

# Harmful Materials Disposal Procedure



Version 6

Revised By: Andy Mudge – Environmental Coordinator

Approved By: Euan Diver – Environmental Service Manager

Date: 20 December 2022

Date: 12 January 2023



# **Contents**

1	Int	troduction	3
1.	1	Legislative Requirements	3
1.	2	Retention of Records	3
2	As	bestos	4
2.	1	Removal of Asbestos	4
2.:	2	Storage of Asbestos	5
2.:	3	Onward Management of Resource	5
3	Au	itomotive Fuel	6
3.	1	Collection of Automotive Fuel	6
3.	2	Onward Management of Resource	6
4	Au	tomotive Oil	6
4.	1	Collection of Automotive Oil	6
4.	2	Onward Management of Resource	6
5	Ba	tteries (Household and Vehicle)	7
5.	1	Collection of Batteries – Alkaline and Lithium-ion	7
5.:	2	Collection of Batteries – Lead Acid	7
5	3	Onward Management of Resource	7
6	Ch	emicals	9
6.	1	Collection of Chemicals	9
6.	2	Onward Management of Resource	9
7	Со	oking Oil	10
7.	1	Collection of Used Cooking Oil	10
7.	2	Onward Management of Resource	10
8	E-v	waste	11
8.	1	Collection of E-Waste	11
8.	2	Onward Management of Resource	11



9 Flu	orescent Globes12			
9.1	Collection of Spent Fluorescent Globes			
9.2	Onward Management of Resource			
10 Glycol 13				
10.1	Collection of Glycol			
10.2	Onward Management of Resource			
11 P	aint 14			
11.1	Collection of Paint			
11.2	Onward Management of Resource			
12 Rubber				
12.1	Collection of Rubber			
12.2	Onward Management of Resource			
13 T	oner Cartridges 16			
13.1	Collection of Toner Cartridges			
13.2	Onward Management of Resource			
14 T	yres17			
14.1	Collection of Tyres			
14.2	Onward Management of Resource			
15 V	Vhite Goods Containing Refrigerant 18			
15.1	Collection of White Goods			
15.2	Onward Management of Resource			



## 1 Introduction

Kosciuszko Thredbo (KT) operates in one of Australia's most beautiful and sensitive natural settings. The alpine and subalpine environments of Thredbo have international conservation significance and are valued by all Australians.

These natural resources provide Thredbo with a major strategic advantage in its business activities at Thredbo. This privilege also carries a responsibility for wise management. We are committed to achieving and maintaining a leading position in sustainable alpine resort management.

While we have a disposal procedure in place, please consider whether the potentially harmful substance needs to be used in the first place, as there may be a less dangerous alternative available. Also consider how a potentially harmful substance will need to be disposed of at the end of its working life, and what fees are associated with responsible disposal.

This document is to inform both Thredbo village sublessees and KT departments of the appropriate disposal methods for harmful materials. If you have a harmful material that requires disposal contact the Environmental Services department who will help manage the disposal.

## 1.1 Legislative Requirements

The NSW Environment Protection Authority (EPA) administers a number of relevant regulations and acts pertaining to the management and disposal of harmful wastes. Current legislation includes, but is not limited to, the following:

- Protection of the Environment Operations Act 1997
- Protection of the Environment Operations (Waste) Regulation 2014
- Environmentally Hazardous Chemicals Act 1985
- Environmentally Hazardous Chemicals Regulation 2017

#### 1.2 Retention of Records

Thredbo has an obligation to report the handling of harmful substances to National Parks and Wildlife Service (NPWS) and to EarthCheck as part of our benchmarking and certification. To be able to verify our disposal methods, evidence is required in the form of receipts, tax invoices, log-book notes, and any other suitable documentation. The recording of the mass, or volume, of all shipments and pick-ups of materials is imperative to accurately measure KT's performance.

The Environmental Services department should be forwarded all records (including invoices) to ensure all data is tabulated and stored correctly. If specific records are unavailable at the time of waste removal, Environmental Services should be notified by the relevant dispatchers of material, in order to create a record and follow up on any missing data. Records will be kept on-file for a minimum of 24 months.

