27/03/2025
Small vehicle drop staff amenity building	Control Copy #5 updated	27/03/2025

CONTENTS

1. ADMINISTRATION

1.1 PURPOSE

Pollution Incident Response Management Plans (PIRMPs) are plans all holders of environment protection licences (licensees) are required to prepare in accordance with section 153A of the Protection of the Environment Operations Act 1997 (POEO Act).

By preparing and implementing a PIRMP that meets the requirements specified by legislation and in accordance with specifics detailed in the NSW EPA's 'Guideline: Pollution Incident Response Management Plans" (September 2022), licensees will:

- minimise the risk of a pollution incident occurring as a result of their licensed activities, as they would have identified risks and the actions they propose to take to minimise and manage those risks.
- have established clear and effective notification, action, and communication procedures to ensure the right people are notified, warned, and quickly provided with updates and information they may need to act appropriately, including:
    - people who may need to be involved in incident responses – including staff at the premises; the Environment Protection Authority (EPA); and other relevant authorities (such as Fire and Rescue NSW, NSW Health – as examples); and
    - industrial, commercial and residential neighbours and other members of the community.
- have properly trained staff and up-to-date incident management information available to ensure the potential impact of a pollution incident is minimised.

To this effect, Armidale Regional Council (ARC) has prepared this Pollution Incident Response Management Plan (PIRMP) for the **Armidale Waste Management Facility (Landfill)** which operates under Environment Protection Licence (EPL) **5860.**

1.2 OBJECTIVE AND SCOPE

It is the intent of **Armidale Regional Council (ARC)** to prevent all foreseeable pollution incidents that might impact on the environment and the safety of employees, contractors, facility users and neighbours, through the implementation of standard operational procedures, undertaking routine site activity inspections, training of personnel in the implementation of operational procedures and through emphasising and supporting proactive incident prevention reporting.

However, it is recognised that pollution incidents are not totally preventable. Therefore, this PIRMP has been developed to achieve the following objectives:

- Reduce the likelihood of a pollution incident occurring at the facility through identification of risks and the development of planned actions to minimize and manage those risks.

- Ensure comprehensive and timely communication about a pollution incident to all staff and contractors at the premises, the Environment Protection Authority (EPA), other relevant authorities specified in the Act (such as NSW Ministry of Health, SafeWork NSW, Fire & Rescue NSW and ARC as the Local Council), and people outside the facility who may be affected by the impacts of the pollution incident.
- Ensure that the PIRMP is properly implemented by trained staff, identifying persons responsible for implementation and ensuring that the PIRMP is regularly tested for accuracy, currency and suitability.
- Provide guidance on how to respond to an environmental pollution incident and how to record and report such an event.

This PIRMP contains guidance in determining the appropriate actions to take to prevent a pollution incident, injury or property damage and how to respond should a pollution incident occur. The PIRMP also includes provisions for record keeping, testing, reporting and document revision.

1.3 LEGISLATIVE CONTEXT

Part 5.7A of the POEO Act requires all licensees to prepare, keep, test and implement a PIRMP. Chapter 4 of the General Regulation sets out the specific information a licensee must include in their PIRMP. In summary, the requirements are:

- All licensees must prepare a PIRMP (section 153A).
- A PIRMP must be in the form required by the regulations and must include the information detailed in the POEO Act (section 153C) and the General Regulation (section 72 and section 73).
- Licensees must keep the PIRMP at the premises the environment protection licence relates to, or where the relevant activity takes place (in the case of trackable waste transporters and mobile plant) (section 153D of the POEO Act) and make certain parts of the PIRMP available on a publicly accessible website of the licensee, or alternatively provide a copy upon written request (section 74 of the General Regulation).
- Licensees must test their PIRMP in accordance with the regulations (section 153E of the POEO Act and section 75 of the General Regulation).
- Licensees must implement their PIRMP immediately if a pollution incident occurs that causes or threatens material harm to the environment (as defined in section 147 of the POEO Act) (section 153F of the POEO Act).

1.4 KEY TERMS AND MEANINGS

An understanding and appreciation of the following key terms is considered integral to the successful implementation of this PIRMP.

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1.4.1 Pollution Incident

The definition of a pollution incident is:

> *'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'.*

1.4.2 Material Harm to the Environment

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 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'.

1.4.3 Immediate Reporting Requirement

Industry is now required to report pollution incidents 'immediately' to the EPA, NSW Health, Fire & Rescue NSW, SafeWork NSW and the Local Council (in this case being ARC).

1.5 FACILITY COVERED BY THIS PIRMP

The operation of the Armidale Waste Management Facility per NSW EPA Licence **5860**, is covered by this PIRMP.

1.6 PIRMP DISTRIBUTION

The Master of this PIRMP is to be saved in **ARC's** electronic records management system ***(CONTENT MANAGER – ARC16/0666).*** The Master file is maintained by the ***Manager Regional Waste*** who will be responsible for revisions of the PIRMP and for the distribution of revised controlled copies to the persons and locations shown in the DISTRIBUTION table.

A copy of this PIRMP is also to be retained by key waste management staff members AND each contractor or entity engaged on or utilising areas of the facility.

A copy of this PIRMP is to be kept at the Site Office of the Armidale Regional Landfill and is to be readily available to those responsible for its implementation and to any Authorised Officer upon request.

1.7 PIRMP REVIEW

The PIRMP is to be reviewed annually by the Waste Operations Supervisor in conjunction with relevant Council staff including the Manager Regional Waste.

When revisions are made to the PIRMP, the revised document will be re-distributed and redundant copies collected and discarded. The date of issue and revision number is to be recorded on the title page of the document for future reference.

As part of the revision process, a Notification of Change Form, (APPENDIX 1), will be provided which must be signed by each responsible party indicating that the party has received a copy of the changes and that the copy of the PIRMP assigned to that party has been updated.

That form is to then be retained in ***CONTENT MANAGER - ARC16/0666*** by the Waste Operations Supervisor.

1.8 PIRMP TRAINING

To ensure that this PIRMP is properly followed in the event of a pollution incident, training programs shall be provided to relevant Waste Services personnel. The objectives of the training program shall be as follows:

a) *To ensure that Waste Services personnel are knowledgeable of their roles and responsibilities concerning this PIRMP.*

b) *To ensure that Waste Services personnel are knowledgeable of the PIRMP's procedures to affect a safe and appropriate response to pollution incidents.*

Waste Services personnel will receive training in the PIRMP appropriate to the level of their expected involvement.

The following is the general training to be implemented in support of this PIRMP:

1.8.1 Training Frequency

Waste Services personnel working at the facility will receive training during initial employment orientation / induction and refresher training at least annually.

Additional training will also be provided to employees whenever the PIRMP is changed.

1.8.2 Training Level

All Waste Services personnel will receive training in the general PIRMP procedures and Standard Operating Procedures related to the PIRMP.

Training shall cover routine pre-emptive inspections, incident discovery and management, (standard operating procedures), notifications, incident response and best practice facility management.

1.8.3 Supervisor Training

The Waste Operations Supervisor will receive additional training, beyond that received by Waste Services personnel or other site personnel, dealing with actions that are necessary to provide for the safety of employees, contractors, facility users and ancillary site operators, the protection of facility assets and the management of pollution incidents.

1.8.4 Training Competencies

Details of the training competencies achieved by Waste Services personnel relevant to this PIRMP are provided in APPENDIX 2.

1.9 PIRMP DRILLS & EXERCISES

To ensure that this PIRMP will meet current conditions and that all individuals involved will respond appropriately, the PIRMP will be tested on an annual basis. The testing will include at least the following:

a) Reaction and accountability of facility personnel; AND

b) Adherence to PIRMP procedures.

All drills and exercises of the PIRMP will be documented, indicating the results of the exercise and any problems that were encountered, along with recommendations for PIRMP modifications.

The Waste Services Coordinator will complete a PIRMP Exercise Record & Evaluation Form provided as APPENDIX 3 and maintain copies for review.

1.10 FORM OF PIRMP

As the purpose of this PIRMP is to mitigate the likelihood and to improve the management of pollution incidents and facilitate better coordination with the relevant response agencies, this PIRMP must be provided in written form, be available at the subject premises, be able to be provided to an authorised EPA officer on request and available to any person who is responsible for implementing the PIRMP.

1.11 RELATIONSHIP WITH OTHER EMERGENCY & INCIDENT RESPONSE PLANS

This PIRMP can function as a standalone document, the implementation of which is required to be undertaken to mitigate risk of a pollution incident but also to respond to a likely pollution incident where there is a potential of 'material harm to the environment'.

If other plans, procedures and protocols provide for enhanced, ancillary or complementary actions, then they may and should be implemented concurrently.

2. FACILITY DETAILS

2.1 LOCATION

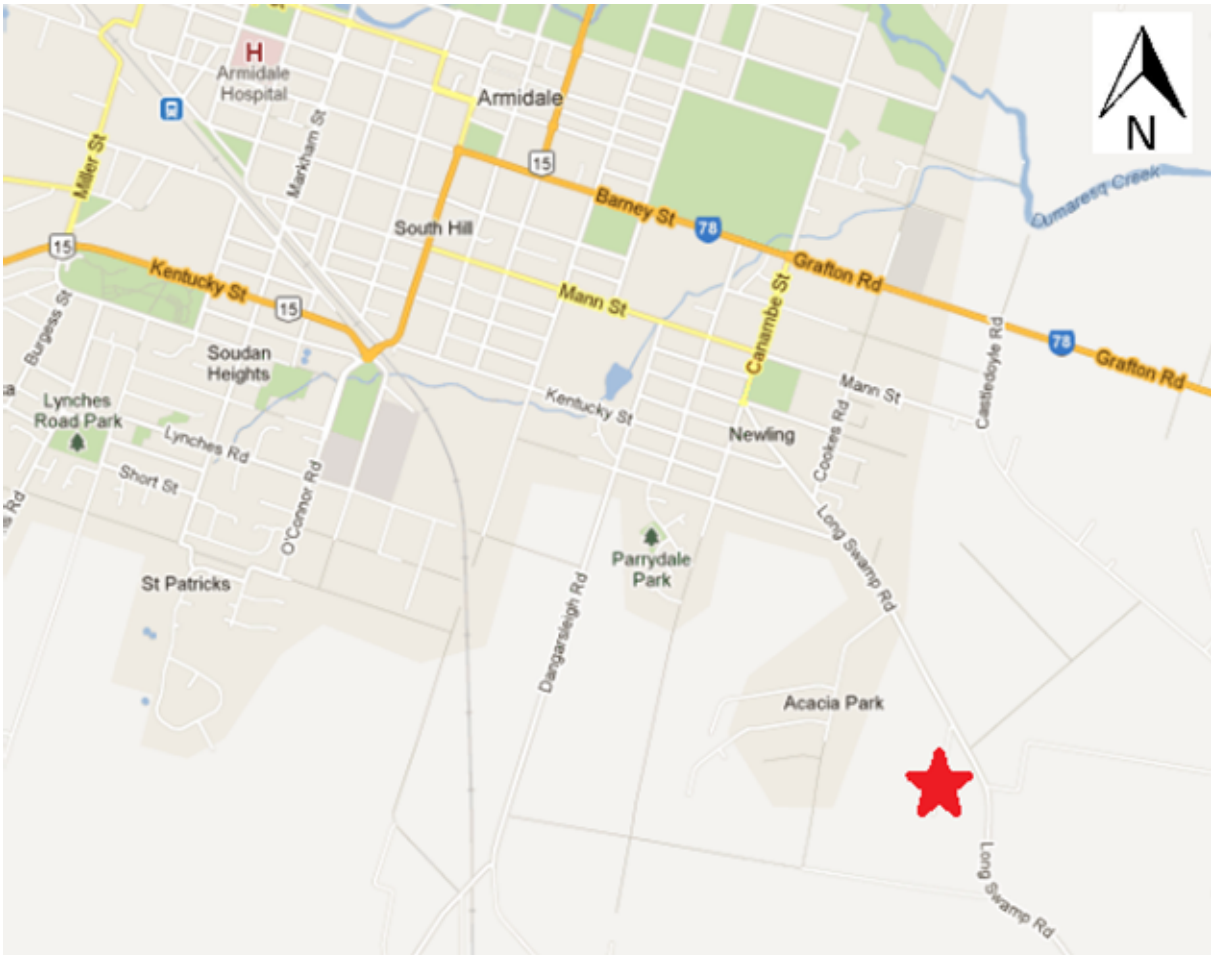
NAME OF THE FACILITY: ARMIDALE WASTE MANAGEMENT FACILITY
("ARMIDALE SOLID WASTE LANDFILL FACILITY" per EPL)

ADDRESS: LONG SWAMP ROAD, ARMIDALE, NSW 2350

PROPERTY DESCRIPTION: LOT 2 DP 820293, LOT 4 DP 868371, LOT 5 DP 868371

OWNER: ARMIDALE REGIONAL COUNCIL

Figure 1 – Location Map:



SITE ACCESS: Is via Long Swamp Road through the gated Main Entry.
Access location is shown on the Site Services and Infrastructure Plan(APPENDIX 30) and as 'Main Entry' on Figure 2 - General Site Layout.

Figure 2 – General Site Layout:

VEGETATION: The vegetation surrounding the facility is primarily grassland with some scattered woodland tree stands to the north, west and east. To the south is grassland /pasture land.

A tree planting 'screen' exists around the internal perimeter of the north eastern boundary of the facility. These are generally native species (Eucalypts, Acacias, Melaleucas etc.).

TOPOGRAPHY: The original topography of the site has been disrupted by the landfill operation. The site drains from the high point in the north, to the south through former flow paths which divert flows around the elevated landfill area.

2.2 FACILITY DESCRIPTION

2.2.1 Site Activities

The Armidale Waste Management Facility operates under an Environmental Protection Licence (EPL) being L5860, issued by the NSW EPA, which relates to a General Solid Waste (Putrescible) Landfill.

Staff are generally on site from approximately 7:15am to 5:15pm daily. The hours of operation (open to the public) for the Waste Management Facility and Recycling Centre are 7:30am to 5:00pm Monday – Friday and 12-5pm Saturdays and Sundays. The Second Hand Goods Shop is open 12 Noon-4:30pm on Saturdays and Sundays. Closures are in place on Christmas Day and Good Friday. Hours of operation on other public holidays are 12-5pm. The site is also fully fenced, gated and secured.

1. **Gatehouse:** is the control point for the site with all vehicles entering and exiting the facility. Incoming vehicles are inspected to ensure only approved waste types are accepted.

2. **Waste Disposal Area (Landfill):** operates for burial of approximately 15,000 tonnes per annum of waste material including (but not limited to) municipal solid waste, commercial and industrial waste, construction and demolition waste, asbestos and dead animals.

   A surface leachate capture system exists along the east and west batters of the landfilled area which in turn directs leachate to one of two surface leachate collection and evaporation dams - directly south of the landfilled area. This leachate is pumped to reinjecting points in the previously filled areas of the landfill.

3. **Green waste and Composting (City 2 Soil) Area:** organic material is managed within this part of the site comprising garden materials and materials collected in the kerbside food organics/garden organics (FOGO) service. The garden materials are stockpiled, shredded and the FOGO materials undergo a composting process. The end products are sold offsite or used on site for landscaping / sediment control. Leachate that drains from this area drains into a northern leachate pond.

   Site management protocols also require dust and litter controls to be in place for this area and it is surrounded by a hardstand which serves as a fire break.

4. **Resource Recovery and Stockpile Areas:** a recovery area exists where recoverable materials, such as concrete, brick, scrap metals, timber, plastic car bumpers and other materials are stockpiled awaiting collection / reprocessing. Service contracts ensure these materials are removed routinely to ensure stockpiles are maintained at minimum sizes.

   Waste concrete and brick are stockpiled before being crushed and subsequently re-used on the landfill for hardstand and internal road construction or sold offsite. Dust controls are integral parts of the service contract for crushing and screening works.

   A buffer zone is kept around each stockpile for both site maintenance and as separation zone in the event of a fire.

   Site management protocols also require dust and litter controls to be in place for these areas.

5. **Small Vehicle Transfer Station (SVTS):** incorporates a series of waste transfer bins being placed for general, recyclable and some recoverable wastes. Resource recovery drop offs for used tyres fridges (including degassing) and other scrap metals are also available. These are taken to larger stockpiles in the Resource Recovery Area of the site.

   Site management protocols require litter controls to be in place for the area and a contaminated water (leachate) collection drainage system captures liquids from under the garbage transfer bins in the main transfer area and directs this to a small containment tank to the south-west of the SVTS. Triple rinsed (empty) agricultural chemical containers are stored in the adjacent fenced compound (DrumMuster Yard) prior to collection and processing offsite.

6. **Community Recycling Centre (CRC):** directly adjacent to the SVTS is the Community Recycling Centre for Household Problem Wastes. Designed to receive household quantities of problem and hazardous waste such as, chemicals, motor and other oils, paints, fluoro globes and tubes, smoke detectors, gas bottles and batteries up to specified weight or volume limits free of charge.

   Site management has been combined into the existing systems for the SVTS.

7. **Truck Wash and Storage Sheds:** incorporates a number of sheds / bays and general storage areas. A vehicle inspection pit, general maintenance work area and closed roofed truck wash are present. Wash water from the truck wash flows into a nearby holding pond.

There is also an Ancillary Site Operation which is entirely independent of the Armidale Waste Management Facility (not directly run by ARC). The ancillary site operation is further explained as:

Materials Recovery Facility: Operated by Armidale Recycling Services, the processes materials for recycling using mechanised / manual sorting arrangements. Like materials (cardboard, paper, metal, plastics etc.) are baled and stored awaiting offsite re-sale / re-use. Large volumes of materials can be present inside and outside of the building.

This operation has their own safety, environment and emergency management processes which sit separate to this PIRMP. Each ancillary operator is required to immediately notify ARC should an incident occur on their facility which will or has the potential to create an impact outside of their 'boundaries' at which time the matter would be dealt with under the general response processes defined in this PIRMP.

A **Reverse Vending Machine:** NSW government operated reverse vending machine, for the community to dispose of beverage containers, is also located on a small section of the site.

NOTE: This PIRMP does not attempt to specifically address risks or hazards directly emanating from within the ancillary, separately managed operations. The PIRMP instead includes communication with the operators in the event of a pollution incident / evacuation from the Armidale Waste Management Facility.

