

Environmental Management

Awareness Presentation



Introduction

This presentation will address...

1. Land Management
2. Discharges to Water
3. Dust and Odour
4. Noise and Vibration
5. Waste Management
6. Dangerous Goods and Hazardous Substances

→ **EMP** = Environmental Management Plan



Land Management

General Requirements

Land Conservation: Areas of habitat will not to be **altered** or **interfered** with, without appropriate authorisation

Litter: Litter is not left on public property or vacant land.
Worksites are kept **litter free**.
Waste is not buried on site or burnt.
Waste is stored on site in a designated area.

Reserve Areas: We only carry out work within or adjacent to **parks, reserves** and **wilderness** zones if we have the appropriate authority

Protected Wildlife: We do not remove or interfere with protected wildlife unless we have the appropriate authority



Land Management

Weed Management

Weed & Soil Matter: ALL of our equipment is clean and free of weed / soil matter **prior to entering or leaving** site

Weed Growth: Weeds are managed so as not to present an **environmental hazard**, be detrimental to **neighbouring properties** or to the **diversity** of the area

Noxious Weeds: Are **controlled** in a manner that satisfies local council requirements and legislation



Land Management

Weed Management

Weed Poisoning: We use a **low residual poison** of the weakest strength. Weed poisoning is conducted in compliance with applicable legislation.

Weed Spraying: Environmental impacts / risk assessment is first reviewed
Spraying is conducted in accordance with **approved** documented safe work processes and we consider:

- Wind speed
- Spraying method
- Waterways adjacent to the spray area
- Location of stock and/or personnel
- Warning Signage
- PPE



Land Management

Cultural Heritage

- Heritage Buildings:** All heritage buildings on or adjacent to a worksite are **identified prior** to works being undertaken. Vibration monitoring is undertaken during vibration inducing works directly adjacent to any heritage-listed buildings.
- Entry or Work Near a Sacred Site:** Entry to or occupation of a worksite adjacent to a sacred site is **prohibited** without local, state and federal laws being observed **and** without the consent of the traditional owners.
- Reporting Archaeological Finds:** If we find an item that we **suspect** is an **archaeological** object we immediately cease work in the area, and **report** the find.



Water Management

General Requirements

- ➔ No water is discharged from a worksite down a drain or anywhere else without **permission** from local authorities
- ➔ We do not install bores without approval and a licence, or take water from a waterway or any other unapproved source
- ➔ We do not interfere with or obstruct the flow of a public waterway



Water Management

Storm Water

- Storm water falling on the worksite is **controlled** and the flow from the worksite kept **clean** and **managed** so that it does not cause erosion or pollute the environment
- The **EMP** for each site identifies the stormwater control measures for the site
- **Good housekeeping** and **prompt cleanup of spills** are important to ensure that storm water is clean as it leaves the site



Trade Waste

Or Discharges to Sewer

- We do not put any site waste into the sewer unless there is a Trade Waste Agreement.
- Each **EMP** details the Trade Waste Agreement and any limits if disposal of liquid to sewer is permitted.



Emissions to Air

Dust and Odour

Dust control strategies and mechanisms are recorded in the **EMP** for the project.

Gusher's strategies may include:

1. **Limiting Operations** during periods of high wind
2. **Covering** stockpiles and material storage areas
3. **Sealing** of plant operating areas and yards or use of water carts and sprinklers
4. Regular **sweeping** of the site
5. Use of **wind barriers** and wind breaks, temporary and permanent



Noise and Vibration

Noise and vibration testing is carried out where there is **potential for impact** and only by persons competent in the use of noise monitoring equipment