If any staff members or contractors are unsure of the requirements for recording waste removal, they should contact Environmental Services for information.



## 2 Asbestos

Asbestos has been used in Australia for construction purposes between 1800 and 1990. It's properties for fireproofing, soundproofing, and insulation has made it widespread across buildings from this time period. The likelihood of asbestos, or Asbestos Containing Material (ACM) in buildings in Thredbo is considered relatively high due to the majority of the centre of Thredbo village being constructed between 1960 and 1990.

The following procedure outlines what is required for the disposal of asbestos and ACM from any KT site located in Thredbo village.

#### 2.1 Removal of Asbestos

Asbestos can <u>only</u> be removed by a qualified asbestos removalist with a NSW Asbestos work licence. There are two types of Asbestos Removal Licence and an Asbestos Assessor Licence.

A Class A Asbestos Work Licence is the preferred licence as the licence holder can assess and remove any quantity of asbestos or ACM including:

- any amount of friable asbestos or ACM
- any amount of Asbestos Contaminated Dust or Debris (ACD)
- any amount of non-friable asbestos or ACM

A Class B Asbestos Work Licence is more limited and can remove:

- any amount on non-friable asbestos or ACM
- ACD associated with the removal of non-friable asbestos or ACM

An Asbestos Assessor licence is required to carry out certain functions connected with class A asbestos removal work. A licensed asbestos assessor can conduct the following:

- air monitoring for Class A asbestos removal work
- clearance inspections for Class A asbestos removal work
- issuing clearance certificates in relation to Class A asbestos removal work

Please follow link for NSW Safe work to check any updates.

https://www.safework.nsw.gov.au/licences-and-registrations/licences/asbestos

## 2.1.1 Worksite restrictions when working in Thredbo Resort.

To mitigate the risk of exposure to employees, contractors and guests of Kosciuszko Thredbo when working with bonded asbestos products, personnel must;

- Use barriers to restrict entry of unauthorised personnel to the work area and to control contamination.
- Place asbestos removal caution signs at the barriers, which comply with AS 1319 Safety Signs for Occupational Environment.



Once asbestos has been removed from a KT building or site, it must be sealed using appropriate plastic, or a leak proof container, into manageable sizes and clearly labelled. All procedures must comply with Safe work NSW and EPA guidelines and only be carried out by qualified personnel.

## 2.2 Storage of Asbestos

Thredbo WTS has a labelled, plastic-lined and lidded container for appropriately sealed and labelled asbestos waste to be stored in. Asbestos will be stored in the labelled container until disposal of asbestos waste is organised.

The Assistant Environmental Manger or the Environmental Services Village Crew Supervisor must be notified when asbestos is being transferred to the WTS and the asbestos log at the WTS must be filled out appropriately. Asbestos disposal is organised and managed by the Environmental Services department.

If KT are transporting asbestos weighing more than 100 kg or consisting of more than 10 m<sup>2</sup> of asbestos sheeting in one load, KT is required to track and report this waste to the EPA using WasteLocate. https://wastelocate.epa.nsw.gov.au/

## 2.3 Onward Management of Resource

Asbestos must be disposed of at a licenced facility. Both Jindabyne Regional Waste Management Facility and Cooma Landfill are licenced asbestos disposal facilities.

Asbestos deliveries should be communicated with the appropriate facility prior to transportation. The contact details of both facilities are as follows:

Jindabyne Regional Waste Management Facility Phone: 02 6457 1062

6013 Kosciuszko Road Jindabyne NSW 2627

Cooma Landfill Phone: 02 6452 1105

8448 Monaro Highway,

Cooma NSW 2630



## 3 Automotive Fuel

Hydrocarbons in the form of fuel can be generated as waste through vehicle maintenance at locations such as the Mountain Cat Shed and the Engineering Workshop Lube Bay.

The following procedure outlines the required process for the disposal of waste fuel in Thredbo village.

#### 3.1 Collection of Automotive Fuel

Any waste fuels must be collected in appropriate, fuel-storage containers and are to be delivered to the Engineering Department at the Valley Terminal Workshop. Once a suitable amount has been collected, the disposal company is to be contacted for collection of the waste oil.