2.2.2 Site Plan

The Site Services and Infrastructure Plan shows the overall site arrangement, activity areas, the locations of first response equipment in the event of a pollution incident together with identification of the sources of potential pollutants.

The detailed Site Services and Infrastructure Plan can be located in APPENDIX 30 of this document.

3. POLLUTION INCIDENT PREVENTION AND PREPAREDNESS

3.1 PREVENTION AS AN INCIDENT RESPONSE

ARC is committed to minimising the circumstances under which pollution incidents may occur. Through the use of regularly scheduled meetings, employee and contractor's orientations, training programs, routine inspections of activity areas and the application of standard operational procedures, Council Employees and contractor's personnel will be able to identify and respond to conditions that might lead to a pollution incident.

Council Employees are instructed, as part of their site inductions and ongoing training, in the steps to report and respond to facility conditions or issues that might give rise to pollution incidents where these conditions/issues are found to exist.

Pre-emptive actions to be taken to minimise or prevent any risk of harm to human health or the environment arising from the activities undertaken at the facility in the context of the potential pollution hazards above are provided as follows:

Table 1 – Summary of Pre-emptive Actions:

POTENTIAL HAZARD	PRE-EMPTIVE ACTION
• Leachate storage overflow caused by excessive inflow storm water • Leachate pump, line, dam or tank failure • Leachate spring eruption • Ground water contamination • Fire at tip face or exposed waste stockpile • Fire in incoming loads / waste transfer bin • Fire in green waste, mulch, tyre or other material stockpile/storage • Chemical spill • Oil/fuel spills. • Failure of hazardous material containment tanks/bund/storage • Windblown litter • Odour • Dust (including Asbestos) and sedimentation • Explosion of gas cylinders • Landfill Gas • Ozone depleting gas release (from refrigeration item wastes)	Undertaking routine inspections in accordance with the Environmental Checklists (APPENDIX 29: ENVIRONMENTAL REPORTING CHECKLISTS) Responding in accordance with Standard Operating Procedures (SOPs) (Appendices 6 to 27)

3.2 REGISTER OF POTENTIAL POLLUTANTS

Potential pollutants kept on the premises or used in carrying out activities at the premises, including the maximum quantity of any potential pollutant that is likely to be stored or held at the premises together with storage locations are summarized as follows:

Table 2 – Summary of Potential Pollutants

POLLUTANT TYPE / SUBSTANCE	SOLID, LIQUID, GAS or POWDER	QUANTITY	LOCATION (see Appendix 30)	TYPE OF CONTAINMENT	MSDS
Leachate	Liquid	3,000,000 litres	Leachate dams	Earth formed dams/sumps, tanks & poly pipes	NA
Used Tyres	Solid	50 tonnes max	Resource Recovery Area	Hardstand	NA
Green waste / compost / mulch	Solid	25,000 cubic metres (shredded) 25,000 cubic meters (unprocessed)	Composting Area	Hardstand	NA
Used Motor Oil	Liquid	Up to 8,000 litres	CRC Small Vehicle Transfer Station	Self bunded oil storage tank	Chemwatch
Diesel	Liquid	Up to 1,000 litres	Recovery Facility (Sorting Yards)	Storage Tank	Chemwatch
		Up to 20 litres	Storage Shed C	Jerry Can	Chemwatch
Petrol	Liquid	Up to 40 litres	City to Soil Storage container	Jerry Can	Chemwatch
Oil / Water based paint	Liquid	Up to 1,000 litres	CRC	Domestic Packaging	Chemwatch
Herbicides / Pesticides	Liquid and Solids	Up to 20 litres	CRC Storage Shed D	Workshop Storage	Chemwatch
Gas cylinders	Solid	Up to 100 units	CRC	Metal Cages	NA
General household chemicals	Liquid or Powder	< 2 tonnes or 2,000L at any time	CRC Storage Shed B Chemical Store 1	Self bunded pallets and domestic packaging	Chemwatch
Lead Acid Batteries	Solid	Up to 100 units	CRC	Self bunded pallets	NA
General Wastes	Solid	50 tonnes	Landfill Face (exposed) Small Vehicle Transfer Station	Landfill Cell Stockpile	N/A
C&D C&I	Solid	1,000 tonnes at any time	Recovery Facility (Sorting Yards)	Concrete slab base, concrete walls, soil Bund / Screen	N/A
Ozone depleting refrigerant gas	Gas	Up to 20 waste fridge / freezer units storage before degassing	CRC	Stored 'in vessel' as delivered	N/A
Asbestos*	Solid	Incidental amounts	Asbestos Disposal area (buried daily)	N/A	N/A
		Incidental amounts	Around Site	N/A	N/A
Landfill Gas*	Gas	Not quantified	Landfilling area	Uncontained	N/A

**Note: Asbestos is sometimes identified in areas where it is not permitted to be disposed (i.e. co-mingled with other materials) and landfill gas passively vents from the landfilled areas – therefore locations for these pollutants is not shown on maps.*

3.3 NATURE AND LIKELIHOOD OF POLLUTION INCIDENTS

Notwithstanding ARC's commitment to preventing conditions/issues which might give rise to a pollution incident, it is not possible to negate all situations which might give rise to an incident.

Possible pollution incidents associated with the operation of the Facility are:

- Fire within facility activity areas
- Explosion of gas bottles/landfill gas emissions
- Spill of chemical, fuels, oils or other hazardous materials
- Leachate discharge off site or into groundwater
- Litter, odour, dust or sedimentation

Having regard to the nature of the operations of the Armidale Waste Management Facility, the level of risk posed by the possible pollution incidents to the environment and the need and priority for management action is qualified for the facility using the following methodology.

Inherent risk will be assessed by combining the *likelihood* and *consequence* of the identified potential risk. In determining the assessment of the likelihood and consequence, the following rating processes has been utilised.

3.3.1 Likelihood

Determination of the probability or likelihood of environmental harm, damage or loss occurring as a result of a pollution incident using the ranking risk factors by probability methodology contained in the following table.

Table 3 – Incident Likelihood Descriptions

RATING	MEASURE	DESCRIPTION
1	Rare	May occur only in exceptional circumstances.
2	Unlikely	Could occur at some time.
3	Possible	Might occur at some time.
4	Likely	Will probably occur in most circumstances.
5	Almost certain	Is expected to occur in most circumstances.

3.3.2 Consequence

Determination of the consequence of the potential environmental harm, damage or loss using the ranking risk factors by consequence methodology contained in the following table.

Table 4 – Incident Consequence Descriptions:

RATING	MEASURE	DESCRIPTION
1	Insignificant	Environmental impact is undetectable
2	Minor	Environmental impact is virtually undetectable.
3	Moderate	Minor (usually reversible) some potential for low level environmental impacts which can be easily managed
4	Major	Major environmental impact which is reversible
5	Severe	Major environmental impact which may be irreversible

3.3.3 Risk Evaluation

Individual evaluation of the management priority for each potential pollution incident using the risk priority matrix presented in the following figure.

Figure 3 – Risk Evaluation Matrix:

Likelihood	Consequences				
	Insignificant	Minor	Moderate	Major	Severe
Almost certain	M	H	H	E	E
Likely	M	M	H	H	E
Possible	L	M	M	H	E
Unlikely	L	M	M	M	H
Rare	L	L	M	M	H

RATING	DEFINITION
LOW	Review consequence and likelihood and manage through routine procedures
MOD	Ensure management system controls risk and managerial responsibility is defined.
HIGH	Ensure system and process controls are such that the risk is as low as is reasonably practicable and that due diligence systems are established so that appropriate management processes can be demonstrated to be in operation.
EXTREME	Risk must be reduced or eliminated. If the risk cannot be reduced from "Extreme", then management must provide continuing assurance that due diligence systems are in place so that appropriate management can be demonstrated.

For the purposes of this PIRMP:

- EXTREME risks and HIGH risks will be eliminated or managed.
- MODERATE risks will be monitored.
- LOW risks will be accepted.

The Residual risk has been shown by measuring the inherent risk against the assessed effectiveness of the controls.

The outcomes of the risk assessment together with the relevant incident control/management action are summarised in **Table 5** following:

Table 5 – Risk Identification and Management Plan

POLLUTION HAZARD / HAZARD (OTHER)	RISK FACTORS	OUTCOME	LIKELIHOOD / CONSEQUENCE (RATING)	PRE-EMPTIVE ACTIONS	REFERENCE	LIKELIHOOD / CONSEQUENCE POST CONTROL (RATING)	INCIDENT RESPONSE ACTIONS	REFERENCE
1. ENVIRONMENTAL **(a) Leachate Discharge (Off Site)**	Leachate dam / containment overflow	Leachate contamination of adjacent land and / or waterways	Possible/ Major (HIGH)	Routine inspections Surface water monitoring of down gradient points	Environmental Inspection Checklist as provided in APPENDIX 29	Rare/ Major (MODERATE)	SOP 6	SOP within the PIRMP
	Leachate pump breakdown or pipeline failure	Leachate contamination of adjacent land and / or waterways	Possible/ Major (HIGH)	Routine inspections. Scheduled maintenance servicing of pump and pump connections Standby pump and service parts available Surface water monitoring	Environmental Inspection Checklist as provided in APPENDIX 29	Rare/ Major (MODERATE)	SOP 6	SOP within the PIRMP Report in EPL Annual Return
	Leachate contamination of the surface water management system.	Leachate contamination of adjacent land and / or waterways	Possible/ Major (HIGH)	Routine inspection to ensure suitable management procedures, including bund separation at active tipping area	Environmental Inspection Checklist as provided in APPENDIX 29	Rare/ Major (MODERATE)	SOP 8 SOP 9	SOP within the PIRMP
	Leachate dam or holding tank / structure rupture	Leachate contamination of adjacent land and / or waterways	Possible/ Major (HIGH)	Routine inspections	Environmental Inspection Checklist as provided in APPENDIX 29	Rare/ Major (MODERATE)	SOP 10	SOP within the PIRMP

POLLUTION HAZARD / HAZARD (OTHER)	RISK FACTORS	OUTCOME	LIKELIHOOD / CONSEQUENCE (RATING)	PRE-EMPTIVE ACTIONS	REFERENCE	LIKELIHOOD / CONSEQUENCE POST CONTROL (RATING)	INCIDENT RESPONSE ACTIONS	REFERENCE
	Leachate seepage from landfill operations into water table	Leachate migration and possible contamination of water table	Possible/ Major (HIGH)	Monitoring of ground bores to detect leachate migration	Environmental Inspection Checklist as provided in APPENDIX 29	Rare/ Major (MODERATE)	SOP 11	SOP within the PIRMP Report in EPL Annual Return
	Uncontrolled or undetected leachate springs	Leachate contamination of the surface water management system, adjacent land and / or waterways	Possible/ Major (HIGH)	Routine inspections	Environmental Inspection Checklist as provided in APPENDIX 29	Rare/ Moderate (MODERATE)	SOP 10	SOP within the PIRMP
(b) Combustion	Stockpile of used tyres ignites	Combustion creates smoke and oil residues	Possible/ Moderate (MODERATE)	Maintain buffer zones Limit quantity of tyres held on site Routine inspections	Environmental Inspection Checklist as provided in APPENDIX 29	Rare/ Moderate (MODERATE)	SOP 12 SOP 15	SOP within the PIRMP
	Green waste stockpile ignites	Combustion creates smoke and fire hazard	Possible/ Moderate (MODERATE)	Routine inspections to ensure stockpile size and temperature management with maintenance of buffer zones	Environmental Inspection Checklist as provided in APPENDIX 29	Rare/ Moderate (MODERATE)	SOP 13 SOP 15	SOP within the PIRMP

POLLUTION HAZARD / HAZARD (OTHER)	RISK FACTORS	OUTCOME	LIKELIHOOD / CONSEQUENCE (RATING)	PRE-EMPTIVE ACTIONS	REFERENCE	LIKELIHOOD / CONSEQUENCE POST CONTROL (RATING)	INCIDENT RESPONSE ACTIONS	REFERENCE
	Fire in waste transfer bins	Combustion creates smoke and fire hazard	Possible/ Moderate (MODERATE)	Inspection of all incoming loads	Environmental Inspection Checklist as provided in APPENDIX 29	Rare/ Moderate (MODERATE)	SOP 14	SOP within the PIRMP
	Fire at landfill active tipping area	Combustion creates smoke and fire hazard. Deep seated fire difficult to extinguish.	Possible/ Moderate (MODERATE)	Inspection of all incoming loads Site secured at close of day	Environmental Inspection Checklist as provided in APPENDIX 29	Rare/ Moderate (MODERATE)	SOP 15	SOP within the PIRMP
	Fire in vehicle loads of incoming wastes	Combustion creates smoke and fire hazard. Property damage.	Possible/ Moderate (MODERATE)	Inspection of all incoming loads and tipping area supervision	Environmental Inspection Checklist as provided in APPENDIX 29	Rare/ Moderate (MODERATE)	SOP 14 SOP 15 SOP 19	SOP within the PIRMP
(c) Chemical Spills	Chemical spill from ruptured or leaking storage containers	Soil contamination Creation of volatile fumes Explosion/fire Contamination of adjacent land and / or waterways	Possible/ Major (HIGH)	Retain minimum quantities on site Separation areas between stored chemicals Creation of bunded storage areas Use approved chemical stores	Environmental Inspection Checklist as provided in APPENDIX 29	Rare/ Moderate (MODERATE)	SOP 17	SOP within the PIRMP

POLLUTION HAZARD / HAZARD (OTHER)	RISK FACTORS	OUTCOME	LIKELIHOOD / CONSEQUENCE (RATING)	PRE-EMPTIVE ACTIONS	REFERENCE	LIKELIHOOD / CONSEQUENCE POST CONTROL (RATING)	INCIDENT RESPONSE ACTIONS	REFERENCE
	Incompatible or incorrect chemical storage	Explosion / fire	Possible/ Major (HIGH)	Retain minimum quantities on site Separation areas between stored chemicals Creation of bunded storage areas Use approved chemical safes for storage	Environmental Inspection Checklist as provided in APPENDIX 29	Rare/ Moderate (MODERATE)	SOP 17 SOP 18	SOP within the PIRMP
	Leakage from incoming loads	Soil contamination Explosion/fire Contamination of adjacent land and/or waterways	Possible/ Major (HIGH)	Inspection of all incoming loads	Environmental Inspection Checklist as provided in APPENDIX 29	Rare/ Moderate (MODERATE)	SOP 19 SOP 17	SOP within the PIRMP
(d) Oil / Fuel Spills	Failure of fuel containers or storage tanks	Soil contamination Explosion/fire Contamination of adjacent land and / or waterways Creation of volatile fumes	Possible/ Major (HIGH)	Retain minimum quantities on site Creation of bunded storage areas	Environmental Inspection Checklist as provided in APPENDIX 29	Rare/ Moderate (MODERATE)	SOP 18 SOP 20	SOP within the PIRMP

POLLUTION HAZARD / HAZARD (OTHER)	RISK FACTORS	OUTCOME	LIKELIHOOD / CONSEQUENCE (RATING)	PRE-EMPTIVE ACTIONS	REFERENCE	LIKELIHOOD / CONSEQUENCE POST CONTROL (RATING)	INCIDENT RESPONSE ACTIONS	REFERENCE
	Failure of mobile plant hydraulic lines	Soil contamination Fire Contamination of adjacent land and/or waterways	Possible/ Major (HIGH)	Staff or contractor training in waste placement and compaction techniques. Routine plant inspection and servicing.	Staff or Contractor training and recording	Rare / Moderate (MODERATE)	SOP 20	SOP within the PIRMP
(e) Dust / Sediment (Soils and Wastes)	Dust / sediment migrating off site	Complaints to EPA / SafeWork NSW	Possible/ Moderate (MODERATE)	Wet down unsealed trafficable areas Use shredded green waste on exposed areas of cover material Revegetation of completed areas and sedimentation structures in place. Asbestos waste policy and education + tipping handling area	Environmental Inspection Checklist as provided in APPENDIX 29	Rare/ Minor (LOW)	SOP 22 SOP 26 SOP 26(A) SOP 26(B)	SOP within the PIRMP
(f) Odour	Offensive odour	Complaints to EPA	Possible/ Moderate (MODERATE)	Provide daily cover to active tipping area	Environmental Inspection Checklist as provided in APPENDIX 29	Rare / Minor (LOW)	SOP 23 SOP 24	SOP within the PIRMP

POLLUTION HAZARD / HAZARD (OTHER)	RISK FACTORS	OUTCOME	LIKELIHOOD / CONSEQUENCE (RATING)	PRE-EMPTIVE ACTIONS	REFERENCE	LIKELIHOOD / CONSEQUENCE POST CONTROL (RATING)	INCIDENT RESPONSE ACTIONS	REFERENCE
(g) Landfill Gas	Contributor to Global warming	Increase in tCO_2-e emissions / explosion / fire	Likely/Major (HIGH)	Waste diversion strategies and community education Resource recovery enhancements or increases Implement Final capping design approved by EPA	Regional Waste Management Strategy / LEMP	Rare/ Moderate (MODERATE)	Pre-emptive actions focus	LEMP
(h) Litter	Litter migrating off site	Complaints to EPA	Likely/ Moderate (HIGH)	Provide daily or intermediate cover to waste Erect semi-permanent litter fences Provide mobile litter fence units and relocate to match conditions Litter collection activities	Environmental Inspection Checklist as provided in APPENDIX 29	Rare/ Moderate (MODERATE)	SOP 21 SOP 24	SOP within the PIRMP
(i) Ozone depleting gas release	Contributor to Global warming	EPA regulatory breach	Likely/Major (HIGH)	Degassing process for fridges implemented	Environmental Inspection Checklist as provided in APPENDIX 29	Rare / Minor (LOW)	SOP 21 SOP 24 Programs (such as City 2 Soil)	SOP within the PIRMP
(2) COMPLIANCE **(a) Incident Reporting**	Non-compliance with statutory reporting	Cautionary Notice/ Penalty Infringement Notice	Unlikely/ Moderate (MODERATE)	Immediate report of incident to the EPA (Pollution Hotline) Prepare reports as required	Environmental Inspection Checklist as provided in APPENDIX 29	Rare/ Moderate (MODERATE)	Follow up Action	PIRMP / LICENCE

POLLUTION HAZARD / HAZARD (OTHER)	RISK FACTORS	OUTCOME	LIKELIHOOD / CONSEQUENCE (RATING)	PRE-EMPTIVE ACTIONS	REFERENCE	LIKELIHOOD / CONSEQUENCE POST CONTROL (RATING)	INCIDENT RESPONSE ACTIONS	REFERENCE
(3) WORK HEALTH and SAFETY	Personal injury to staff, contractors, general public attending the facility	Trauma Lost time Rehabilitation Compensation	Likely/major (HIGH)	Regular tool box meetings with staff and contractors Safe Work Method Statements prepared and implemented Risk assessments undertaken Safety plans developed for major works Staff training Job and site specific orientation for new staff, visitors and contractors Independent audit of all systems of work Emergency and evacuation plans prepared and tested	Established toolbox meeting protocols Council's corporate Work Health, Safety and Environment Plan	Unlikely/ Moderate (MODERATE)	SOP 2 SOP 25	PIRMP / LICENCE

3.4 INCIDENT PREPAREDNESS

3.4.1 Response Equipment and Features

The Armidale Waste Management Facility has a number of active and passive pollution control/safety devices as well as response equipment that can be used during a pollution incident. Relevant details of pollution incident equipment and features are provided as follows:

Table 6 – Response Equipment Inventory

EQUIPMENT	LOCATION/S	QUANTITY	MAINTENANCE REQUIREMENTS / STANDARDS
Asbestos Kit	Lunchroom ARC Vehicles	1 1 per vehicle	Environmental Inspection Checklist as provided in APPENDIX 29
Chemical Spill Kit	SVTS/CRC Small Plant AND Storage shed	1 at each location	
Fire Extinguisher (various types)	Gatehouse Lunchroom SVTS/ CRC Storage Shed A Chemical Store 2 Education Room	2 1 2 1 1 1	
	ARC Vehicles	1 per vehicle	
Fire Hose Reel	Weighbridge SVTS /(CRC) Secondhand Goods Store Materials Recovery Facility	1 2 2 3	
Fire Blanket	Gatehouse and Lunchroom Education Room Secondhand Goods Store	1 1 1	
Fire hydrant	Along eastern boundary near Transfer Station and Education Room	2	
First Aid Kit	Gatehouse Lunchroom Sorting Yard City 2 Soil ARC Vehicles	1 1 1 1 1 per vehicle	
General Heavy Plant items	Excavators 3.5 tonne AND 15 tonne Loader Delivery Truck Can-Am Side-by-Side Forklift	1 of each generally on site	
Dousing Shower and eyewash	SVTS/CRC Lunchroom	1 at each location	
Single use Eyewash	CRC	1	

Equipment such as portable fire extinguishers, fire blankets, hose reels and fire hydrants should only be used by persons who are suitably trained and it is safe to do so. The maintenance of the systems and equipment is to be undertaken in accordance with the standards nominated in the Table above.