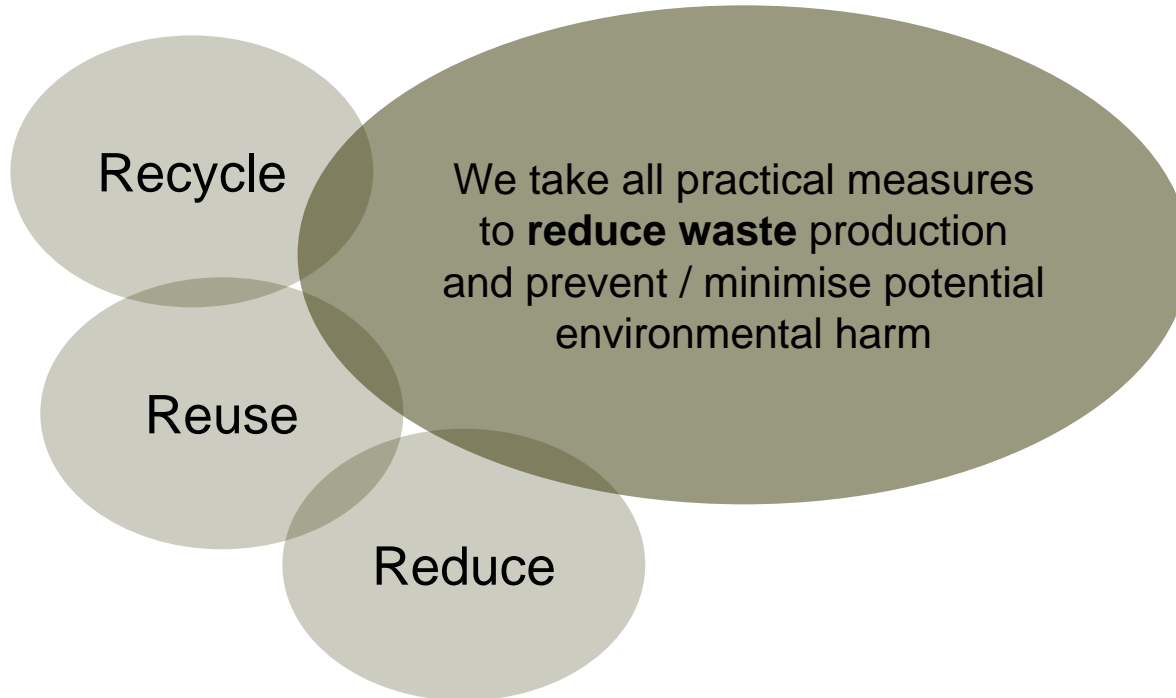
Approval is obtained from local **Heritage Authority** if there is any risk to Heritage buildings

We ensure that all plant and equipment is **correctly maintained** and has all mufflers and vibration damping devices fitted and operating

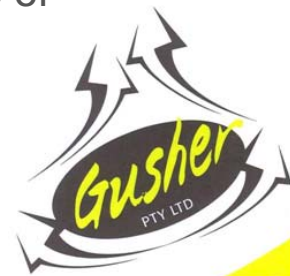


Waste Management

Recycle, Reduce, Reuse



Licensed and suitably equipped contractors are used to remove and dispose of waste. They provide us with a **certificate** or **receipt** for each pick up.



Dangerous Goods

General Requirements

All explosives (including power tools) or other substances not normally used are **approved** by the Site Manager in consultation with the Compliance Manager.

We **avoid refuelling on site.**

If this is unavoidable, we do so **away from waterways and drains** and ensure spill kits are available.

Hazardous substances and Dangerous goods are **transported** in accordance with **applicable legislation.**

Delivery and dispensing areas will be **hard sealed and bunded** where possible.

Vehicles containing dangerous goods will carry a **portable spill kit**



Dangerous Goods

Storage

Current MSDS (less than 5 years old) are kept on site and accessible.

A **manifest** is available for all locations where the Legislated threshold is exceeded.

All Dangerous Goods containers and tanks are **clearly labelled** in accordance with applicable Legislation.

Where possible, we store all substances in their **original containers**.



Dangerous Goods

Storage

All storage tanks for Hazardous Substances and Dangerous Goods:

1. Are clearly **labelled** in accordance with applicable legislation
2. Have **high** and **low** safe fill levels clearly displayed
3. Are **vented** in accordance with Australian Standard



Dangerous Goods

Spill Control

- Our Site Manager or Compliance Manager will determine what **spill kit** types and locations are suitable for each site
- **Training** is provided in the use of the chosen spill kits
- **Spill kit locations** are signed and marked on the Emergency Plan
- Spill kits and other emergency equipment are regularly maintained.



Dangerous Goods

Bunding

All bunding is:

Designed in accordance with Legislative requirements

Approved by our Compliance Manager or Site Manager

Able to contain 25% of the total volume stored and 110% of the largest container (whichever is greater)

Covered and emptied regularly

→ **ALL** Dangerous goods stored on site are **bunded**



Portable Bund



Environmental Management Plan

A site specific **EMP** is developed for each major site by the Compliance Manager.

Inclusions

1. Storm water
2. Trade waste
3. Prescribed waste
4. Land management
5. Emissions to air
6. Noise and Vibration
7. Dangerous Goods & Hazardous Substances
8. Emergency Response
9. Incident Reporting

Frequency

- Reviewed and updated as site conditions change or at least 6 monthly
- To be approved by the General Manager



Emergency Planning

The Compliance Manager and Site Manager will ensure that **emergency preparation** for each site is carried out including:

Emergency Plan

First Aid Kits

Spill kits

Placarding and Signage

Manifest (if required)

Alarms / sirens

Firefighting Equipment

Bunding

Designated muster points



Thankyou for viewing this presentation.

The team at Gusher Pty Ltd.