## 3.2 Onward Management of Resource

A certified transport and collection business is utilised for removing waste oils from Thredbo. Any queries regarding waste oil collections and transport should be directed to KT's Environmental Services Department.

## 4 Automotive Oil

This section is specific to oils such as those from motor or hydraulic applications. For cooking oil procedures see Section 7.

The following procedure outlines what is required for the disposal of any waste oil from any site located in Thredbo village.

#### 4.1 Collection of Automotive Oil

Any waste oil (hydraulic or engine, but not cooking oil) that is to be disposed of is to be collected in appropriate containers and be delivered to the Engineering Department at the Valley Terminal Workshop. Once enough has been collected, the disposal company is to be contacted for collection of the waste oil.

#### 4.2 Onward Management of Resource

A certified transport and collection business is utilised for removing waste fuel from Thredbo. Any queries regarding waste fuel collections and transport should be directed to KT's Environmental Services Department.



# 5 Batteries (Household and Vehicle)

Batteries are used across KT operations for applications such as TV remote controls, computer keyboards, walkie-talkies, cordless power tools, and KT fleet vehicles.

Different batteries are composed of different materials depending on their intended use. Examples of common types of batteries used by KT are:

- AAA/AA Alkaline batteries;
- C/D Alkaline batteries,
- Lithium Ion batteries, and
- Lead Acid batteries.

Batteries can be recycled to reclaim the metals and other materials used in their construction. However, different types of batteries require different recycling methods.

The following procedure outlines the steps for the disposal of batteries in Thredbo village.

#### 5.1 Collection of Batteries – Alkaline and Lithium-ion

Any used alkaline and lithium-ion batteries are to be deposited in the recycling containers in one of these three areas:

- Thredbo Information Centre;
- outside the KT Mountain office at Valley Terminal; and
- inside the KT Environmental Services office at Valley Terminal.

All batteries are stored in a dedicated bin in the Environmental Services office awaiting disposal. Once a suitable amount has been gathered, the batteries are then taken to the disposal company for recycling.

#### 5.2 Collection of Batteries – Lead Acid

Used lead acid batteries are generally produced as a result of vehicle servicing by KT mechanics. This type of battery requires a different process to recycle the materials and components.

When lead-acid battery waste is produced, the Environmental Services department should be contacted to arrange removal of the batteries to a safe storage location. This location is undercover at the WTS, where batteries are stored together on pallets until the off-site transport of the waste stream can be arranged.

#### 5.3 Onward Management of Resource

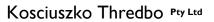
There are a number of options regarding battery recycling for household and vehicle batteries such as alkaline, lithium-ion, and lead-acid. Currently, KT undertake the removal of all batteries from site; a preference for limiting unnecessary transport is generally taken.

The below locations have been deemed as suitable battery recycling facilities:

Jindabyne Regional Waste Management Facility Phone: 02 6457 1062

6013 Kosciuszko Road

Jindabyne NSW 2627





**Battery World South Canberra** 

95 Grenville Court

Phillip ACT 2606

Phone: (02) 6282 9884

Fax: (02) 6285 2737

Email: south can be erra @ batteryworld.com.au



#### 6 Chemicals

Chemicals are substances, mixtures and articles that can pose a significant risk to health and safety if not managed correctly. They may have health hazards, physical hazards, or both. Additionally, they pose a risk to the health of the environment if allowed to escape containment.

The following procedure outlines what is required for the safe handling and disposal of any hazardous chemicals from sites located in Thredbo village.

#### 6.1 Collection of Chemicals

#### 6.1.1 Determine What Needs to be Disposed

The first step is to determine what chemicals are requiring disposal. Personnel must check the Safety Data Sheet (SDS) for each chemical to find out if KT can safely dispose of the product.

When using a chemical disposal company, it is vital to know how much (in Litres or Kilograms) of each chemical there is to be disposed of and the condition of the chemical container. Contact other departments to see if there are any similar chemicals requiring disposal.

## 6.1.2 Collect All Chemicals Together

Once it is determined what chemicals are requiring disposal, all chemicals need to be collected together in a single location, that has adequate bunding for the items being stored.