Additionally, site plant items (loader, truck etc.) are available for use to construct diversion/containments etc. if required. These items will only be operated by Council staff OR operators approved by the Waste Operations Supervisor or more senior Council Officer.

3.4.2 Communication System

A telephone system is installed within the Armidale Waste Management Facility with this system providing for communication both internally (mobiles) and externally. Mobile telephones supplement the telephone system as does the two-way system installed in site vehicles or portable units provided to key site staff. The two-way radio channel is operated on **UHF channel 33.**

In a pollution incident, the telephone can be used as a means of notifying those individuals / organisations responsible for activating this PIRMP and managing the incident response. In addition to the telephone system, mobile telephones will be the accepted means of communications. Communication mechanisms for neighbouring properties, issuing media releases and providing information on Council's web site are detailed in the Summary of Community Notification and Communication provided in Table 9 of Section 4.3.2.

3.4.3 Security

Access to the Armidale Waste Management Facility by unauthorised persons and unauthorised activities occurring on the site are controlled during opening hours at the weighbridge by Council personnel and after hours by perimeter fencing and securing the entry gates.

3.4.4 First Aid Equipment

An easily accessible first aid kit is located at the Gatehouse and its location clearly labelled. Other first aid kits are available within Council vehicles and around the site. (Refer APPENDIX 30)

3.4.5 Signs and Labels

Signs and labels provide key information to facility personnel and users. Suitable signage indicating the location of incident response equipment, the first aid kit and evacuation points are provided and maintained within the facility. A list of emergency phone numbers is to be clearly displayed at a location/s within the facility that can be seen by Council Employees, contractor staff and facility users.

3.4.6 Funding Arrangements and Support

The cost of any clean up that is undertaken by emergency response agencies and the EPA will generally be recovered from Council or the individual responsible for the pollution incident. Having regard to the above the following pollution incident funding arrangements are in place:

- Funds within Council's Waste Reserve
- Public liability insurance policies

4. POLLUTION INCIDENT CONTROL AND RESPONSE

4.1 KEY FACILITY INCIDENT MANAGEMENT CONTACT DETAILS

The following is a list of incident response individuals who are responsible for activating the PIRMP together with their notification and communication responsibilities:

Table 7 – PIRMP Contact Personnel:

NAME	POSITION	CONTACT DETAILS (24 Hours)	NOTIFICATION RESPONSIBILITIES	COMMUNICATION RESPONSIBILITIES
JOSH KEENE	Waste Operations Supervisor	0427 788 952	Emergency Services EPA Ministry of Health SafeWork NSW Manager Regional Waste	Emergency Services ARC site personnel, On-site Contractors, Neighbouring property owners, Waste Operations Supervisor *As required to support Manager Regional Waste*
GUADA LADO	Manager Regional Waste	0488 248 621	Chief Officer Assets and Services	Media releases Web updates
ANCILLARY CONTACTS: (Contractors routinely located on the Facility)				
MARK LOW	Director – Armidale Recycling Services	0439 696 965	Organisation's staff/Management	Waste Operations Supervisor

The above details are to be verified annually and updated whenever a change in personnel or responsibility has occurred.

4.2 KEY INCIDENT CONTACT DETAILS

The following is a list of incident response individuals and organisations that may be needed during a pollution incident.

Table 8 – PIRMP Emergency Agency Contacts:

ORGANISATION	CONTACT NAME	CONTACT DETAILS
Fire & Rescue NSW	Emergency	Triple Zero ('000')
	Non-Emergency (Duty Officer)	133 473
NSW Rural Fire service	New England Fire Control Centre	02 6771 7700 AH: 02 9123 7832
NSW Police Force	Emergency	Triple Zero ('000')
	Police Assistance Line (Duty Officer)	131 444
	Armidale Station	02 6771 0611
Ambulance Service of NSW	Emergency	Triple Zero ('000')
	Non-Emergency (Duty Officer)	131 233
Armidale Base Hospital	Reception	02 6776 9500
Environment Protection Authority (EPA)	EPA Environment Line	131 555
	Armidale Office	6773 7000
Office of Environment and Heritage (NP&WS)	National Parks & Wildlife Service	1300 072 757
	Regional Office	(02) 6738 9100
SafeWork NSW	Duty Officer	131 050
Department of Primary Industries (NSW Fisheries)	Reception	1300 550 474
POISONS Information	Duty Officer	131 126
NSW Ministry of Health	Tamworth Public Health Unit (24Hr)	02 6764 8000
	NSW Head Office	1300 066 055
State Emergency Service (SES)	Duty Officer	132 500
Roads and Traffic Authority	Reception	132 213
Bureau of Meteorology	General Information	1300 659 218

This list is to be verified at least annually and updated whenever an organization advises that a change has occurred.

4.3 INCIDENT NOTIFICATION AND COMMUNICATION

4.3.1 Incident Notification

In order to provide for the safety of employees and subcontractors, facility users, ancillary operations personnel and the wider community, along with ensuring appropriate pollution incident response, it is essential that early warning and notification of pollution incidents are made so that incident response procedures can be implemented and incident response organisations notified of the situation.

The prompt notification of an incident can often greatly assist in ensuring that the risk of injury, death, damage or environmental harm is minimized. In this regard the following incident notification procedures are to be implemented:

4.3.1.1 Small Area / Minor Incidents

Incidents such as small chemical spills or individual medical emergencies will generally not require the notification of incident response agencies. It will be the general practice that ALL incidents will be notified immediately to the Waste Operations Supervisor so that an assessment of the level of response required can be made.

The mobile telephone contact will be the preferred means of reporting such incidents.

In addition to the immediate notification of any minor incident or event, an incident report notification form, included as APPENDIX 4, is to be completed and forwarded to the Waste Operations Supervisor.

4.3.1.2 Major Incident

A major incident is *where material harm to the environment is caused or threatened.*

Where a major incident occurs, the Waste Operations Supervisor (ARC) is to immediately implement the pollution notification protocol included as APPENDIX 5
Importantly APPENDIX 5 requires the immediate notification of:

- EPA (131 555)
- Ministry of Health via the local Public Health Unit 02 6764 8000
- SafeWork NSW (13 10 50)
- Council (Environmental Services) 6770 3600
- Fire and Rescue NSW (000) if not called for initial emergency response.

In addition to the immediate notification of any major pollution incident, an incident report notification form, refer to APPENDIX 4, is to be completed and forwarded to the Manager Regional Waste.

4.3.2 Community Notification and Communication

Communicating with neighbours and the local community is an important element in managing the response to any pollution incident.
In this regard the following notification and communication action plan will be applicable to a major pollution incident at the Armidale Waste Management Facility.

The following action plan has been based upon the pollution incident risk assessment included in Section 3.3 of this PIRMP.

Table 9 – PIRMP Community Notification and Communications Plan:

NATURE OF INCIDENT	IMPACT ON COMMUNITY	NOTIFICATION REQUIREMENTS	RESPONSIBILITY	NOTIFICATION MECHANISM / TOOLS	KEY MESSAGE
Leachate discharge (off site)	Local impact, ranging from MINOR to SEVERE	EPA Occupiers of neighbouring downstream properties (Refer to APPENDIX 28 for Communication Recipients Schedule) Local Community / Media	Waste Operations Supervisor Manager Regional Waste	Phone call to EPA Environment Line followed by a written report Phone call to occupiers of impacted neighbouring properties Information displayed on Council's web site	Assessment of severity Type and quantity of material involved Explanation of what happened Date and time of incident Response actions taken Refrain from contact / use of water Strategy for prevention of recurrence
Fire	Local impact, likely to be MINOR, depending on the severity of the fire	EPA Occupiers of neighbouring properties (Refer to APPENDIX 28 for Communication Recipients Schedule) Local Community / Media	Waste Operations Supervisor Manager Regional Waste	Phone call to EPA Environment Line followed by a written report Phone call to occupiers of impacted neighbouring properties Information displayed on Council's web site	Date and time of incident Response actions taken Type of fire Agency responding Close windows / doors Strategy for prevention of recurrence

NATURE OF INCIDENT	IMPACT ON COMMUNITY	NOTIFICATION REQUIREMENTS	RESPONSIBILITY	NOTIFICATION MECHANISM / TOOLS	KEY MESSAGE
Chemical / Hazardous materials spill (off site discharge)	Local impact, likely to be MINOR	EPA Occupiers of neighbouring properties (if impacted) (Refer to APPENDIX 28 for Communication Recipients Schedule) Local Community / Media	Waste Operations Supervisor Manager Regional Waste	Phone call to EPA Environment Line followed by a written report Phone call to occupiers of impacted neighbouring properties Media release / Information displayed on Council's web site	Date and time of incident Response actions taken Type of Spill Agency responding Refrain from contact with soil / water Strategy for prevention of recurrence
Oil / fuel spill (off site discharge)	Local impact, likely to be MINOR	EPA Occupiers of neighbouring properties (if impacted) (Refer to APPENDIX 28 for Communication Recipients Schedule) Local Community / Media	Waste Operations Supervisor Manager Regional Waste	Phone call to EPA Environment Line followed by a written report Phone call to occupiers of impacted neighbouring properties Media release / Information displayed on Council's web site	Date and time of incident Response actions taken Type of Spill Agency responding Refrain from contact with soil / water Strategy for prevention of recurrence

NATURE OF INCIDENT	IMPACT ON COMMUNITY	NOTIFICATION REQUIREMENTS	RESPONSIBILITY	NOTIFICATION MECHANISM / TOOLS	KEY MESSAGE
Explosion	Local impact, likely to be MINOR (not a pollution incident if noise only)	**If off site impacts above noise only:** EPA Occupiers of neighbouring properties (Refer to APPENDIX 28 for Communication Recipients Schedule) Local Community / Media	Waste Operations Supervisor Manager Regional Waste	Phone call to EPA Environment Line followed by a written report Phone call to occupiers of impacted neighbouring properties Media release / Information displayed on Council's web site	Assessment of severity Agency responding Date and time of incident Damage report Strategy for prevention of recurrence

4.4 FACILITY EVACUATION

4.4.1 General Requirements

Most minor pollution incidents will not require the evacuation of all or in most instances even part of the facility. However, it is acknowledged that any major incident may require the facility to be evacuated.

In the event of a major incident evacuation of Council Employees, any contractor's and staff, facility users and ancillary co-located operations is of the utmost importance.

In order to achieve a safe and timely evacuation, it is critical that an early warning of the pollution situation be communicated and action implemented to remove Council Employees contractor's staff and facility users from the hazard area.

In this regard the standard operating procedures applicable to Facility Evacuation, (refer to APPENDIX 25) must be implemented once a decision is made to evacuate the facility.

Whilst the need for evacuation will be dependent upon the nature and scale of an incident it is of primary importance that personnel or public health is not put at risk at anytime during a pollution incident.

The decision to evacuate (in part of full) is to be made by the Waste Operations Supervisor, and supported by facility personnel OR as directed by a responding Emergency Service.

4.4.2 Stages of Evacuation

There are 2 stages of evacuation that are applicable to the facility, being;

- Stage One: Immediate Area – The evacuation of persons in immediate danger.
- Stage Two: Total Facility – A complete evacuation of the Facility by all people.

In the event of a Total Facility Evacuation, the Facility is not to be re-entered unless instructed to do so by the Waste Operations Supervisor OR as directed by a responding Emergency Service

4.4.3 Priority of Evacuation

The Waste Operations Supervisor is responsible for prioritising the order in which people are evacuated from the site of the incident. Generally the following priorities apply:

- Ambulatory
- Semi-ambulant (people requiring some physical assistance)
- Non-ambulant (people who need to be physically moved or carried)
- Aggressive, violent or resistive people.

The above priority for evacuation is for guidance only, the emergency may dictate otherwise.

Where a person refuses to comply with a direction given by the Waste Operations Supervisor, the following action is to be initiated:

- Ensure that the person has been clearly advised that they are required to evacuate the facility because of an emergency situation that maybe life threatening.
- Notify the Officer-in-Charge of the attending Emergency Service.

4.4.4 Mobility Impaired Persons

A register is to be maintained of site personnel who may have a permanent or temporary disability that would impede their ability to self evacuate if required.

A staff member who works with a person with a disability shall be appointed as that person's carer during an emergency. The procedures for assisting mobility-impaired persons should be discreetly discussed with the individual concerned.

All staff should be trained in methods of assisting mobility-impaired persons during an emergency.

4.4.5 Evacuation Assembly Areas

The facility has a designated primary evacuation assembly point.

In the event of an incident requiring the FULL evacuation of the facility, all Council Employees, any contractor's/staff and facility users are to immediately leave the facility by the designated route and report to the designated primary evacuation point.

Should the primary evacuation point be in a hazardous area or is unsuitable due to the nature of the threat, employees and facility users will then be directed to proceed to a designated secondary evacuation point. This may also occur for a "partial" evacuation of the site (i.e. from a discrete operational area in lieu of the need for a FULL evacuation.

On arrival at the designated evacuation assembly point all persons will remain until the Waste Operations Supervisor has determined the status of all personnel and;

- accounted for all, or
- prepared a list of names and / or numbers of missing personnel or facility users and the location last seen

For the purposes of this PIRMP the following evacuation assembly points are applicable;

Primary Evacuation Point in the carpark adjacent to the Gatehouse and to the south of the main entry to the Armidale Waste Management Facility. An "Evacuation Muster Point" sign is located at the site.

An example of a secondary Assembly Point or partial site evacuation assembly point is at the Small Vehicle Transfer Station. This might require 'on foot' egress from the site via a path to be determined by the Chief Warden, as the situation permits.

The Site Services and Infrastructure Plan in APPENDIX 30 shows the locations of the assembly points.

4.4.6 Post Evacuation Assembly Point

Once the facility has been evacuated, either to the Evacuation Muster Point at Gatehouse (or partial evacuation assembly points such as the Sorting Yard or Second Hand Goods Store)and the presence of personnel and facility users confirmed, arrangements MAY made by the Waste Operations Supervisor for Council Employees and contractor's staff to be transported / moved to a Post Evacuation Assembly Point which may, depending on time of day and other factors (such as scale of incident), be the Council Administration Building (CAB)in Rusden Street, Armidale.

Incident debriefing and incident investigation will be undertaken at the Post Evacuation Assembly Point. Further management instructions will also be provided.

5. POLLUTION INCIDENT RESPONSE PROCEDURES

Appendices No 6 to 27 of this PIRMP contain instructions, (Standard Operating Procedures – SOPs), for facility employees, contractor's staff and facility users about actions to be taken for personal safety, and the procedures that are to be implemented to help guide management efforts during a pollution incident such as:

- Leachate discharge (off-site)
- Fire
- Chemical spill
- Oil/fuel spill
- Hazardous materials / inappropriately disposed wastes
- Facility Evacuation

6. POST POLLUTION INCIDENT ACTIVITIES

This section of the Pollution Incident Response Plan identifies those activities necessary to support Council staff and contractor's staff during and following a pollution incident and those activities necessary to restore operations at the Armidale Regional Landfill.

6.1 RECOVERY OPERATIONS

The recovery of facility operations and services will depend on the extent of damage suffered by the facility.

The Waste Operations Supervisor, in collaboration with the Manager Regional Waste will need to prioritise activities that can be accomplished with available staff and resources.

Immediately following the emergency phase of an incident, the Waste Operations Supervisor will develop an operational recovery plan.

6.2 INCIDENT INVESTIGATION (AFTER ACTION REVIEW)

A pollution incident must be investigated as soon as possible following its occurrence. The investigation is designed to determine why the incident occurred and what precautions can be taken to prevent a recurrence.

The Manager Regional Waste is responsible for ensuring that an incident investigation is conducted following all pollution incidents that occur at the facility.

6.2.1 Small Incidents

For small incidents, the Waste Operations Supervisor will normally conduct the investigation.

