



# Jemena Limited

## AMI - Environmental Management Plan

ELE-999-PA-EV-012



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AMI - Environmental Management Plan

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**Owning Functional Area**

Business Function:	Network Assets – Electricity Metering
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# 1. Introduction

## 1.1 Purpose

This Environmental Management Plan (EMP) provides the environmental framework for planning and delivering Jemena's large-scale Victorian electricity smart meter replacement program, consisting of:

- Aged-asset replacement of existing smart meters - AMI to AMI
- Associated site visits, communications activities, operational activities and material handling

The program replaces the original inspection-based smart meter condition assessment program, which only replaced meters if field inspection deemed it necessary. Due to asset aging, manufacturer life-expiry and increased meter failures, the program has moved to a proactive asset replacement strategy, significantly increasing:

- Meter recovery logistics
- E-waste and hazardous waste volumes
- Storage, handling and transportation of electronic equipment
- OHS requirements associated with higher field activities
- Environmental controls for the disposal and recycling of meters, communication modules and packaging

This EMP outlines how environmental risks will be managed throughout the program lifecycle.

## 1.2 Scope & Application

This EMP applies to all personnel, contractors and subcontractors delivering:

- Replacement of existing AMI smart meters
- Responsible recycling/disposal of removed electronic meters
- Communications modules
- Interactions within shared fusing environments, meter boards and consumer mains
- Transport, temporary storage, and disposal of removed equipment
- Waste and materials management at depots, warehouses and customer sites
- All OHS and environmental obligations under Victorian energy safety, EPA and WorkSafe regulations

## 1.3 Objectives

The environmental objectives of the program are to:

- Prevent environmental harm during the widespread replacement of meters across Jemena's network.
- Ensure all end-of-life meters and components are responsibly recycled in accordance with EPA Victoria requirements.
- Minimise waste sent to landfill through approved e-waste recycling pathways.
- Reduce vehicle emissions through efficient routing and fleet utilisation.
- Ensure all personnel understand and meet environmental obligations.
- Provide transparent reporting on environmental incidents and continuous improvement.

## 1.4 Governance and Responsibilities

The table below defines the Governance roles and responsibilities:

Role	Responsibilities
Program Director	<ul style="list-style-type: none"> <li>• Provides overall leadership to ensure the AMI replacement program meets all environmental obligations.</li> <li>• Ensures environmental risks (e-waste volumes, asbestos meter boards, contaminated sites, increased vehicle movements) are identified early and managed appropriately.</li> <li>• Ensures sufficient resources, contractors, and capabilities are in place to meet environmental requirements.</li> <li>• Escalates major environmental concerns to executive leadership and regulators where required.</li> </ul>
Environmental Manager /HSEQ Lead	<ul style="list-style-type: none"> <li>• Owns the EMP and ensures implementation across all program workstreams.</li> <li>• Provides technical oversight on e-waste handling, spill response, site contamination, asbestos protocols, noise, and dust controls.</li> <li>• Delivers environmental training and ensures field teams are competent in all EMP procedures.</li> <li>• Conducts audits, inspections, and continuous improvement initiatives.</li> <li>• Leads investigation and reporting of all environmental incidents.</li> </ul>
Field Delivery Manager	<ul style="list-style-type: none"> <li>• Ensures all field crews comply with EMP requirements at customer sites.</li> <li>• Oversees correct segregation, storage, and transport of removed smart meters and mechanical meters.</li> <li>• Ensures contractors follow environmental controls, including PPE, spill kits, waste handling, and asbestos identification.</li> <li>• Conducts field-based audits, toolbox talks, and safety/environmental briefings.</li> <li>• Ensures environmental documentation and field records are completed accurately.</li> </ul>
Depot/Logistics Manager	<ul style="list-style-type: none"> <li>• Ensures depots and storage facilities comply with EMP requirements, including correct handling and storage of e-waste and hazardous materials.</li> <li>• Manages transport of removed meters to EPA-licensed recyclers.</li> <li>• Maintains segregation of waste streams, secure containment, and chain-of-custody records.</li> <li>• Ensures spill kits, bunding, and environmental controls are in place at all facilities.</li> </ul>
IT Systems Manager	<ul style="list-style-type: none"> <li>• Maintains systems that support environmental compliance, including asset traceability, waste tracking, disposal records, and incident management systems.</li> <li>• Ensures MDMS/SAP/field mobility continue to capture data required to meet e-waste, disposal, and audit obligations.</li> <li>• Supports accurate reporting to regulators and internal audit processes.</li> </ul>
Customer Operations Manager	<ul style="list-style-type: none"> <li>• Communicates customer-facing environmental impacts, including noise restrictions, dust management, asbestos issues, and meter board contamination.</li> <li>• Ensures customer communications align with EMP obligations (e.g., safe access, environment-related delays).</li> <li>• Coordinates responses to environmental enquiries or complaints from customers or the community.</li> </ul>
Regulatory & Compliance Lead	<ul style="list-style-type: none"> <li>• Ensures the program meets all environmental regulatory obligations, including EPA Victoria e-waste laws, transport rules, asbestos controls, and Energy Safe Victoria requirements.</li> <li>• Oversees environmental reporting to AER, AEMO, DEECA, and other bodies as required.</li> <li>• Maintains EMP-related policies, evidence, and audit readiness.</li> </ul>
Field Technicians / Metering Contractors	<ul style="list-style-type: none"> <li>• Follow all EMP procedures at all sites.</li> <li>• Segregate and handle meters and materials in accordance with e-waste and hazardous waste controls.</li> <li>• Identify asbestos or contaminated meter boards and apply correct protocols.</li> </ul>

Role	Responsibilities
	<ul style="list-style-type: none"><li>• Carry spill kits, use PPE, and maintain safe environmental practices.</li><li>• Report any environmental hazard or incident immediately.</li></ul>

## 1.5 Increase in E-Waste Volumes

Compared to the previous inspection-based program, the proactive replacement schedule produces vastly greater quantities of:

- Whole smart meters
- RF-mesh communications modules
- PCBs and wiring harnesses
- Plastic and metal meter housings

All removed meters must be classified as e-waste and cannot enter landfill under Victorian EPA regulations.