Where possible, containers used for the chemicals should either be in the original container, or a clearly labelled container composed of a suitable material, with the lid securely fastened. Any unknown container incurs the maximum costs for disposal.

Care must be taken to ensure that the risk of chemicals reacting is managed and reduced, including whether the chemicals can be stored together in the same location and the level of bunding that may be required. Consult the relevant SDS for each chemical to find this information.

## 6.1.3 Collect All Relevant Safety Data Sheets

Where the chemical is known, an SDS is required. The SDS must be kept with the chemical that is to be disposed, and provided to the disposal company upon collection.

## 6.2 Onward Management of Resource

Cleanaway is the preferred regulated chemical transport and processing company. Any queries regarding hazardous chemical collections and transport should be directed to KT's Environmental Services Department.



# 7 Cooking Oil

Cooking oil is used in numerous venues around Thredbo by KT and private businesses. Once cooled, used cooking oil does not pose a risk to human health. However, uncontrolled discharge to the environment can disrupt local ecology and alter ecosystems.

Currently, used cooking oil from Thredbo is recycled to produce bio-diesel and stock feed.

The following procedure outlines the required process for the disposal of used cooking oil in Thredbo village.

## 7.1 Collection of Used Cooking Oil

As part of normal procedure, empty oil drums should be kept on premises that use cooking oil. This allows for decanting of the used oil back into these drums. Once a drum has been filled, it is to be moved to the designated pick up area in the main hotel loading dock (behind the information centre) for collection by the Environmental Services department.

Drums are collected by the Environmental Services personnel during normal waste collections and are taken for storage at the Waste Transfer Station (WTS). Drums are decanted into 1000L intermediate bulk containers to allow for safe and controlled storage prior to off-site removal.

If drums are awaiting collection for a prolonged period, please contact the Environmental Services department to arrange a pick-up.

# 7.2 Onward Management of Resource

Used cooking oil is removed from the Thredbo WTS periodically by a suitable business. Any queries regarding waste cooking oil collections and transport should be directed to KT's Environmental Services Department.

White goods



## 8 E-waste

E-waste refers to electronic waste, and can encompasses the following items:

**Printers Tablets** Computers

Hard drives Keyboards Mouses Webcams

Fax machines Kitchen Appliances **USB** drives

Scanners Wiring CDs and DVDs

KT offices and other operations can produce items of E-waste through day to day upgrades and maintenance.

The following procedure outlines what is required for the disposal of e-waste from KT operations in Thredbo village.

#### 8.1 Collection of E-Waste

TV screens

Collect all E-waste together and record items and quantities that are ready for disposal, contact the Environmental Services department and provide this information. Once a suitable amount of E-waste has been collected the Environmental Services department will contact the disposal company for a quote. For successful collection, all E-waste must be in a single location and securely wrapped on a pallet.

## 8.2 Onward Management of Resource

E-waste is sent to a regulated recycler at KT's expense. Any queries regarding E-waste collections and transport should be directed to KT's Environmental Services Department.



#### 9 Fluorescent Globes

Premises in Thredbo village generate spent fluorescent globes when the globes come to the end of their usable life-span. A number of businesses in Australia can process globes to recycle the glass, aluminium and mercury. However, due to the mercury-containing components the globes are classed as a potentially harmful waste stream.

The following procedure outlines what is required for the safe disposal of any fluorescent globes from any site located at Thredbo village.

## 9.1 Collection of Spent Fluorescent Globes

Any spent fluorescent tubes or compact fluoro globes need to be collected together. Staff and residents in Thredbo village are encouraged to deposit spent fluorescent globes at one of two locations in the village:

- In the Thredbo Information Centre: and
- Outside the KT Mountain office in the Valley Terminal building.

A labelled recycling box is provided at both locations, which is emptied periodically by Environmental Services.

Larger fluorescent tubes are to be collected in a safe location for pick-up by Environmental Services personnel. If a pick-up of larger fluorescent tubes is required, please contact Environmental Services.

All globes and tubes, are taken to the WTS and stored together. Care must be taken to avoid breaking any of the tubes or globes to avoid the escape of mercury from components.