6.2.2 Major Incidents

For major pollution incidents where material harm to the environment is caused or threatened statutory authorities and emergency response agencies will generally be involved in conducting the investigation. The Waste Operations Supervisor and Manager Regional Waste will assist the authorities as needed.

6.3 DOCUMENTATION

Documentation of response activities is of critical importance following a pollution incident. All records and forms used during the incident to document activities along with testing and amendments to the PRIMP will be retained for future reference in the organisations corporate records Management System (***CONTENT MANAGER - ARC16/0666***).

Following a pollution incident or emergency situation, the Waste Operations Supervisor will have the responsibility for collecting all records and forms used during the incident. These will be used for several purposes, such as incident investigation, insurance claims and potential legal actions.

The Waste Operations Supervisor must prepare a report documenting activities that took place during a major pollution incident. The report of the Waste Operations Supervisor and all related documentation will be submitted to the Manager Regional Waste for review and necessary follow-up actions.

The Manager Regional Waste will make any necessary follow up reports to the EPA or other Agencies.

6.4 INCIDENT IMPACT ASSESSMENT

Following an incident, an assessment of impact that has occurred to the facility, the environment and equipment must be conducted.

The major goal of this assessment will be to determine the extent of damage to facilities and/or the environment resulting from the incident, and identify repairs or restoration that must be initiated to minimise further damage and restore the facility for operational use or to rehabilitate the environment.

The Manager Regional Waste will have the primary responsibility for conducting the damage assessment following an incident.

Assistance will be obtained as needed from facility employees and outside organizations, such as ecologists, engineers and clean up contractors.

6.5 INCIDENT DEBRIEFING

The purpose of incident debriefing is to inform employees about any hazards that may still remain on the facility property following the incident and to identify unsafe conditions that may still exist.

6.6 AFTER ACTION REVIEW & PIRMP UPDATES / AMENDMENTS

This will occur within 30 days of any pollution incident.

The After Action Review (AAR) will analyse the actions that took place during the pollution incident (both good and bad) and will seek to identify opportunities to improve the effectiveness of the PIRMP, through Prevention, Preparation, Response and Recovery procedures in place for the facility.

The AAR findings will produce Actions to amend, modify or may determine no change requirements are necessary for the PIRMP.

ENDS

APPENDIX 1: PIRMP AMENDMENT NOTIFICATION FORM

Following a review of the Pollution Incident Response Management Plan that was conducted on the ……the following amendments to the plan have been made. Accordingly these changes are to be incorporated into the PIRMP document which is held by you.		
Distribution • Master copy • Site copy • Manager Regional Waste		**Date Issued: Revision:**
PAGE NUMBER	**PIRMP SECTION**	**DESCRIPTION OF CHANGE**
MANAGEMENT AUTHORISATION: **DATED:**		
I acknowledge receipt of the amendments to this PIRMP and have incorporated these into the document for which I am responsible. (not required, new document issued) **SIGNED:** **DATED:** **NAME:**		

APPENDIX 2: STAFF AND CONTRACTOR TRAINING

Standard Operating Procedure

PURPOSE AND SCOPE:

To ensure the safe and effective management at the Armidale Waste Management Facility, it is essential that all relevant staff receive training appropriate to their position, duties and level of responsibility.

The purpose of this procedure is to outline the minimum training requirements which are applicable to staff involved in the operations of the waste management facility and in the provision of waste management services.

PROCEDURE/STANDARD:

Staffing and training requirements shall be adequate to enable proper management and service delivery

Staff will undergo a variety of training to ensure an adequate level of skill and education is possessed to enable all tasks and activities to be carried out successfully. Training will be conducted in house, on the job or by external providers.

The guidance for specific training programs that are integral to the operation of Council's facilities is described below.

PROGRAM A – SITE ENVIRONMENT INDUCTION:

Key points to be covered in this program may include:

- environmental impacts of the landfill
- pollution incident response
- waste identification and rejection procedures
- hours of operation and traffic management
- environmental mitigation measures and controls
- record keeping and reporting
- waste placement, compaction and covering
- evacuation procedures

This training would generally be provided by the Waste Operations Supervisor when new staff / contractors commence at the site. Ongoing "on the job" training will also be necessary.

PROGRAM B – FIRE FIGHTING

Key points to be covered in this program may include:

- Types of fires (e.g. oil, electrical)
- Determining responsibilities in the event of a fire (staff/fire brigade)
- Procedures for extinguishing fires
- Types/location and maintenance of firefighting equipment
- Prevention of fires
- Procedures for communication in the event of fire

This training would be undertaken in the form of a toolbox talk and may include practical demonstrations. The training would be prepared and delivered by suitably qualified personnel (internal or external). Input may also be provided by officers of the local Fire and Rescue NSW or NSW Rural Fire Service

PROGRAM C – HAZARDOUS SUBSTANCES and DANGEROUS GOODS HANDLING

Key points to be covered in this program may include:

- Use and interpretation of Material Safety Data Sheets
- Identification of hazardous materials
- Handling of hazardous materials
- Labelling of containers
- Storage and transport of hazardous substances and dangerous goods
- Spill management and basic first aid procedures
- Compatibility of materials.

This training would be provided by suitable service provider/s. Where required, additional input may be required from external SafeWork NSW accredited WH&S consultants.

TRAINING RECORDS

A record of all training undertaken will be maintained at the Council's Offices and will be made available for inspection by authorised personnel.

BENEFIT OF COMPLIANCE TO PROCEDURE:

- Impacts on the natural environment are minimised
- Operational issues identified
- Demonstrated operational competency
- Employees safety protected
- Health and safety of public / facility users / neighbours protected
- Meeting environmental goal

CONSEQUENCE OF NON-COMPLIANCE TO INSTRUCTION:

- Violations and/or fines from Regulatory Agencies
- Pollution of the environment
- Unresolved operational issues
- Injury/Death to employee
- Injury/Death to public / facility users

REVIEWED BY:	**APPROVED BY:**
DATE:	**DATE:**

POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN TRAINING / COMPETENCY SUMMARY			
OPERATIONAL STAFF	**TRAINING / COMPETENCY STREAM**		
	PROGRAM A Environmental and General Safety Induction for Facility	**PROGRAM B** Fire Fighting and Emergency Incident response.	**PROGRAM C** Hazardous Substance and Dangerous Goods Management
NAME and POSITION	**DATE OF TRAINING COMPLETION**		
REVIEWED BY: **DATE:**	**APPROVED BY:** **DATE:**		

APPENDIX 3: PIRMP EXERCISE RECORD AND EVALUATION FORM

FACILITY: ARMIDALE WASTE MANAGEMENT FACILITY		
DATE:		
EMERGENCY SEQUENCE:	**TIME**	
Matters:	**Hours**	**Minutes**
Incident uncovered		
Assessment of significance		
Initiation of incident response/notification of incident		
Evacuation alarm sounded (if necessary)		
Incident control/remediation action commenced		
Evacuation commenced (if necessary)		
Warden checks for personnel present		
Evacuation completed (if necessary)		
Pollution contained		
Clean up commenced		
Clean up completed		
All clear given		
Pollution Incident Report Form completed		
Exercise terminated		
COMMENTS:		
1. Compliance with Standard Operating Procedures (SOPs)		
2. Competency of Employees assessment		
3. Time frames for response		
4. General Comments/Recommendations for action		
OBSERVER		
SIGNED: **DATE:**		

APPENDIX 4: POLLUTION INCIDENT REPORTING AND RECORDING

Standard Operating Procedure

PURPOSE AND SCOPE

The purpose of this procedure is to define the pollution incident reporting requirements which are applicable to the operation of the Armidale Waste Management Facility. A pollution incident is defined as 'material harm to the environment' as described in section 147 of the Act. Material harm includes on-site harm, as well as harm to the environment beyond the premises where the pollution incident occurred. A 'pollution incident' includes a leak, spill or escape of a substance, or circumstances in which material harm is likely to occur.

Note

There is a duty to report pollution incidents under section 148 of the Protection of the Environment Operations Act 1997 (POEO Act) in addition to EPL condition R2 which reads "The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment as soon as practicable after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act. Notifications must be made by telephoning the Environment Line on 131 555.

Note

Use Attachment A for general pollution incident reporting

Use Attachment B for leachate discharge/overflow reporting

PROCEDURE/STANDARD

1. If a pollution incident occurs, all necessary action should be taken to minimise the size and any adverse effects of the release as a first response, (sand bagging, application of spill kit, shutting off the source, construction of temporary bunds/dam etc.). Guidance can be found by referring to the SOP within the facility PIRMP.
2. If the incident presents an immediate threat to human health or property, Fire and Rescue NSW, the NSW Police and the NSW Ambulance Service should be contacted for emergency assistance - phone 000.
3. At an appropriate time, during an incident, a staff member shall record the following;
   - Type and nature of the incident (what happened)
   - Notification source and details
   - Details of the conversations that may ensue with staff, emergency services and authorities
   - Time events
   - Actions taken to mitigate the incident
   - Details of other actions during the course of the incident management
4. As soon as possible during an incident staff will notify the Waste Operations Supervisor of the incident and provide an update of the action initiated.
5. Waste Operations Supervisor to notify the EPA and other agencies in accordance with the protocols in this PIRMP
6. The Waste Operations Supervisor is to record the details of the incident on a Pollution Incident Notification Form within 24 hours of the incident commencing and advise the Manager Regional Waste.

7. Post Incident

Documentation of incident activities is of critical importance following the incident. All records and forms used during the incident to document activities must be retained for future reference.

Following an incident, the Waste Operations Supervisor will have the responsibility for collecting all records and forms used during the incident. These will be used for several purposes, such as incident investigation, insurance claims and potential legal actions.

The Waste Operations Supervisor must, within 24 hours of being notified of a pollution incident, prepare a report documenting activities that took place during the incident.

The report and all related documentation will be submitted to Council's Manager Regional Waste, for review and necessary follow up actions.

Where there is potential for litigation in relation to the incident the Manager Regional Waste shall prepare a written report for referral to the Council's legal representative.

ATTACHMENTS / ADDITIONAL FORMS

A. Pollution Incident Report form
B. Leachate discharge/overflow Reporting Form

BENEFIT OF COMPLIANCE TO PROCEDURE:

- Details of incident are readily available including information regarding incident response activities
- Demonstrated operational competency
- Meeting environmental goal

CONSEQUENCE OF NON-COMPLIANCE TO INSTRUCTION:

- Violations and/or fines from Regulatory Agencies

REVIEWED BY:	**APPROVED BY:**
DATE:	**DATE**

POLLUTION INCIDENT REPORT FORM (A)			
DATE OF INCIDENT:		**TIME OF INCIDENT:**	
NAME OF REPORTING PERSON			
LOCATION OF INCIDENT Where did it occur?			
TYPE and **QUANTITY** of **MATERIAL INVOLVED**			
Outline **ACTIONS** initiated **IN RESPONSE TO INCIDENT**			
Was it necessary to initiate the **MAJOR INCIDENT NOTIFICATION PROTOCOL**?			
Was the **COMMUNITY NOTIFICATION and COMMUNICATION PLAN** activated?			
Was **ACTION IN ACCORDANCE WITH SOPS**? If not - why?			
Is there a **NEED TO REVIEW SOP** in response?			
DATE and **TIME** of details provided to: **Waste Operations Supervisor**			
OTHER MATTERS			
MANAGEMENT ACKNOWLEDGEMENT: **DATED:**			

POLLUTION INCIDENT REPORT FORM (B) Leachate Discharge/Overflow			
DATE OF INCIDENT:		**TIME OF INCIDENT:**	
NAME OF REPORTING PERSON:			
DETAILS of **PERSON WITNESSING THE LEACHATE DISCHARGE** or overflow			
LOCATION of incident Where did it occur?			
DATE and **TIME** of **COMMENCEMENT OF** the **DISCHARGE**			
Assessed **VOLUME OF DISCHARGE** or overflow			
PERIOD OF time the **DISCHARGE** or overflow occurred (Start / finish)			
WEATHER CONDITIONS at the time of the discharge or overflow.			
DAILY RAINFALL (mm) on the **DAY OF THE DISCHARGE**. **RAINFALL** (mm each day) for the **WEEK PRIOR TO THE DISCHARGE**			
SAMPLING OCCURRED? (Yes / No)? Most recent **MONITORING RESULTS** of the chemical composition of the **LEACHATE**.	Attach analytical results		
Explanation **WHY and HOW** the **DISCHARGE OCCURRED**			
PLAN OF ACTION to **PREVENT** a similar **DISCHARGE**			
OTHER MATTERS			
MANAGEMENT ACKNOWLEDGEMENT: **DATED:**			

APPENDIX 5: POLLUTION INCIDENT NOTIFICATION PROTOCOL

Standard Operating Procedure

CALL 000 IF THE INCIDENT PRESENTS AN IMMEDIATE THREAT TO HUMAN HEALTH OR PROPERTY.

Fire and Rescue NSW, the NSW Police and the NSW Ambulance Service are the first responders, as they are responsible for controlling and containing incidents.

If the incident *does not* require an initial combat agency, or once the 000 call has been made, notify the relevant authorities in the following order. The 24-hour hotline for each authority is given when available:

- EPA – phone Environment Line on 131 555
- the Ministry of Health via the local Public Health Unit on 02 6764 8000
- the SafeWork NSW – phone 13 10 50
- ARC Council (Environmental Services) on 02 6770 3600
- Fire and Rescue NSW – phone 133 473 (if 000 not called initially)

Complying with these notification requirements does not remove the need to comply with any other obligations for incident notification, for example, those that apply under other environment protection legislation or legislation administered by SafeWork NSW.

APPENDIX 6: LEACHATE DISCHARGE EMERGENCY RESPONSE

Standard Operating Procedure

PURPOSE AND SCOPE

The purpose of this procedure is to define an incident response in the event of a leachate discharge being detected or reported from a leachate dam/s overflowing at Armidale Waste Management Facility.

PROCEDURE/STANDARD

- Leachate or leachate contaminated surface water discharge to adjacent waterways

Actions required in response to such events may vary and it will be the role of Council staff to determine and initiate appropriate actions.

The following notes will form the basis of decision making together with emergency exercises and desktop trials:

- Confine the source of the discharge and/or sources of inflows to limit the spread of its effects without endangering personnel. Check leachate pumps are working.
- Construct sand bag barriers or earth berms to contain or divert the flow and/or excavate temporary retention dams to withhold discharges.
- Secure the affected area(s) by using barricades and bunding if necessary.
- Advise the Waste Operations Supervisor of all actions taken or proposed.
- Source a tanker truck to pump out the retained leachate or return to system when holding capacity is available
- Notify neighbours who may be affected by the incident.
- A copy of the Pollution Incident Report Form is to be referred to Waste Operations Supervisor.

It is considered essential that all operators using the site are aware and understand the specific emergency and incident response requirements.

BENEFIT OF COMPLIANCE TO PROCEDURE:

- Limit environmental damage
- Health and safety of public/facility user protected

CONSEQUENCE OF NON-COMPLIANCE TO INSTRUCTION:

- Violations and/or fines from Regulatory Agencies

REVIEWED BY:	**APPROVED BY:**
DATE:	**DATE**

APPENDIX 7: LEACHATE SYSTEM MANAGEMENT AND MAINTENANCE

Standard Operating Procedure

PURPOSE AND SCOPE:

To ensure that the leachate control system is operating effectively with its design objectives to prevent leachate escaping from the landfill into groundwater, surface water and subsoil.

PROCEDURE/STANDARD

1. It is the responsibility of Waste Operations Supervisor to ensure prescribed inspections of leachate control systems occur and to report upon and record that following leachate control measures as being undertaken by site staff:
   - Inspect leachate pump and pipelines to ensure they are operating correctly.
   - Examine the level of leachate within collection wells/dams. Where leachate levels appear excessive immediately determine appropriate method to reduce volume retained.
   - Inspect pump discharge lines and discharge points to ensure their effective operation. Where failures are detected, consideration must be given to deactivating the system so as to determine the scope of repair works.

     Note: In considering the deactivation of the system it will be necessary to ensure that sufficient leachate storage capacity is available to cover the period of deactivation. This should involve an assessment of the likelihood of and extent of rain.
   - Inspect the site for emergence of leachate springs.
2. Where system operational defects are detected immediately contact the Manager Regional Waste to discuss and arrange rectification/maintenance works.
3. Details of system inspection and findings / actions are to be recorded on the Site Inspection checklist.

CONSEQUENCE OF NON-COMPLIANCE TO INSTRUCTION:

- Violations and/or fines from Regulatory Agencies
- Pollution of the environment

REVIEWED BY:	**APPROVED BY:**
DATE:	**DATE**

APPENDIX 8: SURFACE WATER QUALITY MONITORING

Standard Operating Procedure

PURPOSE AND SCOPE

Prevention of contamination entering the stormwater management system should be the first priority and the Environmental Checklist in Appendix 29 of the PIRMP provides for this. The purpose and scope of the surface water quality monitoring program should effectively monitor and report current surface water character and ensure early detection and reporting of possible pollution of surface water quality. Quarterly sampling is an EPL requirement when surface water is present / discharge is occurring.

Sampling locations are identified in the EPL.

PROCEDURE/STANDARD

All surface water monitoring at the site occurs in accordance with the requirements of EPL 5860.

ARC engages a NATA accredited third party laboratory to analyse and report findings to comply with specific EPL requisites and wider EPA public reporting requirements.

REPORTING

All results received shall be reviewed by the Manager Regional Waste and reported to the NSW Environment Protection Authority (EPA) on an annual basis with the EPA annual landfill licence return.

If any particularly high contaminant levels are received they shall be reported to the EPA within 14 days from receipt of results from the Laboratory.

Results must be published to the Council Web page within 14 days following receipt of results from the Laboratory.

BENEFITS OF COMPLIANCE TO PROCEDURE:

- Impacts on the natural environment minimised
- Operational issues identified
- Demonstrated operational competency

CONSEQUENCE OF NON-COMPLIANCE TO INSTRUCTION:

- Violations and/or fines from Regulatory Agencies
- Pollution of the environment
- Unresolved operational issues

REVIEWED BY:	**APPROVED BY:**
DATE:	**DATE**

APPENDIX 9: OPERATION/MAINTENANCE - SEDIMENT CONTROL SYSTEM

Standard Operating Procedure

PURPOSE AND SCOPE

To ensure that the surface water control system, including the stormwater retention dam, is operating effectively within its design objectives to control erosion and sediment deposition.