Smart meters may contain:

- Heavy metals
- PCBs
- Capacitors and power supply components
- Batteries

These require segregated disposal, compliant transport and authorised recyclers.

## 2. Operational Environmental Risks - Site Access, Meter Handling & Waste Generation

The AMI meter replacement program involves diverse installation environments and high volumes of removed equipment, each contributing to environmental and safety risks that must be actively managed.

### 2.1 Site Access, Meter Board Condition & Shared Fusing

Environmental and safety risks increase when technicians work in complex or degraded meter environments, including:

- **Meter boards with degraded or asbestos-containing backboards**, requiring strict identification, isolation, and regulated disposal procedures.
- **Multi-occupancy dwellings**, where access constraints and shared infrastructure increase electrical and environmental control complexities.
- **Shared-fusing arrangements**, will be managed in accordance with Jemena's internal OH&S policies and shared fusing notification procedures. Additional safety risks may require coordination with other occupants to prevent unsafe energisation.
- **Weather-exposed, water-damaged or contaminated meter panels**, which increase the likelihood of equipment contamination, mould, or hazardous material exposure.

These conditions require heightened environmental controls, correct PPE, appropriate waste segregation, and adherence to asbestos protocols

### 2.2 Transportation, Handling & Storage of Removed Meters

The high volume of removed devices (smart meters, and comms modules) generates environmental risks associated with transport and storage, including:

- **Storage and stacking risks**, such as collapsed loads or damaged e-waste containers.
- **Manual handling risks**, which may lead to dropped or damaged units creating contamination hazards.
- **Increased heavy-vehicle movements**, contributing to emissions, noise, dust, and community impact.

All removed equipment must be transported using EPA-compliant e-waste and hazardous waste processes, with appropriate containment, chain-of-custody, and licensed recycling pathways.

### 2.3 Waste Generation (E-Waste & Hazardous Waste)

The program generates large volumes of electronic waste, including entire meters, PCBs, and antennas. Environmental impacts include:

Potential Impacts

- Illegal or inappropriate disposal leading to regulatory breaches.

- Landfill contamination from prohibited e-waste streams.

#### Environmental Controls

- All removed meters are classified as e-waste and must not enter landfill.
- Mandatory segregation of waste streams at point-of-collection (meters, metal-only waste).
- Use of EPA-licensed recyclers with documented destruction and recovery certificates.
- Field crews trained in waste handling and storage protocols.



### 3. Controls

Aspect	Impacts	Controls/Mitigations
Transport & Logistics	<ul style="list-style-type: none"> <li>• GHG emissions</li> <li>• Noise and dust</li> <li>• Increased fuel consumption</li> </ul>	<ul style="list-style-type: none"> <li>• Route optimisation</li> <li>• Reduction of vehicle idling</li> <li>• Preference for low-emission or hybrid fleet options</li> </ul>
Hazardous Materials	<ul style="list-style-type: none"> <li>• Spills or damaged electronic components</li> <li>• Exposure to hazardous materials (PCBs, capacitors)</li> </ul>	<ul style="list-style-type: none"> <li>• Spill kits carried in all vehicles</li> <li>• Dangerous Goods—compliant storage and transport containers</li> <li>• SDS available for all materials</li> <li>• Mandatory PPE requirements and training</li> </ul>
Noise & Air Quality	<ul style="list-style-type: none"> <li>• (Implicit impacts for this aspect: noise disturbance, dust generation)</li> </ul>	<ul style="list-style-type: none"> <li>• Restricted working hours</li> <li>• Dust suppression methods (e.g., foam spray)</li> <li>• Use of low-noise equipment where possible</li> </ul>

## 4. Environmental Work Procedures

### 4.1 Meter Removal

All meters must be removed using environmentally safe practices. Before any removal work begins, the meter must be fully de-energised to ensure both safety and compliance. Technicians must carefully assess the meter board for asbestos, degraded mounting surfaces, or signs of contamination. Once the site is confirmed safe, meters are removed and immediately segregated according to their type—smart meters and communications modules. All removed units must be placed directly into approved, sealed containers designed to prevent contamination, spills, or accidental damage.

### 4.2 Storage and Transport

Removed meters and components must be stored and covered. Containers must be clearly labelled “E-WASTE – SMART METERS” to ensure correct identification and segregation. All stacking, manual handling, and transport activities must comply with established safety standards, ensuring containers remain stable and secure during handling and vehicle movements.

### 4.3 Disposal and Recycling

All removed electrical equipment — including smart meters, communications modules, and PCBs, must be diverted entirely to EPA-authorised e-waste recyclers. Contractors must provide certificates of destruction or recycling confirming that all material has been processed in accordance with regulatory requirements. Program teams must maintain accurate records and report recycling volumes to demonstrate ongoing compliance and track environmental performance. Contractors will be required to follow Jemena’s EMP framework guidelines.

### 4.4 Monitoring Audit & Continuous Improvement

- Periodic field audits
- Regular waste volume reporting
- Regular review of recycling performance
- Contractor audits
- EMP review based on new risks

This EMP applies rigorous environmental controls to safely deliver the Victorian AMI smart meter replacement program and manage all associated e-waste, hazardous materials, field operations and OHS uplift requirements.