## 9.2 Onward Management of Resource

Fluorescent globes are sent to a regulated recycler at KT's expense. Any queries regarding fluorescent globe collections and transport should be directed to KT's Environmental Services Department.

12



# 10 Glycol

Glycol is an important heat-transfer fluid used in industrial applications. KT produces waste glycol as a result of cooling system maintenance.

The following procedure outlines what is required for the disposal of waste glycol from any site located in Thredbo village.

## 10.1 Collection of Glycol

Generally, a Heating, Ventilation and Air Conditioning (HVAC) contractor will collect and remove waste glycol during their works. If this is not possible, waste glycol is to be collected into appropriate storage containers and taken to the Valley Terminal Workshop to be stored until removal from Thredbo. The disposal company is contacted annually to collect and dispose of the waste glycol.

## **10.2 Onward Management of Resource**

A certified transport and collection business is utilised for removing waste glycol from Thredbo. Any queries regarding waste glycol collections and transport should be directed to KT's Environmental Services Department.



#### 11 Paint

Paint is used across Thredbo for building maintenance among other uses. Waste may be generated in the form of old, discontinued, or spare paint.

The following procedure outlines what is required for the disposal of any waste paint from KT operations located in Thredbo village.

#### 11.1 Collection of Paint

The first step is to determine the type of paint requiring disposal; whether it is oil-based or water-based paint, as these have differing disposal methods.

#### 11.1.1 Collect All Relevant Safety Data Sheets

Where the paint is known, SDS are is required to be collected and kept with the paint in question that is to be disposed. For water-based paints the SDS may be recycled once the paint has been disposed.

#### 11.1.2 Oil-Based Paint

Once it is determined that there is oil-based paint requiring disposal, all containers need to be collected together to a single location, preferably in a safe, bunded area. Care must be taken to ensure that paints are stored correctly. Consult the relevant Safety Data Sheet (SDS) for this information.

Where possible, containers used for the paints should either be the original container, or clearly labelled with a secure lid. Any unknown containers incur maximum costs for disposal. It is also vital to know how much of each paint product there is for disposal.

Contact the Environmental Services department with information about the products to be disposed. The Environmental Services department will contact all other departments, once there is enough material ready for a collection a Chemical Manifest form will be completed.

#### 11.1.3 Water Based Paint

Water based paint can be safely disposed of by the Hotel Maintenance department, using the Dulux Enviro solutions, enviro wash system.

Hotel Maintenance should be contacted at maintenance\_thredbo@evt.com to organise a drop off of water-based paints. Hotel Maintenance will keep a record of which departments use this service, the cost of disposal will be shared between those departments.

## 11.2 Onward Management of Resource

A certified transport and collection business is utilised for removing waste paint from Thredbo. Any queries regarding waste paint collection and transport should be directed to KT's Environmental Services Department.



## 12 Rubber

Rubber waste, that **does not include tyres**, is generated by KT during regular maintenance operations. Rubber items are primarily:

- Sheave liners (from ski-lifts);
- Timing/auxiliary belts (from vehicles or ski-lift motors).

Rubber has been included as a hazardous material due to the NSW EPA requirements surrounding reporting and transport of rubber items. Rubber collected from Thredbo goes towards the creation of rubber-derived fuels, a method of re-using the chemicals found in rubber and preventing the volume of waste from entering landfill.

#### 12.1 Collection of Rubber

Waste Rubber Items are to be added to a dedicated rubber collection cage at the Thredbo WTS. Once the cage is full it is weighed and loaded on to a vehicle by Environmental Services personnel, ready for off-site removal.

Once the weight of the rubber waste is known, the relevant EPA WasteLocate forms can be filled ready for transport to the designated facility. Forms can be found here: <a href="https://wastelocate.epa.nsw.gov.au/">https://wastelocate.epa.nsw.gov.au/</a>

## 12.2 Onward Management of Resource

The following destination is recognised by the EPA as a suitable rubber collection site:

Jindabyne Regional Waste Management Facility Phone: 02 6457 1062

6013 Kosciuszko Road

Jindabyne NSW 2627



# 13 Toner Cartridges

Day-to-day KT operations generate printer and toner cartridges as waste from offices. The materials within toner cartridges can be recycled.