To define the procedure for the operation and maintenance of the water quality control structures.

Definition: "Water quality control structures" are dams / basins designed to intercept sediment laden runoff and retain a significant portion of the sediment thereby protecting downstream waterways from pollution and excessive sedimentation. This retention of sediment is generally achieved by the settling of the suspended sediment from the stormwater flow. Locations of large sediment control basins /detention dams are found in the Site Services and Infrastructure Plan.

PROCEDURE/STANDARD

Non vegetated and unsealed areas, new waste disposal stages, recently completed filling areas, stockpile areas and roads have a high potential to release sediments into stormwater, and significant sedimentation and erosion controls have to be constructed to minimise this risk.

Surface water management can be achieved by:

- Control site clearing to minimise exposed areas
- Applying mulch to erodible surfaces
- Revegetation of degraded areas and slopes
- Revegetation of final capping
- Establishing silt barriers to catch drains
- De-silting sedimentation basins and ensuring detention of stormwater inflows
- Limit access to non-landfill areas to protect existing vegetation
- Visual inspection of surface water control systems after rain events
- Drainage control by using perimeter banks, bunds, diversion channels and drains to divert silt laden flows into controlled dams and basins

1. INSPECTION AND MAINTENANCE OF STRUCTURES

- Routine inspections are to be carried out to assess the need for maintenance and are primarily concerned with checking the functionality of the stormwater drainage and treatment facilities; items such as drains, drainage pits, box culverts, detention basins and retention systems. Maintenance of these items is most important for the ongoing drainage and treatment of stormwater.
- Water quality basins (retention dams) should be inspected following each storm event and after discharge of stormwater to ensure adequate capacity is maintained in the basin at all times.
- Should the inspection reveal that maintenance of any item is required this is to be reported to the Waste Operations Supervisor for action.
- Items that are to be subject to Routine Inspections for Maintenance may comprise, but not be limited to, those listed in the attached inspection sheet. The inspection sheet is to be read in conjunction with the overall Environmental Checklist for the facility.
- Marker pegs are to be used to indicate the capacity of sediment control basins. If sediment has accumulated to a point above the marker pegs, removal of accumulated sediment must occur to return capacity of the sediment basin. Relocate the sediment to an area away from the drainage paths.
- Personnel completing the routine inspections for maintenance should be generally observant of items such as equipment failures, leaking water, scouring and/or signs of blockages of water flow. If such items are observed an immediate inspection for engineering maintenance should be organised.
- Where routine maintenance is repeatedly carried out in one location, the problem should be investigated further during an engineering inspection for maintenance.

2. FREQUENCY OF INSPECTION

- Routine inspections for maintenance shall be carried out over the life of the facility.
- Event heavy rain inspections should be carried out as soon as practicable following an intense period of rainfall (i.e. greater than (>25mm event over 48 hours).

3. RECORDS

- Records detailing each of the routine inspections for maintenance should be completed during the inspection and describe in detail any required maintenance.
- The inspection records are to be provided as part of the facility inspection and audit program for the facility.
- Records of any maintenance carried out as a result of the inspection should be completed immediately after the works have been finalised and filed appropriately.

4. PERSONNEL

- Routine inspections for maintenance are required to establish the need for basic maintenance. On this basis such inspections do not require professional engineering knowledge and may be carried out by any responsible person, including site staff and the Waste Operations Supervisor.

5. ATTACHMENTS / ADDITIONAL FORMS REQUIRED A) Water Quality Structure Inspection Requirements
BENEFIT OF COMPLIANCE TO PROCEDURE: • Impacts on the natural environment minimised • Operational issues identified • Demonstrated operational competency • Meeting environmental goal
CONSEQUENCE OF NON-COMPLIANCE TO INSTRUCTION: • Violations and/or fines from Regulatory Agencies • Pollution of the environment • Unresolved operational issues

REVIEWED BY: **DATE:**	**APPROVED BY:** **DATE**

ATTACHMENT A

WATER QUALITY STRUCTURE INSPECTION REQUIREMENTS

ITEM / AREA	ROUTINE INSPECTIONS FOR MAINTENANCE	FREQUENCY
Drains/pipes/pits	Inspect surface access points to underground culverts, pipes as well as surface in the area of the access points. Particular attention should be paid to damage or blockage	Monthly
	Inspect lining of open drains to determine any scour or damage requiring repair. In particular the connection points into batter drainages outlets to stormwater channels need to be investigated for evidence of scour.	Monthly
	To be visually inspected after heavy rainfall events to ensure they are free of debris and litter.	As required
Batter drains	Inspect batter drains for evidence of deterioration and scour. This inspection is required for both lined and unlined batter drains, including where the drain crosses benches.	Monthly
	Inspect batter drains for debris and overgrown vegetation	Monthly
	To be visually inspected after heavy rainfall events to ensure they are free of debris and litter	As required
Retention Dams	Inspect dam lining for damage and general condition	Monthly
	Inspect retention dams for damage or debris collection	Monthly
	Trash screens (if installed) to be visually inspected after heavy rainfall events to ensure they are free of debris and litter	Monthly
Inlet / Outlets and Gabions	Inspect for signs of deterioration (scouring / undercutting), blockage or damage	Monthly
	Trash screens (if installed) to be visually inspected after heavy rainfall events to ensure they are free of debris and litter	As required
Overflow Weirs / Baffles and Shutters	Inspect for signs of deterioration or damage	Monthly
Inspections of structures / drains etc should also be undertaken after a heavy rainfall event		

APPENDIX 10: LEACHATE DISCHARGE (DAM / SUMP / TANK FAILURE)

Standard Operating Procedure

Purpose and Scope

The purpose of this procedure is to define an incident response in the event of a leachate discharge being detected or reported from a leachate dam / sump / tank rupturing or suffering a significant leak at the Armidale Waste Management Facility.

Procedure/Standard

- Leachate or contaminated surface water discharge to adjacent waterways

Actions required in response to such events may vary and it will be the role of Waste Operations Supervisor to determine and initiate appropriate actions.

The following notes will form the basis of that decision making.

- Confine the source of the discharge to limit the spread of its effects without endangering personnel.
- Place sand bag barriers at the point of failure if safe to do so or engage suitable plant to replace earth in repairing the defective dam wall.
- Secure the affected area(s) by using barricades and bunding if necessary.
- Advise the Manager Regional Waste of all actions taken or proposed.
- Notify neighbours who may be affected by the incident.
- Engage a suitably qualified expert to evaluate the damage and to design the remedial work.
- A copy of the Pollution Incident Report Form is to be referred to Manager Regional Waste**.**

It is considered essential that all operators using the site are aware and understand the specific emergency and incident response requirements.

Benefit of Compliance to Procedure:

- Limit environmental damage
- Health and Safety of public/facility users, contractors, staff and neighbours is protected

Consequence of Non-Compliance to Instruction:

- Violations and/or fines from Regulatory Agencies

REVIEWED BY:	**APPROVED BY:**
DATE:	**DATE**

APPENDIX 11: GROUNDWATER MONITORING

Standard Operating Procedure

PURPOSE AND SCOPE

The purpose and scope of the groundwater monitoring program should be to effectively monitor and report current groundwater character and ensure early detection and reporting of possible pollution of groundwater at the Armidale Waste Management Facility.

PROCEDURE/STANDARD

All ground water monitoring wells and leachate monitoring points at the landfill are sampled in accordance with the requirements of EPL 5860.

ARC engages a NATA accredited third party laboratory to analyse and report findings to comply with specific EPL requisites and wider EPA public reporting requirements.

REPORTING

All results received shall be reviewed by the Manager Regional Waste and reported to the NSW Environment Protection Authority (EPA) on an annual basis with the EPA annual licence return.

If any particularly high contaminant levels are received they shall be reported to the EPA within 14 days from receipt of results from the Laboratory.

Monitoring Results must also be published to the Organisation's Web page within 14 days following receipt of results from the Laboratory.

BENEFIT OF COMPLIANCE TO PROCEDURE:

- Meeting environmental goal
- Impacts on the natural environment are minimised
- Operational issues identified
- Demonstrated operational competency

CONSEQUENCE OF NON-COMPLIANCE TO INSTRUCTION:

- Violations and/or fines from Regulatory Agencies
- Pollution of the environment
- Unresolved operational issues

REVIEWED BY:	**APPROVED BY:**
DATE:	**DATE**

APPENDIX 12: TYRE STOCKPILE MANAGEMENT AND MAINTENANCE

Standard Operating Procedure

PURPOSE AND SCOPE

To define the procedure for management of used tyres which have been stockpiled and are awaiting removal offsite for recycling or disposal so as to minimise the risk of fire.

The Environmental Protection Licence requires stockpiles of tyres not to exceed 50 tonnes.

PROCEDURE/STANDARD

- Tyres are to be placed on a hardstand area compacted of a depth of at least 500 mm if located above previously placed general waste and are to be removed from site on a routine basis to ensure the stockpile is kept to a minimum.
- A safety exclusion area is to be maintained around the stockpile as a retained buffer zone to prevent the spread of fire and to allow fire suppression activities to be undertaken in the event of fire.
- Fire prevention measures are to be undertaken including signage, servicing of firefighting equipment and training of personnel in firefighting techniques.

In the event of a fire:

- Attempt to extinguish a small, controlled fire with equipment on site without endangering facility personnel and equipment. This equipment includes a suitable fire extinguisher, hand tools or plant items available on site.
- Report any potentially dangerous fire to "000" and request the fire brigade, providing all information they require (i.e. your name, fire location, type, size, etc)
- As soon as possible notify the Waste Operations Supervisor of the incident and provide an update of the action initiated to date.
- Keep all unauthorised people away from the area on fire whilst protecting personal safety.
- Provide any requested assistance to Emergency Services IF SAFE TO DO SO.
- Report the details of the fire on an Incident Notification Report and refer to Manager Regional Waste

BENEFIT OF COMPLIANCE TO PROCEDURE:

- Impacts on the natural environment minimised

CONSEQUENCE OF NON-COMPLIANCE TO INSTRUCTION:

- Violations and/or fines from Regulatory Agencies
- Pollution of the environment

REVIEWED BY:	**APPROVED BY:**
DATE:	**DATE**

APPENDIX 13: MULCH / GREENWASTE STOCKPILE MANAGEMENT

Standard Operating Procedure

PURPOSE AND SCOPE

To define the procedure for the management of green waste which has been stockpiled and is awaiting shredding or has been shredded and is composting or awaiting transporting offsite so as to minimise the risk of fire and/or odour generation.

PROCEDURE/STANDARD

- A safety exclusion area is to be maintained around stockpiles as a retained buffer zone to prevent the spread of fire and to allow fire suppression activities to be undertaken in the event of fire.
- Fire prevention measures are to be undertaken including signage, servicing of firefighting equipment and training of personnel in firefighting techniques.
- Stockpiles and windrows of shredded green waste are to be limited to between 2.5 and 3.0m in height and 5-6m in width.
- Stockpiles and windrows of shredded green waste are to be visually inspected weekly and an assessment of the temperature, odour and moisture conditions within the stockpile made.
- If heating in a stockpile is suspected a temperature probe should be inserted into the stockpile and allowed to remain undisturbed until the temperature reading remains static.
- Stockpiles and windrows of mulch are to be turned when temperatures exceed 55^{o}C (standard process) but must be turned (for safety) whenever temperatures within the stockpile exceed 70^{o}C.

BENEFIT OF COMPLIANCE TO PROCEDURE:

- Impacts on the natural environment minimised

CONSEQUENCE OF NON-COMPLIANCE TO INSTRUCTION:

- Violations and/or fines from Regulatory Agencies
- Pollution of the environment

REVIEWED BY:	**APPROVED BY:**
DATE:	**DATE**

APPENDIX 14: FIRE IN WASTE TRANSFER BIN

Standard Operating Procedure

PURPOSE AND SCOPE

To define a procedure for responding to a fire that is detected in a waste transfer bin.

PROCEDURE/STANDARD

Fire Response:

- Attempt to extinguish a small, controlled fire with equipment on site without endangering facility personnel and equipment. This equipment includes a fire hose, water cart, or suitable fire extinguisher or soil. Do not attempt to remove a transfer bin containing the fire.

Note: Be sure to use the proper extinguisher for the fire

- Report any potentially dangerous fire to "000" and request the fire service, providing all information they require (i.e. your name, fire location, type, size, etc.)
- As soon as possible notify the Waste Operations Supervisor of the incident and provide an update of the action initiated to date.
- Keep all unauthorised people away from the area on fire whilst protecting personal safety.
- Provide any requested assistance to Emergency Services IF SAFE TO DO SO.
- Commence notification of Neighbours where offsite smoke / fire impact is possible.
- Report the details of the fire on an Incident Notification Report and refer to Manager Regional Waste

BENEFIT OF COMPLIANCE TO PROCEDURE:

- Meeting environmental goal.
- Employee's safety protected
- Health and safety of public/facility user protected
- Minimise damage to public property

CONSEQUENCE OF NON-COMPLIANCE TO INSTRUCTION:

- Injury/death to employee
- Injury/death to public/facility user
- Damage to public property
- Violations and/or fines from Regulatory Agencies

REVIEWED BY:	**APPROVED BY:**
DATE:	**DATE**

APPENDIX 15: FIRE AT ALL THE TIPPING FACES

Standard Operating Procedure

PURPOSE AND SCOPE

To define a procedure for responding to a fire that is detected at the tipping face or elsewhere on the landfill at the Armidale Waste Management Facility.

PROCEDURE/STANDARD

Fire

1. Attempt to extinguish a small, controlled fire with equipment on site without endangering facility personnel and equipment. This may include the use of a fire hose reel, water cart or isolating the source of the fire and covering with soil by using on-site plant.

   Note: If using a fire extinguisher, be sure to use the correct extinguisher for the fire type.

2. If in any doubt, evacuate area and immediately call '000' and request the presence of Fire and Rescue NSW. Provide all information required (i.e. your name, fire location, type, size etc.).
3. As soon as possible notify the Waste Operations Supervisor of the incident and provide an update of the action initiated to date.
4. Keep all unauthorised people away from the area where the fire is burning.
5. Provide any requested assistance to Emergency Services IF SAFE TO DO SO.
6. Commence notification of Neighbours where offsite smoke / fire impact is possible.
7. Report the details of the fire on an Incident Notification Report and refer to Manager Regional Waste

BENEFIT OF COMPLIANCE TO PROCEDURE:

- Meeting environmental goal.
- Employee's safety protected
- Health and safety of public / facility user protected
- Minimise damage to public property

CONSEQUENCE OF NON-COMPLIANCE TO INSTRUCTION:

- Injury/death to employee
- Injury/death to public/facility user
- Damage to public property
- Violations and/or fines from Regulatory Agencies

REVIEWED BY:	**APPROVED BY:**
DATE:	**DATE**

APPENDIX 16: FIRE IN WASTE LOAD

Standard Operating Procedure

PURPOSE AND SCOPE

To define a procedure for responding to a fire which is detected in a load of material brought onto to the Armidale Waste Management Facility and prior to being discharged / unloaded.

PROCEDURE/STANDARD

Fire in load refers to a vehicle load of waste that is either on fire and/or smouldering or smoking on the site AND prior to discharge at the tip face or applicable deposition location.

All employees are expected to be familiar with the following procedures for handling such loads:

1. The driver is to dump the material in the "HOT LOAD" area. (City 2 Soil Pad). If not possible / safe, in a clear area that is away from any building, vegetation and/or debris – preferably on a thick hardstand area or on virgin ground with limited vegetation.
2. Should it not be possible to move the vehicle to a clear space, isolate the vehicle and evacuate the area.
3. If unable to contain, notify the Fire Brigade by telephoning Triple Zero ('000') providing all information they require (i.e. your name, fire location, type, size, etc)
4. Where suspected hazardous wastes are involved contact Triple Zero ('000') and request HAZMAT attendance. Provide all information they require (i.e. your name, fire location, type, size, etc).
5. Provide any requested assistance to Emergency Services IF SAFE TO DO SO.
6. As soon as possible notify the Waste Operations Supervisor of the incident and provide an update of the action initiated to date.
7. Contain the fire, and if possible spread out the load and extinguish the fire with soil and / or water, being mindful of where runoff fire water may be travelling. Contain run off where practical.
8. Commence notification of Neighbours where offsite smoke / fire impact is likely.
9. Once fire is determined to be completely out, assess the content of the waste to determine if any hazardous wastes are present place the load into an empty waste receptacle for transport to the landfill. No other waste is to be incorporated into the waste receptacle (if still contained in a bin type body).
10. Report the details of the fire on an Incident Notification Report and refer to Waste Operations Supervisor.

BENEFIT OF COMPLIANCE TO PROCEDURE:

- Meeting environmental goal.
- Employee's safety protected
- Health and safety of public/facility user protected
- Minimise damage to public property

CONSEQUENCE OF NON-COMPLIANCE TO INSTRUCTION:

- Injury/death to employee
- Injury/death to public/facility user
- Damage to public property
- Violations and/or fines from Regulatory Agencies

MANAGEMENT AUTHORISATION:

SIGNED: **DATED: / /**

NAME:

APPENDIX 17: CHEMICAL SPILL RESPONSE

Standard Operating Procedure

PURPOSE AND SCOPE

The purpose of this procedure is to define an incident response in the event of a chemical spill from containers at the Armidale Waste Management Facility.

PROCEDURE/STANDARD

Chemical spillage

Actions required in response to such an event may vary and it will be the role of the Waste Operations Supervisor to determine and initiate appropriate actions. The following notes will form the basis of that decision making process.

- Depending on the scale of the spillage, it may be necessary to make first contact with emergency services by dialling 000 and advise of the type of emergency and the assistance needed (Fire Brigade – HAZMAT).
- Secure the affected area(s) by using suitable means such as barricades and bunding. Engage measures to restrict vehicles entering the site.
- If necessary, initiate evacuation of staff and others that may be on site, including contractors.
- Where possible, confine the incident and prevent the spread of its effects without endangering personnel. This may include building sand bag bunds, rotating the container or plugging the leak.
- For small spills, use the spill kit kept on site, cover drains and/or place temporary bunding.
- Advise the Waste Operations Supervisor of all actions taken or proposed.
- Provide any requested assistance to Emergency Services IF SAFE TO DO SO.
- Notify neighbours who may be affected by the incident.
- Report the details of the spill on an Incident Notification Report and refer to Manager Regional Waste

BENEFIT OF COMPLIANCE TO PROCEDURE:

- Limit environmental damage
- Health and safety of public/facility user protected

CONSEQUENCE OF NON-COMPLIANCE TO INSTRUCTION:

- Extended environmental damage
- Injury/death to employee
- Injury/death to public/facility user
- Violations and/or fines from Regulatory Agencies

REVIEWED BY:	**APPROVED BY:**
DATE:	**DATE**

APPENDIX 18: STORAGE/HANDLING OF CHEMICALS/HAZARDOUS SUBSTANCES

Standard Operating Procedure

PURPOSE AND SCOPE

The use of chemicals and hazardous substances at the Armidale Waste Management Facility is generally limited to paints, solvents for maintenance of site equipment /plant and herbicides/pesticides for controlling pests.

The aim of this procedure is to assist in the identification, handling, storage and disposal of hazardous substances. It includes the use of labels and Material Safety Data Sheets (MSDS), provision of information and training to personnel as well as storage and disposal requirements for use of hazardous substances.

The procedure also addresses the management of hazardous substances imported to the site by users of the waste management facility. These substances include paints, household chemicals, herbicides, pesticides and gas bottles etc.

PROCEDURE / STANDARD

1. Purchase of Materials

When a hazardous substance is purchased the supplier must provide sufficient information to ensure that the substance can be handled, stored, transported, used, processed and disposed of safely. Full safety data in the form of a current approved MSDS must be provided by the supplier on the first occasion that a hazardous substance is supplied. The manufacturer shall review and revise the MSDS every five years as a minimum. Suppliers are required to provide MSDS on request.

Whenever possible a non-hazardous alternative shall be selected. However where no such alternative is available the most suitable, but least harmful or dangerous, shall be considered.

2. Labelling of Hazardous Substances

Suppliers shall ensure that all containers of hazardous substances for use are appropriately labelled. Where a hazardous substance is decanted and not used or further processed immediately, the container into which the substance is decanted is labelled with the product name and risk and safety information (this does not apply to substances which are decanted and used immediately). Hazardous substance containers shall remain appropriately labelled until they are cleaned and no longer contain any hazardous substance. All containers shall be in suitable condition. Damaged, leaking or corroded containers must not be accepted.

3. Material Safety Data Sheets

Material Safety Data Sheets should contain the following information as a minimum:

- State if the product is classified as a hazardous substance
- Safety Equipment to be worn by the operator when using the substance
- Storage requirements including compatibility with other substances
- Requirements for transport and disposal
- Procedures for clean-up and disposal of spilt product and waste containers
- First aid procedures if the substance contacts skin, eyes, is swallowed or ingested

A register of MSDSs shall be maintained at the facility and made available for use by all employees at site. All MSDS shall be readily accessible to all employees with potential exposure to those substances.

4. Storage

Flammable goods need to be stored away from sources of ignition and spillage containment is required. Dangerous goods legislation requires segregation of different classes of dangerous goods and licensing is required when certain quantities are exceeded.

5. Handling Hazardous Substances and Dangerous Goods

- Hazardous substances bought to the facility shall be segregated and taken to the designated storage areas located within the facility. These substances need to be adequately segregated to prevent fires or other dangerous occurrences.
- Examples of these wastes include paints, household chemicals, herbicides, pesticides and gas bottles.
- These materials and substances will be collected on regular basis under contract and transferred for disposal at an appropriate facility. These substances are not to be disposed of at Council's Landfill.

BENEFIT OF COMPLIANCE TO PROCEDURE:

- Employee's safety protected
- Health and safety of public/facility user protected
- Impacts on the natural environment are minimised

CONSEQUENCE OF NON-COMPLIANCE TO INSTRUCTION:

- Injury/Death to employee
- Injury/Death to public/facility user
- Violations and/or fines from Regulatory Agencies

REVIEWED BY:	**APPROVED BY:**
DATE:	**DATE**

APPENDIX 19: INSPECTION OF INCOMING LOADS

Standard Operating Procedure

PURPOSE AND SCOPE

To ensure that only Permitted Waste is accepted at the Armidale Waste Management Facility through the adoption and implementation of appropriate vehicle inspection procedures.

PROCEDURE/STANDARD

The Gatehouse Attendant shall conduct a vehicle inspection and waste assessment to ensure that only Permitted Wastes are accepted at the facility. The minimum requirements of the inspection are:

1. Exhibit prominent signage at the entrance to the facility defining the types of wastes that will be accepted and those that are excluded.
2. In-coming vehicles are to have the loads uncovered at the designated area prior to entering the control point / weighbridge. All loads shall be subject to a visual inspection to ensure no excluded wastes are contained within the loads.
3. The Gatehouse Attendant shall also enquire to the customer whether hazardous materials, such as lead acid batteries, gas bottles, solvents, paints, asbestos etc., are contained within the load.
4. Empty chemical containers should be checked for triple rinsing before accepting for disposal.
5. Any vehicles suspected of containing excluded wastes shall be refused entry until verified otherwise.
6. The Gatehouse Attendant shall require and collect appropriate evidence from the driver of the incoming vehicle, as necessary, to substantiate that the waste is not an excluded waste e.g. provision of a test certificate.
7. Where wastes are contained in enclosed vehicles, e.g. private waste collection vehicles, the Gatehouse Attendant shall identify the source and nature of the waste by inquiry.
8. At the waste transfer station/tipping face of the waste disposal areas the discharge of wastes from enclosed vehicles is to be inspected by the Landfill Operator.
9. No sealed containers shall be deposited without substantiation that the contents are acceptable for disposal.
10. All private waste collection and disposal companies servicing commercial and industrial premises and using the facility shall be required to enter into an agreement with the customer regarding disposal of collected wastes. This agreement shall include the identification of excluded wastes and undertakings by the customer not to deposit such wastes in the collection receptacle.

BENEFIT OF COMPLIANCE TO PROCEDURE:

- Meeting environmental goal
- Employee's safety protected
- Health and safety of public/facility user protected
- Impacts on the natural environment minimised

CONSEQUENCE OF NON-COMPLIANCE TO INSTRUCTION:	
• Injury/Death to employee • Injury/Death to public/facility user • Violations and/or fines from Regulatory Agencies	
REVIEWED BY: **DATE:**	**APPROVED BY:** **DATE**

APPENDIX 20: CLEAN UP OF FUEL OR OIL SPILLS

Standard Operating Procedure

PURPOSE AND SCOPE

To define the procedure for the containment, management and clean-up of minor fuel / oil spills at the Armidale Waste Management Facility.

PROCEDURE/STANDARD

Definitions

Fuel / oil spills refers to discharges of petroleum compounds, including petrol, diesel, lubricating oils, hydraulic oils, greases etc. Spillage of oils and fuels may arise from leaking machinery (e.g. burst hydraulic hoses) and spillage of liquids from containers deposited or stored at the site.

It is important to take prompt action to clean up any spilt oil or fuel to minimise the risk of accidents occurring and to prevent contamination of local waterways should the spilt fuel / oil enter the site drainage system.

Equipment available to clean up oil spills include oil absorbent pads, "kitty litter", oil absorbent booms and drain blocking pads. Additional materials may be obtained by contacting the Council's Store or Suppliers. This equipment or "spill kit" should be stored close to point of use or in a readily transportable form e.g. on a trailer or in a wheeled bin.

The steps in this procedure shall be as follows:

1. For mechanical equipment, shut down the item of plant and plug the leak or crimp the hydraulic hose if possible and quickly. For leaking containers, address the source of the leak, but at all times, avoid contact with the material.
2. Isolate adjacent drainage points.
3. Dam and contain the spill using the contents of the spill kit.
4. Recover and absorb.

Once the source of the leak is established, undertake all efforts to prevent further flow, e.g. if leak is from an oil drum, roll drum so that leak areas is uppermost. If leak is from pipe from oil truck, close valves etc. All attempts should be made to plug the leak.

Stop all human and vehicular traffic through the spill area. Isolate sources of ignition and advise fire authorities (and licensing authorities). Mobilise fire extinguishers, if suitable.

Contain the spill as follows:

- Protect drains by forming barriers and sealing drainage grates (e.g. using strong plastic bags partially filled with sand or water). The absorbent socks and pillows can be used to block off drains allowing water to go through but trapping the oil. Absorbent material has limited capacity and needs to be replaced regularly.
- If possible stop the spill from spreading by deflecting the oil into another container.
- Form barriers using absorbent material and place on the edge of the spill. (or use any other suitable and available materials, e.g. soil, sand).
- All used absorbent material is to be collected for disposal at a suitable landfill.

- If sufficient product exists, hand pumps should be used and product transferred to a suitable container (lined drums, skips or tankers).
- Avoid the use of electrical equipment that could be the source of ignition.

BENEFIT OF COMPLIANCE TO PROCEDURE:

- Employee's safety protected
- Health and safety of public / facility user protected
- Impacts on the environment are minimised

CONSEQUENCE OF NON-COMPLIANCE TO INSTRUCTION:

- Injury to employee
- Injury to public / facility user
- Environmental pollution
- Violations and / or fines from regulatory agencies

REVIEWED BY:	**APPROVED BY:**
DATE:	**DATE**

APPENDIX 21: DEPOSITING OF WASTE AT TIPPING AREA

Standard Operating Procedure

PURPOSE AND SCOPE

The purpose of this procedure is to define the procedure for the depositing of waste from collection vehicles or waste transfer bins at the landfill site.

PROCEDURE/STANDARD

1. All staff and private contractors engaged in the collection and disposal of waste are to be oriented in the proper management of the landfill tipping area.
2. Drivers are to undertake a physical inspection of the disposal site and assess the disposal location for risks, such as uneven/sloping ground, obstacles, hazards, unstable ground, sharp objects, moving plant, other vehicles, etc.
3. The vehicle is to be reversed to the disposal location as directed by the Landfill Operator, stopped in the appropriate position and brakes applied
4. The tailgate/tipping body is to be unlatched and/or secured in the open position
5. The body is to be lifted to the upright position and the waste emptied
6. The vehicle is to move from the disposal site with the tailgate/tipping body secured in the closed position.

BENEFIT OF COMPLIANCE TO PROCEDURE:

- Employee safety is protected
- Vehicle damage is avoided
- Adherence to landfill protocols

CONSEQUENCE OF NON-COMPLIANCE TO INSTRUCTION:

- Employee safety is put at risk
- Vehicular damage
- Improper use of landfill

REVIEWED BY:	**APPROVED BY:**
DATE:	**DATE**

APPENDIX 22: DUST MANAGEMENT

Standard Operating Procedure

PURPOSE AND SCOPE

The purpose of this procedure is to define the means for controlling the creation and distribution of dust at the Armidale Waste Management Facility.

PROCEDURE/STANDARD

Dust can arise from a number of sources in the operation of a waste management facility and these include unsealed roads, previously capped and un-vegetated areas, from shredding of green waste, concrete crushing, the movement of stockpiles of dry materials and tipping of wastes.

It is the responsibility of the Waste Operations Supervisor to ensure preventative measures are put in place to control the generation of dust. Such measures include:

- Applying shredded green waste to capped areas within the landfill operations areas.
- Wetting piles of green waste immediately prior to shredding
- Operating mist sprays where concrete or hard rock are being crushed
- Wetting of roadways
- Wetting down of dusty loads or requiring materials to be wet and bagged prior to delivery to site (in the case of asbestos type materials)

BENEFIT OF COMPLIANCE TO PROCEDURE:

- Mitigating the likelihood of a pollution incident
- Adherence to landfill protocols

CONSEQUENCE OF NON-COMPLIANCE TO INSTRUCTION:

- Complaints from adjoining property owners
- Improper use of landfill

REVIEWED BY:	**APPROVED BY:**
DATE:	**DATE**

APPENDIX 23: ODOUR MANAGEMENT

Standard Operating Procedure

PURPOSE AND SCOPE

The purpose of this procedure is to define the means for controlling excessive odours at the Armidale Waste Management Facility.

PROCEDURE/STANDARD

Odour can arise from a number of sources in the operation of a waste management facility and these include uncovered waste, composting of organic material that includes food waste, landfill gas, animal carcasses, exposing anaerobic decomposing materials, sewer sludge and disturbed areas of previously placed waste.

It is the responsibility of the Waste Operations Supervisor to ensure preventative measures are put in place to control the generation of odour. Such measures include:

- Examination of incoming loads to ensure only permitted wastes are accepted
- Daily cover (VENM) or suitable inert waste is to be placed over any exposed waste end of the day's operations
- Green waste mulch / composting operations to occur strictly in accordance with the approved methodology
- Animal carcasses and odorous loads are deep buried within the waste mass
- Grading and profiling of the site is undertaken to avoid ponding over filled areas or areas of exposed wastes
- Use of odour suppression sprays and masking agents, liming or specialised dosing.
- Routine inspections are undertaken in accordance with the Environmental Checklist (see **Appendix 29**) to ensure there are no areas of exposed waste resulting after storm events or site activities

BENEFIT OF COMPLIANCE TO PROCEDURE:

- Mitigating the likelihood of a pollution incident
- Adherence to landfill protocols

CONSEQUENCE OF NON-COMPLIANCE TO INSTRUCTION:

- Complaints from adjoining property owners
- Improper use of landfill

REVIEWED BY:	**APPROVED BY:**
DATE:	**DATE**

APPENDIX 24: COVERING OF WASTE / LITTER CONTROL

Standard Operating Procedure

PURPOSE AND SCOPE

To define a procedure for the covering of waste at the Armidale Waste Management Facility to ensure waste / litter is controlled in an acceptable manner.

PROCEDURE/STANDARD

Covering of Waste

- The purpose of 'daily cover' is to control litter, flies, rodents, birds, odour and to reduce the risk of fire and improve the visual appearance of the landfill.
- It is important to thoroughly compact the waste prior to the placement of the daily cover. A uniform, even surface will allow the placement of a controlled thickness of soil whereas an uncompacted or uneven surface results in a high percentage of soil being used.
- The waste is to be covered with 150mm of inert waste or soil at the end of each day.
- The cover material previously placed over the underlying layer of waste should be bladed off to expose the waste such that the newly placed waste is in direct contact with the old waste. The cover may be removed by a track loader or similar equipment.

Litter Control

The following measures shall be implemented to minimise the potential for migration (off site) of litter:

- Waste will be compacted and covered as per the covering frequency indicated above.
- Daily inspection of litter/perimeter fences and clearing as required.
- Signage will be placed at the entry/exit points to advise customers that if they drop or transport waste in a manner that could result in littering they may be liable for prosecution.
- Vehicles transferring rubbish to the site must have the waste material covered at all times.
- Semi-permanent litter fencing will be erected in close proximity to the active tipping areas
- If required, mobile litter barricades will be used and relocated around the tipping area as wind direction dictates

Reporting

Non-conformances shall be reported in the weekly inspection checklist. Major non-conformances shall be reported to the Waste Operations Supervisor before the end of the day which the non-conformance occurred or is identified.

BENEFIT OF COMPLIANCE TO PROCEDURE:

- Meeting the environmental goal.
- Impacts on the natural environment are minimised

CONSEQUENCE OF NON-COMPLIANCE TO INSTRUCTION:	
• Violations and/or fines from Regulatory Agencies • Pollution of the environment	
REVIEWED BY: **DATE:**	**APPROVED BY:** **DATE**

APPENDIX 25: FACILITY EVACUATION

Standard Operating Procedure

PURPOSE AND SCOPE

To define a procedure for the covering the requirement to implement and Evacuation of the Armidale Waste Management Facility in an acceptable manner.

PROCEDURE/STANDARD

Emergency Response

1. Upon notification of an incident the Chief Warden (generally this would be the Waste Operations Supervisor or other most senior staff member at the site) determines the need for evacuation.
2. Chief Warden contacts by telephone the emergency services by dialling '000' providing all information they require (i.e. your name, incident type, size, etc.).
3. Chief Warden sounds the evacuation alarm (if present) or provides evacuation advice to all personnel and facility users on site.
4. The Chief Warden initiates measures to restrict vehicles entering the facility.
5. The Chief Warden determines safe evacuation routes and direct personnel and facility users to the Primary Evacuation area. Where necessary unlock gates on evacuation routes so as to provide for movement to the Primary Evacuation Point or the Secondary Evacuation Point.
6. The Chief Warden provides direction to Primary Evacuation Point.
7. Prior to leaving the facility the Chief Warden with the assistance of any area deputy / area wardens accounts for all personnel including checking of all work areas.
8. Upon arrival at the Primary Evacuation Point the Chief Warden is to;
   a) Confirm the presence or otherwise of all personnel/staff and facility users (as far as practical)
   b) Determine the suitability of the Primary Evacuation Area. If necessary initiate movement to Secondary Evacuation Point or other suitable Assembly Area.
   c) Upon their arrival brief the emergency services including the status of facility personnel.
   d) Co-ordinate the movement of personnel to the Post Evacuation Assembly Area.
   e) Brief the Manager Regional Waste on the incident and provide an update of the action initiated to date.
9. The Chief Warden is to report the details of the event on an Incident Notification Report Form and refer to Manager Regional Waste.

BENEFIT OF COMPLIANCE TO PROCEDURE:

- Meeting the legislative requirements.
- Improved safety for site staff and users

CONSEQUENCE OF NON-COMPLIANCE TO INSTRUCTION:

- Violations and/or fines from Regulatory Agencies
- Death or injury to site staff / visitors

REVIEWED BY:	**APPROVED BY:**
DATE:	**DATE**

EMERGENCY CHECKLIST FOR CHIEF WARDEN

Name of Chief Warden:	
Time at which potential emergency was raised:	
Location of potential emergency:	
Description of potential emergency:	
IF EMERGENCY IS DECLARED:	
Emergency declared	Time
ALERT signal activated (if available)	Time
Phone relevant Emergency Service on 000	Time
IF SITE EVACUATION IS NECESSARY:	
Evacuation signal activated / advice issued?	Time
Deputy/ Area Wardens report evacuation is complete:	

AREA	WARDEN	AREA EVACUATED	COMMENTS

ADVISED EMERGENCY SERVICE:	TIME

APPENDIX 26: MANAGEMENT OF ASBESTOS

Standard Operating Procedure

PURPOSE AND SCOPE

The purpose of this procedure is to define the activities of acceptance and management of waste materials that contain asbestos at Armidale Waste Management Facility.