The following procedure outlines the requirements for the disposal of any toner cartridges in Thredbo village.

## 13.1 Collection of Toner Cartridges

Once used toner cartridges are removed from a printer, the IT Department is to be notified for collection and subsequent addition to a collection box in the IT office. When full, the box is posted to the disposal company for recycling of the cartridges.

## 13.2 Onward Management of Resource

The following company is used for toner cartridge recycling:

Close the Loop Australia Phone: 1800 24 24 73

208 Hume Hwy Fax: 03 9930 8695

Somerton VIC 3062 Email: info@closetheloop.com.au



# 14 Tyres

Waste tyres are most likely generated by KT during the servicing of vehicles. However, the majority of tyres are not replaced on-site in Thredbo village. Rather, the process is undertaken by specialists at a tyre-servicing centre in Jindabyne.

Mountain bike (MTB) tyres are often replaced during the summer season by MTB maintenance staff, generating a number of waste tyres throughout the summer months. KT MTB maintenance staff produce waste tyres during the servicing of KT and privately-owned bicycles.

The following procedure outlines the requirements for the disposal of tyres from any KT-operated site located in Thredbo village.

## 14.1 Collection of Tyres

#### 14.1.1 Vehicle Tyres

Replacement of vehicle tyres undertaken by an external company. This company then is tasked with recycling of the worn tyres. This is arranged by the Engineering Department and is only for KT owned vehicles.

Occasionally waste tyres can be generated by KT maintenance operations. In this case, the disposal company is contacted to arrange a suitable recycling method.

#### 14.1.2 MTB Tyres

As of November 2021, KT has undertaken a process to recycle used and broken MTB tyres.

If the waste tyres are generated by the KT MTB Workshop, they will be collected inside the Workshop store-room ready for removal by the Environmental Services department. If the tyres are generated by guests or residents within Thredbo village, a tyre recycling bin, with signage, is positioned adjacent to the Kosciuszko Express Chairlift base station. This bin is emptied periodically by Environmental Services personnel. The bin is left *in-situ* for the duration the MTB season (November-April).

MTB tyres are sorted into bundles of 10 units, tied with an old inner-tube, to allow for ease of handling and transport.

# 14.2 Onward Management of Resource

Replacement and recycling of vehicle tyres is currently undertaken by Snowy River Tyrepower. MTB tyres are also recycled through Snowy River Tyrepower, however they must be transported to them at KT's expense. Their contact details are as follows:

Snowy River Tyrepower Phone: (02) 6457 2488

7 Percy Harris St Email: jindabyne@tyrepower.com.au

Jindabyne NSW 2627



# 15 White Goods Containing Refrigerant

End-of-life replacements of white goods generates waste. Generally, these are classified as hard waste. However, items such as fridges and freezers, contain refrigerant chemicals and therefore must be treated differently to more inert white goods such as dishwashers.

The following procedure outlines what is required for the disposal of any waste white goods, that contain refrigerant, generated by KT in Thredbo village.

#### 15.1 Collection of White Goods

Any white goods containing refrigerant are to be collected by Environmental Services, and taken to the WTS for storage before further processing. The items can be disposed of in one of two methods.

Items can be de-gassed on-site at Thredbo using local refrigeration services. Such as Jindabyne Refrigeration or Jay Kelly Refrigeration. Both businesses are able to remove refrigerant on-site. After the removal of refrigerant, the white goods can be added to scrap metal collections for removal from Thredbo. This is the preferred process of disposal.

Otherwise, units still containing refrigerant can be transported to Jindabyne Regional Waste Management Facility and disposed of at the Council-run facility. This method costs an increased up-front fee for disposal to cover the necessary refrigerant removal costs incurred by the council.

## 15.2 Onward Management of Resource

Local certified businesses are contacted regarding the degassing of refrigerant of white goods, after which they are sent to suitable recycling businesses. Any queries regarding white goods collection and transport should be directed to KT's Environmental Services Department.