PROCEDURE/STANDARD

ACCEPTANCE:
All disposals must be pre-arranged with the site.

Bookings:

- *Loads must be booked at a minimum of 24 hours in advance of disposal by completing an Armidale Asbestos Disposal Booking form.*
- *Council will limit acceptance to an appropriately designated time on a suitable day when staffing and equipment is available.*
- *Staff will respond to bookings and advise the customer of the requirements for packaging and presentation and will confirm with customer the approved disposal date.*
- *On the day of arranged disposal, staff will assess site conditions and decide whether to proceed with the disposal. The decision to proceed with acceptance on the agreed day will be confirmed by the Waste Operations Supervisor or most senior staff member at the site - based on an assessment of weather, site safety, traffic ability etc.*
- *Staff to contact customer to advise if agreed disposal must be changed for any reason (e.g. if equipment / staff become unavailable.*
- *Domestic quantities may be accepted without the required notice / booking, at the discretion of the Waste Operations Supervisor or most senior staff member at the site. However, all customers including domestic customers will be required to complete the Armidale Asbestos Disposal Booking form.*

Packaging, Presentation for Disposal:

***Friable Asbestos** waste must be presented in two (2) sealed, heavy duty bags made from low density polyethylene (LDPE) at least 0.2mm thick.*

Each bag will have maximum dimensions less than or equal to 1.2 m in height and 0.9 m in width and a maximum weight of 25 kg.

Each bag must be marked "CAUTION ASBESTOS" in letters of not less than 40 mm in height.

These sealed bags must be placed on the ground in a manner which prevents their rupture.

***Bonded Asbestos** waste must be securely packaged at all times. The asbestos waste must be securely bagged or wrapped in LDPE plastic.*

Asbestos waste must be secure during transport and asbestos dust or fibres cannot be allowed to escape during transportation.

*For **Asbestos Contaminated Soil** the customer to provide a report from an occupational hygienist confirming:*

- if the asbestos material in the soil is bonded or friable
- the extent of asbestos contamination
- safe work procedures for the remediation of the site

If the asbestos is classified as friable, the customer must supply copies of:

- *An AS1 licence for the person / company undertaking the removal.*
- *The AS1 licensee's safe work method statements, which must address disposal as well as the removal of the asbestos contaminated soil.*
- *The current application / permit issued by SafeWork NSW to remove the asbestos contaminated soil*
- ***Asbestos contaminated soils** must be wetted down before delivery.*
- *The customer must inform staff on arrival that the waste contains asbestos*
- *The customer must place the waste in the location designated by Council (pre delivery inspection by the customer may be appropriate)*
- *When unloading and disposing of any asbestos waste at the site, the waste must be unloaded in a manner as to prevent the generation of dust or the stirring up of dust*
- *Vehicles and their containers must be cleaned before leaving the waste facility*

TRAINING REQUIREMENTS:

The minimum training for those working at a waste or recycling facility workplace where asbestos or Asbestos Containing Material (ACM) may be present is an asbestos awareness course.

The minimum training for those involved in inspection for asbestos and ACM in loads is a Class B asbestos removal course.

PERSONAL PROTECTIVE EQUIPMENT:

The following personal protective equipment (PPE) will be provided to all staff involved in the management of asbestos waste.

- ***Breathing masks** suitable for asbestos work environments – Australian Standards*
- ***Protective one piece suits** must be worn when working with asbestos and always close by should operators become aware of asbestos exposure risks.*
- ***Safety Vests** or safety shirts must be worn at all times while working.*
- ***Safety Boots** must be worn at all times while working.*
- ***Leather Working Gloves** should be worn for all manual handling tasks.*
- ***Safety Glasses or Goggles** must be worn when appropriate.*
- ***Ear Muffs** must be worn by the operators and assistants in the working area **(5m)** of any noisy machinery.*
- ***Ear Plugs** should be worn when in the vicinity **(5m to 10m)** of noisy machinery.*
- ***Hard Hats** must be worn in the working area **(5m)** of any overhead machinery.*

INSPECTION AND REJECTION OF LOADS:

All loads entering and leaving the Armidale Waste Management Facility are to be inspected for the possible presence of ACM. An initial inspection will occur at the entry gatehouse and more detailed inspections will occur at the point of unloading (e.g. small vehicle transfer station).

This section applies to situations where asbestos waste is taken to Armidale Waste Management Facility and the waste is:

- *Not correctly packaged for delivery and disposal,*
- *Not disclosed by the transporter as being asbestos or asbestos containing materials.*

Where asbestos waste is not correctly packaged for delivery and disposal, or is not disclosed by the transporter as being asbestos or asbestos containing materials, Council may:

- *Reject the asbestos waste from the facility.*
- *Accept the asbestos waste if it is correctly packaged.*

Where loads of asbestos waste are identified and rejected for disposal the customer is to complete an Asbestos Rejected Load Form. The customer is to be issued with an Asbestos Non-compliance letter and also provided with asbestos fact sheets.

Completed Asbestos Rejected Load Forms shall be kept at the gatehouse in a rejected load register.

BURIAL / DISPOSAL:

The disposal of asbestos waste at the nominated tipping area must be supervised by a suitably trained Council or contractor employee.

The waste must be unloaded and disposed of in such a manner as to prevent the generation of dust or the stirring up of dust.

The waste must be covered immediately with virgin excavated natural material (VENM) or other material as approved in the facility's environment protection licence:

- *initially (at the time of disposal), to a depth of at least 0.15 metre, and*
- *at the end of each day's operation, to a depth of at least 0.5 metre, and*
- *finally, to a depth of*
- *at least 1 metre (in the case of bonded asbestos waste or asbestos-contaminated soils) OR*
- *3 metres (in the case of friable asbestos material) beneath the final land surface of the landfill site.*

All site machinery involved in asbestos disposal must (including contractors) be fitted with ultra-high efficiency filters or (High Efficiency Particulate Air (HEPA) filters in their cabins. Additionally, all machinery and vehicles on site must have stored in their cabins an emergency asbestos kit in case operators need to leave the vehicles when uncontrolled asbestos has been detected.

BENEFIT OF COMPLIANCE TO PROCEDURE:

- Limit environmental damage
- Health and safety of staff, public / facility users protected

CONSEQUENCE OF NON-COMPLIANCE TO INSTRUCTION:

• Infringements and/or fines from Regulatory Agencies
REVIEWED BY: **DATE:**	**APPROVED BY:** **DATE**

Safe Operating Procedure/Work Instruction – Unexpected Asbestos Finds

APPENDIX 26(A): MANAGEMENT OF ASBESTOS – INCIDENTAL FINDS

APPROVED BY: GUADA LADO DATE: 30/04/2024

CONTEXT

Where unexpected finds of material suspected of being asbestos is discovered at the Armidale Regional Council Armidale Waste Management Facility. This includes potential asbestos detected:

- Entering on vehicle at the gatehouse (not declared by customer)
- At the transfer station (Community Recycling Centre)
- At the sorting facility
- At the following stockpile sites:
  - Green waste
  - Mulch
  - City2Soil
  - Cement / Concrete
  - Metal

PARENT POLICY

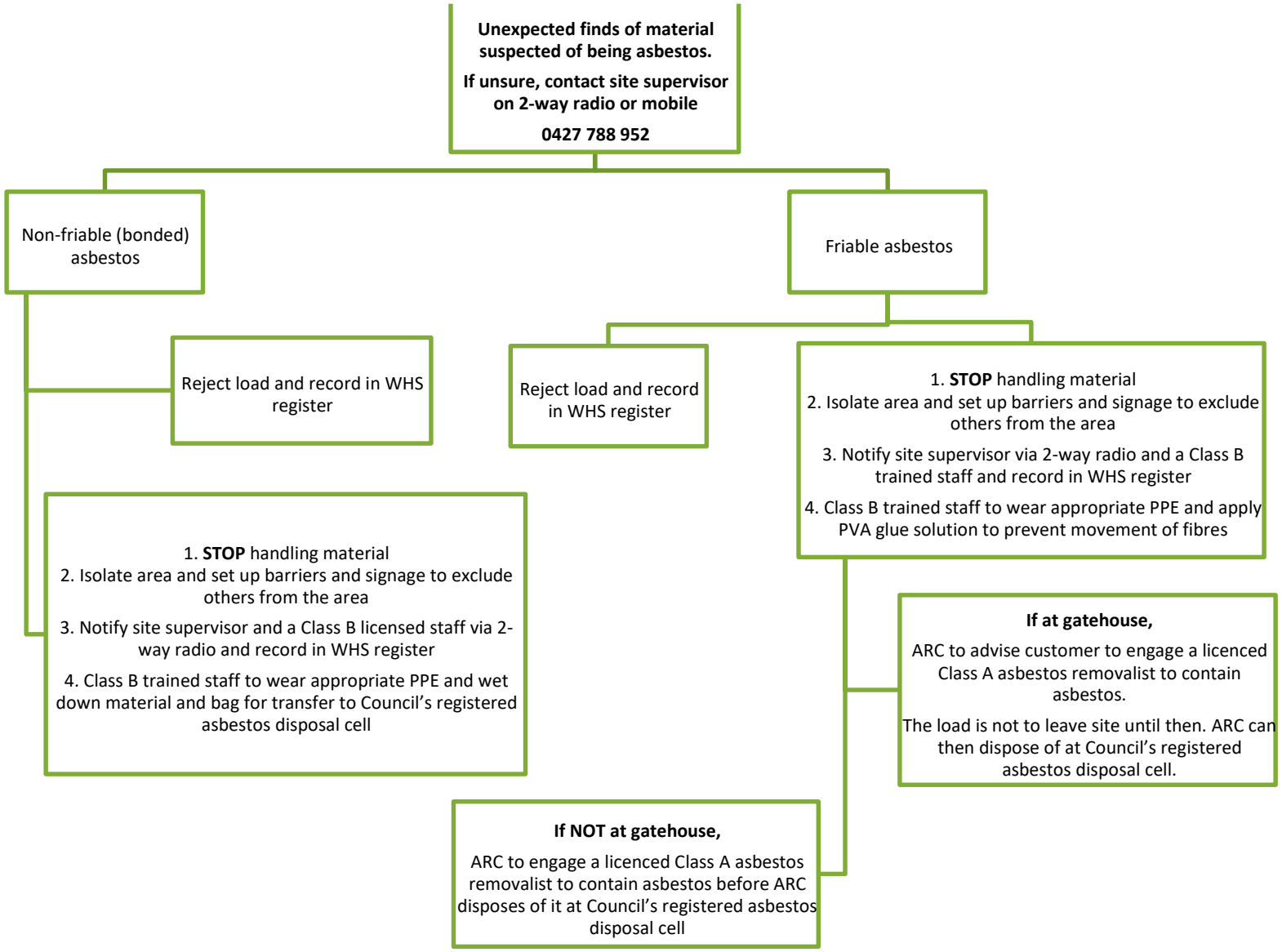
These Procedures are to be read in conjunction with the Asbestos Management Operational Policy (the Parent Policy) (AINT/2018/27548).

STATEMENT OF PROCEDURES

Personal Protective Equipment

					
Disposable gloves	High-vis clothing	Protective eyewear	Disposable coveralls with fitted hoods and cuffs.	Gumboots	P2 rated particulate face mask. Wearer must be clean shaven

Procedure


Unexpected finds of material suspected of being asbestos.
If unsure, contact site supervisor on 2-way radio or mobile
0427 788 952
Non-friable (bonded) asbestos
Friable asbestos
Reject load and record in WHS register
Reject load and record in WHS register
1. STOP handling material
2. Isolate area and set up barriers and signage to exclude others from the area
3. Notify site supervisor via 2-way radio and a Class B trained staff and record in WHS register
4. Class B trained staff to wear appropriate PPE and apply PVA glue solution to prevent movement of fibres
1. STOP handling material
2. Isolate area and set up barriers and signage to exclude others from the area
3. Notify site supervisor and a Class B licensed staff via 2-way radio and record in WHS register
4. Class B trained staff to wear appropriate PPE and wet down material and bag for transfer to Council's registered asbestos disposal cell
If at gatehouse,
ARC to advise customer to engage a licenced Class A asbestos removalist to contain asbestos.
The load is not to leave site until then. ARC can then dispose of at Council's registered asbestos disposal cell.
If NOT at gatehouse,
ARC to engage a licenced Class A asbestos removalist to contain asbestos before ARC disposes of it at Council's registered asbestos disposal cell

REVIEW

These Procedures will be reviewed every two years or in-line with the review of the parent policy and at other times as required. Changes to the Procedure that are consistent with the parent policy can be approved by the Coordinator Governance and Risk.

APPROVAL AND REVIEW		
Responsible Business Unit	Waste Management	
Responsible Officers	Theresa Choi, Josh Keene	
Date/s adopted	*Executive Management Committee* [updated by policy owner]	*Council* [DD Mmmm YYYY]
Date/s of previous adoptions	N/A	
Date of next review	30/04/2026	
CM Reference	AINT/2024/17905	

Safe Operating Procedure/Work Instruction – Wetting Down Loads at Asbestos Disposal Area

APPENDIX 26(B): MANAGEMENT OF ASBESTOS – WETTING DOWN

APPROVED BY: GUADA LADO DATE: 20/05/2024

CONTEXT

This procedure outlines the process of wetting down loads of booked asbestos waste arriving in customer vehicles at Armidale Regional Council's Armidale Waste Management Facility. It is for the purpose of dust suppression at Council's registered asbestos disposal area.

PARENT POLICY

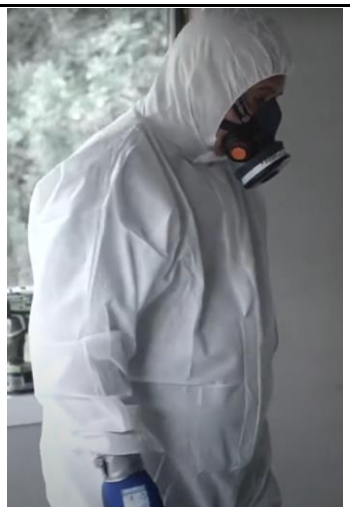
These Procedures are to be read in conjunction with the Asbestos Management Operational Policy (the Parent Policy) (AINT/2018/27548).

STATEMENT OF PROCEDURES

Personal Protective Equipment
Staff must wear the following:

					
Disposable coveralls with fitted hoods and cuffs.	Gumboots	Disposable gloves	P2 rated particulate face mask. Wearer must be clean shaven	Protective eyewear	High-vis clothing
CHECKLIST					
☐	☐	☐	☐	☐	☐

Procedure

Wind Speed: _____km/h		
Wind Direction: _____		
		Checklist
STEP 1	 Class B Asbestos Removal trained staff to wear appropriate PPE.	☐
STEP 2	 **Photo for demonstrative purposes only** Drive to registered asbestos disposal cell in site vehicle with water trailer (for loads greater than the volume of a box trailer, a water cart (through a contractor) will be used). Park the vehicle approximately 50 m and upwind of the asbestos disposal cell.	☐

		Checklist
STEP 3	 **Photo for demonstrative purposes only** Park vehicle approximately 30 m from the registered asbestos disposal cell and unwind hose to wet down load.	☐
STEP 4	 Staff to decontaminate and dispose of PPE in registered asbestos disposal cell and leave area in site vehicle	☐

Safe Operating Procedure/Work Instruction – Wetting Down Loads at Asbestos Disposal Area

SIGN-OFF

Staff Name	
Date	
Comments/room for improvement	

REVIEW

These Procedures will be reviewed every two years or in-line with the review of the parent policy and at other times as required. Changes to the Procedure that are consistent with the parent policy can be approved by the Coordinator Governance and Risk.

APPROVAL AND REVIEW		
Responsible Business Unit	Waste Management	
Responsible Officers	Theresa Choi, Josh Keene	
Date/s adopted	*Executive Management Committee* [updated by policy owner]	*Council* [DD Mmmm YYYY]
Date/s of previous adoptions	N/A	
Date of next review	20/05/2026	
CM Reference	AINT/2024/22917	

APPENDIX 27: MANAGEMENT OF OZONE DEPLETING GASED ITEMS

Standard Operating Procedure

PURPOSE AND SCOPE

The purpose of this procedure is to define the activities of acceptance and management of waste materials that contain ozone depleting gas (refrigerant gas) at Armidale Waste Management Facility.

PROCEDURE/STANDARD

Gatehouse staff to determine if incoming loads contain items which commonly contain ozone depleting gas (including refrigerators, freezers, air-conditioners or similar) are present through the load inspection protocol SOP in this PIRMP.

Items that are identified and are understood to be still containing gas (have no degassing certificate) OR have no obvious signs to suggest gas has been released (missing compressors, cut pipes etc) will be:

- Deposited by the user at a predetermined location on the site where damage / release of gas is minimised. Instructions on that location will be provided to the site user by the Gatehouse Attendant.
- Segregated from other waste until such time as a suitably qualified and certified person decants the gas from the units and certifies the gas has been removed.
- Items can then be co-mingled with the metal waste stockpiles at the site (pushed up).

It is considered essential that all staff at the site are aware and understand the specific requirements for safe handling of items (not to be crushed or damaged / pushed into stockpiles until advised that degassing has been completed).

BENEFIT OF COMPLIANCE TO PROCEDURE:

- Limit environmental damage
- Health and safety of public / facility user protected

CONSEQUENCE OF NON-COMPLIANCE TO INSTRUCTION:

- Infringements and/or fines from Regulatory Agencies

REVIEWED BY:	**APPROVED BY:**
DATE:	**DATE**

APPENDIX 28: COMMUNICATIONS RECIPIENTS SCHEDULE (NEIGHBOURS)

#	ADDRESS	NAME	PHONE
1	347 Dangarsleigh Road Armidale	Baroona Properties Pty Ltd P.O box 182 Cessnock 2325	
2	69 Seaton Street Armidale	SJ & AM Frost	(02)67721220
3	71 Seaton Street Armidale	DJ Heagney	(02)67722076
4	87 Seaton Street Armidale	RG, EM, AR Ovenden	(02)67720400
5	137-159 Long Swamp Road Armidale	CJ & DA Milne	(02)67711640
6	161-181 Long Swamp Road Armidale	GK Axelsen	

APPENDIX 29: ENVIRONMENTAL REPORTING CHECKLISTS

The following procedures define the protocol for undertaking site inspection and audits at the Armidale Waste Management Facility with the aim of:

- minimising the likelihood of a pollution incident occurring
- identifying non-conformance with EPA licence conditions and to implement corrective actions where necessary
- identifying non-conformance with the PIRMP and the implementation of corrective actions

AUDITING AND INSPECTION PROGRAM – OVERVIEW		
TYPE OF AUDIT	**FREQUENCY**	**RESPONSIBILITY**
Site Inspection	Daily, weekly, monthly, quarterly and after a rainfall event that causes significant run-off (>25mm event)	Waste Operations Supervisor
Site Audit	Quarterly, Six monthly	Waste Operations Supervisor
Environmental Audit	Annual	Manager Regional Waste

The inspection and auditing functions are to be undertaken in accordance with the following requirements:

LANDFILLED AREAS / LEACHATE PONDS and RESOURCE RECOVERY AREAS - SITE INSPECTION CHECKLIST ARMIDALE WASTE MANAGEMENT FACILITY								
DATE:							**INSPECTED BY:**	
ISSUE	**INSPECTION FREQUENCY AND ACKNOWLEDGEMENT**					**SATISFACTORY Y/N**	**ACTION TAKEN**	**COMMENTS:**
Perimeter fence line secure and intact	Monthly	**Month 1**	**Month 2**	**Month 3**	**Month 4**			
Detention basins / dams – empty and de-silted	Monthly / After rain							
Site re-vegetation areas are in good condition – no exposed faces, erosion	Monthly							
Site vegetation control –slashing, no evidence of weed infestation	Monthly							
Leachate pumps operational. Check records of volumes discharged are retained for each pumping instance	Monthly	**Month 1**	**Month 2**	**Month 3**	**Month 4**			
Leachate dam/s sound – no erosion, slips or seepage observed	Monthly	**Month 1**	**Month 2**	**Month3**	**Month 4**			
Leachate drainage lines and discharge lines in place, intact and secure	Monthly	**Month 1**	**Month 2**	**Month 3**	**Month 4**			
Intermediate cover applied to filled areas	Monthly	**Month 1**	**Month 2**	**Month 3**	**Month 4**			
Final capping applied to final landform design.	Monthly							
No evidence of erosion of the intermediate capping	Monthly / After rain							

LANDFILLED AREAS / LEACHATE PONDS and RESOURCE RECOVERY AREAS - SITE INSPECTION CHECKLIST ARMIDALE WASTE MANAGEMENT FACILITY								
DATE:							**INSPECTED BY:**	
ISSUE	**INSPECTION FREQUENCY AND ACKNOWLEDGEMENT**					**SATISFACTORY Y/N**	**ACTION TAKEN**	**COMMENTS:**
No evidence of leachate eruption through the capped zone/landfill toe/batters	Monthly / After rain	**Month 1**	**Month 2**	**Month 3**	**Month 4**			
Tipping face being kept to minimum size and shaped for minimum cover placement	Monthly	**Month 1**	**Month 2**	**Month 3**	**Month 4**			
Waste placed in 600mm layers and the correct compaction pattern applied to achieve lift heights of 2 to 3 metres.	Weekly	**Week 1**	**Week 2**	**Week 3**	**Week 4**			
Daily cover placed at the end of the day's operation and exposed waste areas completely covered	Weekly	**Week 1**	**Week 2**	**Week 3**	**Week 4**			
Daily cover 'stripped' to expose waste whenever over filling with waste occurs	Weekly	**Week 1**	**Week 2**	**Week 3**	**Week 4**			
Any evidence of litter beyond the active tipping area.	Weekly	**Week 1**	**Week 2**	**Week 3**	**Week 4**			
Condition and functionality of stormwater infrastructure sound.	Monthly / After rain							
Any evidence of sedimentation downstream of stormwater basins or detention structures	Monthly / After rain							

LANDFILLED AREAS / LEACHATE PONDS and RESOURCE RECOVERY AREAS - SITE INSPECTION CHECKLIST ARMIDALE WASTE MANAGEMENT FACILITY								
DATE:							**INSPECTED BY:**	
ISSUE	**INSPECTION FREQUENCY AND ACKNOWLEDGEMENT**					**SATISFACTORY Y/N**	**ACTION TAKEN**	**COMMENTS:**
Evidence of soil tracking onto road surfaces	Monthly / After rain	**Month 1**	**Month 2**	**Month 3**	**Month 4**			
Signs of dust generation around perimeter of site	Monthly	**Month 1**	**Month 2**	**Month 3**	**Month 4**			
Surface of hardstand areas intact/repairs or rectification required.	Monthly							
Sediment controls maintained around cover stockpiles	Monthly							
Compliance with facility operating times	Monthly	**Month 1**	**Month 2**	**Month 3**	**Month 4**			
Wastewater, septic, leachate tanks, inspected and are operational. No evidence of overflows noted or likely	Weekly	**Week 1**	**Week 2**	**Week 3**	**Week 4**			
Evidence of feral animal activity	Monthly							
Record of Incidents or site complaints up to date (entire facility)	Annually							

LANDFILLED AREAS / LEACHATE PONDS and RESOURCE RECOVERY AREAS - SITE INSPECTION CHECKLIST

ARMIDALE WASTE MANAGEMENT FACILITY

DATE:							**INSPECTED BY:**	
ISSUE	**INSPECTION FREQUENCY AND ACKNOWLEDGEMENT**					**SATISFACTORY Y/N**	**ACTION TAKEN**	**COMMENTS:**
		Month 1	**Month 2**	**Month 3**	**Month 4**			
Evidence of bird infestations at tipping face	Monthly							

VERIFIED BY: Waste Operations Supervisor

Satisfactory ☐ Unsatisfactory ☐

DATE:

FERAL ANIMAL INSPECTION and ACKNOWLEDGEMENT RECORD

ARMIDALE WASTE MANAGEMENT FACILITY

ANIMAL	JANUARY	APRIL	JULY	OCTOBER	PRESENCE Y/N	ACTION TAKEN	COMMENTS
Feral Cats							
Rats/mice							
Dogs							
Foxes							

VERIFIED BY: Waste Operations Supervisor

Satisfactory ☐ Unsatisfactory ☐

DATE:

SMALL VEHICLE WASTE TRANSFER STATION / CRC / LUNCHROOM- SITE INSPECTION CHECKLIST									
ARMIDALE WASTE MANAGEMENT FACILITY									
DATE:								**INSPECTED BY:**	
ISSUE	**INSPECTION FREQUENCY AND ACKNOWLEDGEMENT**						**SATISFACTORY Y/N**	**ACTION TAKEN**	**COMMENTS**
Roads, aprons and tipping platform free of dirt and debris	Monthly / After rain								
Emergency spill kit/s on site and fully stocked	Monthly	**Month 1**	**Month 2**	**Month 3**	**Month 4**				
Evidence of vermin sightings/sound/droppings	Monthly	**Month 1**	**Month 2**	**Month 3**	**Month 4**				
Chemicals and hazardous materials properly separated and stored	Monthly	**Month 1**	**Month 2**	**Month 3**	**Month 4**				
CRC Chemical closets secure and undamaged	Monthly	**Month 1**	**Month 2**	**Month 3**	**Month 4**				
CRC Chemical bunded pallets empty and undamaged	Monthly	**Month 1**	**Month 2**	**Month 3**	**Month 4**				
CRC stillage's and pallets not being overfilled	Monthly	**Month 1**	**Month 2**	**Month 3**	**Month 4**				
General housekeeping – site tidy – litter collected, signage in place, mowing etc.	Monthly	**Month 1**	**Month 2**	**Month 3**	**Month 4**				
Fire extinguisher and hose reel in place and tags current	Annually								
Test dousing showers and Eyewash stations	Monthly	**Month 1**	**Month 2**	**Month 3**	**Month 4**				

SMALL VEHICLE WASTE TRANSFER STATION / CRC / LUNCHROOM- SITE INSPECTION CHECKLIST									
ARMIDALE WASTE MANAGEMENT FACILITY									
DATE:								INSPECTED BY:	
ISSUE	INSPECTION FREQUENCY AND ACKNOWLEDGEMENT						SATISFACTORY Y/N	ACTION TAKEN	COMMENTS
Fuel containers and fuel storage – secured/not leaking / properly sealed / bunded	Monthly	Month 1	Month 2	Month 3	Month 4				
Stockpiles of combustible materials minimised	Monthly	Month 1	Month 2	Month 3	Month 4				
Record of incidents up to date and PIRMP review occurred for each incident	Monthly	Month 1	Month 2	Month 3	Month 4				
Gas bottles are stored in accordance with SafeWork NSW and EPA requirements.	Monthly	Month 1	Month 2	Month 3	Month 4				
Excessive odours not present	Monthly	Month 1	Month 2	Month 3	Month 4				
Waste transfer bins not being overfilled	Monthly	Month 1	Month 2	Month 3	Month 4				
Litter controlled around the facility	Monthly	Month 1	Month 2	Month 3	Month 4				
Oil Storages levels checked and no evidence of overflow or likely discharge. Servicing arranged?	Monthly	Month 1	Month 2	Month 3	Month 4				

SMALL VEHICLE WASTE TRANSFER STATION / CRC / LUNCHROOM- SITE INSPECTION CHECKLIST								
ARMIDALE WASTE MANAGEMENT FACILITY								
DATE:							**INSPECTED BY:**	
ISSUE	**INSPECTION FREQUENCY AND ACKNOWLEDGEMENT**					**SATISFACTORY Y/N**	**ACTION TAKEN**	**COMMENTS**
		Month 1	**Month 2**	**Month 3**	**Month 4**			
All signage and traffic control operating effectively	Monthly							
VERIFIED BY: Waste Operations Supervisor **DATE:**				☐ Satisfactory	☐ Unsatisfactory			

GREEN WASTE /CITY 2 SOIL STOCKPILING AND PROCESSING AREAS - SITE INSPECTION CHECKLIST									
ARMIDALE WASTE MANAGEMENT FACILITY									
DATE:								**INSPECTED BY:**	
ISSUE:	**INSPECTION FREQUENCY AND ACKNOWLEDGEMENT**						**SATISFACTORY Y/N**	**ACTION TAKEN**	**COMMENTS**
Hardstand areas, roads and unloading zone free of excessive dirt and debris	Weekly/ After rain	**Week 1**	**Week 2**	**Week 3**	**Week 4**				
Adjacent stormwater infrastructure clear of debris, litter and sediment accumulations	Weekly/ After rain	**Week 1**	**Week 2**	**Week 3**	**Week 4**				
Evidence of vermin sightings/sound/droppings	Weekly	**Week 1**	**Week 2**	**Week 3**	**Week 4**				
Surface of hardstand areas intact/repairs or rectification required	Monthly/ After rain								
General housekeeping – site tidy – litter collected, signage in place, mowing etc.	Weekly	**Week 1**	**Week 2**	**Week 3**	**Week 4**				
Record of incidents up to date	Daily	**Week 1**	**Week 2**	**Week 3**	**Week 4**				
Processing of stockpiled green waste is occurring routinely	Monthly								
Safety exclusion zones in place during mulching and materials loading	When mulching / loading								
Bulk mass of stockpiles being managed to prevent likelihood of spontaneous combustion.	Weekly	**Week 1**	**Week 2**	**Week 3**	**Week 4**				
Excessive odours not present	Weekly	**Week 1**	**Week 2**	**Week 3**	**Week 4**				

GREEN WASTE /CITY 2 SOIL STOCKPILING AND PROCESSING AREAS - SITE INSPECTION CHECKLIST									
ARMIDALE WASTE MANAGEMENT FACILITY									
DATE:								**INSPECTED BY:**	
ISSUE:	**INSPECTION FREQUENCY AND ACKNOWLEDGEMENT**						**SATISFACTORY Y/N**	**ACTION TAKEN**	**COMMENTS**
Excessive dust not occurring during mulching	When mulching								
Hydrant connections tested / flushed	Monthly	**Week 1**	**Week 2**	**Week 3**	**Week 4**				
Contamination being controlled	Weekly	**Week 1**	**Week 2**	**Week 3**	**Week 4**				
VERIFIED BY: Waste Operations Supervisor ☐ Satisfactory ☐ Unsatisfactory **DATE:**									

RESOURCE RECOVERY AREAS, GATEHOUSE, WEIGHBRIDGE, WASHBAY, STORAGES and SITE SURROUNDS – SITE INSPECTION CHECKLIST									
ARMIDALE WASTE MANAGEMENT FACILITY									
DATE:								**INSPECTED BY:**	
ISSUE	**INSPECTION FREQUENCY AND ACKNOWLEDGEMENT**						**SATISFACTORY Y/N**	**ACTION TAKEN**	**COMMENTS**
Entrance and exit roads free of excessive dirt and debris	Weekly/ After rain	**Week 1**	**Week 2**	**Week 3**	**Week 4**				
Adjacent stormwater infrastructure clear of debris, litter and sediment accumulations	Weekly/ After rain	**Week 1**	**Week 2**	**Week 3**	**Week 4**				
Roadways and hardstand areas intact/repairs or rectification required	Monthly/ After rain								
General housekeeping – site tidy – litter collected, signage in place, mowing etc	Weekly	**Week 1**	**Week 2**	**Week 3**	**Week 4**				
Evidence of fuel / lubricant contamination / spillage	Weekly	**Week 1**	**Week 2**	**Week 3**	**Week 4**				
Record of Incidents up to date	Daily	**Week 1**	**Week 2**	**Week 3**	**Week 4**				
All signage and traffic control operating effectively	Daily	**Week 1**	**Week 2**	**Week 3**	**Week 4**				
Activities confined to operational area	Monthly								

RESOURCE RECOVERY AREAS, GATEHOUSE, WEIGHBRIDGE, WASHBAY, STORAGES and SITE SURROUNDS – SITE INSPECTION CHECKLIST								
ARMIDALE WASTE MANAGEMENT FACILITY								
DATE:							**INSPECTED BY:**	
ISSUE	**INSPECTION FREQUENCY AND ACKNOWLEDGEMENT**					**SATISFACTORY Y/N**	**ACTION TAKEN**	**COMMENTS**
Fire safety buffer zone maintained around tyre, mulch / timber stockpiles.	Monthly							
Wastewater, septic, leachate tanks inspected and are operational. No evidence of overflows noted or likely	Weekly	**Week 1**	**Week 2**	**Week 3**	**Week 4**			
Emergency spill kit, asbestos kit and sharps kit on site and fully stocked	Weekly	**Week 1**	**Week 2**	**Week 3**	**Week 4**			
Test dousing shower	Weekly	**Week 1**	**Week 2**	**Week 3**	**Week 4**			
Fuel containers and fuel storage – secured/not leaking/properly sealed / bunded	Weekly	**Week 1**	**Week 2**	**Week 3**	**Week 4**			
VERIFIED BY: Waste Operations Supervisor ☐ Satisfactory ☐ Unsatisfactory **DATE:**								

QUARTERLY and SIX MONTHLY SITE AUDIT CHECKLIST					
ARMIDALE WASTE MANAGEMENT FACILITY					
DATE:				**CONDUCTED BY:**	
ISSUE	**ACTIVITY FREQUENCY AND ACKNOWLEDGEMENT**		**SATISFACTORY Y/N**	**ACTION TAKEN**	**COMMENTS**
EPL Environmental Monitoring (Leachate, Groundwater, Surface water, Gas monitoring etc) undertaken, evaluated and published to webpage within 14 days of receipt from Lab	Quarterly				
Leachate management system intact and operational	Quarterly				
Intermediate cover applied to filled areas	Quarterly				
Final capping applied to final landform.	Quarterly				
Surveys undertaken to confirm final landform design is being achieved	Six Monthly				
Vermin – inspection undertaken	Quarterly				
Fire Safety inspection undertaken for all essential fire safety equipment onsite. Fire breaks being maintained.	Six Monthly				
Activities confined to appropriate areas	Quarterly				
Conditions of EPA licence for facility being met	Quarterly				
Incident reporting – entries correct and complete	Six Monthly				
Register of weekly site inspections – current and complete	Six Monthly				
Review of on-site procedures against PIRMP undertaken	Annually				
SOPs understood by staff and required training for EPL / PIRMP etc up to date.	Annually				
Inspection of septic infrastructure undertaken (corrective action / servicing initiated if required)	Six Monthly				

QUARTERLY and SIX MONTHLY SITE AUDIT CHECKLIST					
ARMIDALE WASTE MANAGEMENT FACILITY					
DATE:				**CONDUCTED BY:**	
ISSUE	**ACTIVITY FREQUENCY AND ACKNOWLEDGEMENT**		**SATISFACTORY Y/N**	**ACTION TAKEN**	**COMMENTS**
Inspection of stormwater infrastructure undertaken (corrective action initiated if required)	Six Monthly				
Review of incident reports and corrective actions	Six Monthly				
Review of dust and sediment control requirements	Quarterly				
Acoustic testing undertaken for licence conformity	Annually				
Weighbridge tested and verified.	Annually				
Weighbridge activities audited by independent third party	Annually				
Waste Compaction survey undertaken	Annually				
VERIFIED BY: Waste Operations Supervisor		Satisfactory	Unsatisfactory		
DATE:					

ANNUAL LANDFILL ENVIRONMENTAL MANAGEMENT PLAN and PIRMP AUDIT					
ARMIDALE WASTE MANAGEMENT FACILITY					
DATE:				**CONDUCTED BY:**	
ISSUE	**ACTIVITY FREQUENCY and ACKNOWLEDGEMENT**		**SATISFACTORY Y/N**	**ACTION TAKEN**	**COMMENTS**
Annual volumetric filling survey undertaken	Annual				
Review of environmental monitoring records.	Annual				
Review of environmental management documentation including LEMP, PIRMP, SOPs, registers and reporting	Annual				
Toolbox meeting with site staff and lease/facility operators to ensure an understanding of the PIRMP requirements are satisfactory	Annual				
Review of non-conformance reports, weekly inspection checklist, Quarter and Six-monthly audit, Pollution Incident Records and PIRMP reviews (occurred as required)	Annual				
Identification and implementation of any improvements to the operation of the facility	Annual				
Annual water quality (surface water, ground water and leachate) and gas monitoring reports prepared. Trend information prepared and reviewed for LEMP / PIRMP amendments / EPA reports	Annual				
VERIFIED BY: Manager Regional Waste **DATE:**		Satisfactory	Unsatisfactory		

APPENDIX 30: SITE SERVICES AND INFRASTRUCTURE PLANS