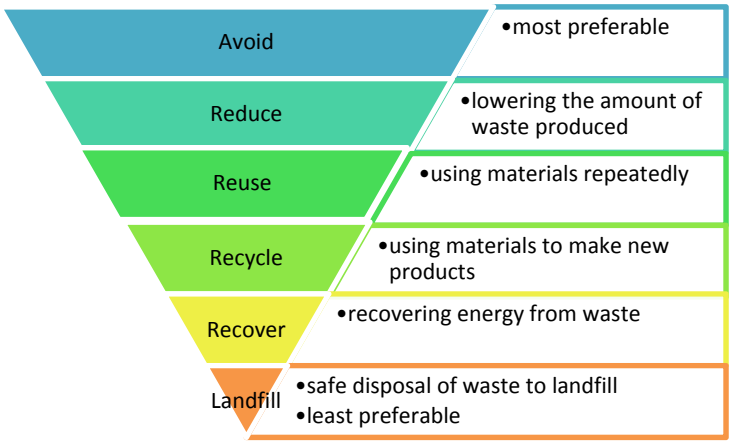
Waste Management

HSEQ Operational Procedure

What this procedure describes

How to manage TasNetworks waste materials by providing guidance on the identification, handling, storage, transport and disposal procedures for wastes including:

- contaminated soil and construction waste
- hazardous substances
- pole ash
- scrap wood, wooden cross arms, burnt pole ash, treated and untreated wood poles
- concrete, steel concrete poles, street light poles
- steel, copper and aluminium
- SF_6 equipment and gas
- metres, metre panels, electrical equipment excluding oil insulated transformers and equipment
- cable insulation and jointing kits
- light globes and batteries
- packaging, pallets and cable drums
- gas cylinders
- waste water and waste to sewer
- waste from vegetation clearing
- general office wastes
- IT assets, office furniture and equipment
- sharps waste
- bushfire waste



Why it is required

- To assist you to apply the waste management hierarchy to avoid, reduce, reuse, recycle, recover and dispose to landfill waste.
- TasNetworks is required to manage the waste in accordance with relevant health, safety and environmental legislation and codes of practice.
- To prevent environmental pollution associated with the handling, storage and disposal of waste materials.
- The procedure supports the TasNetworks goal of Zero Harm.

Who it applies to and when

- This procedure applies to everyone working for or on behalf of TasNetworks.

Authorisation	
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Authorised by	GM Works and Service Delivery
Review Cycle	3 years

Revision History	
Date	**Revision Details**
01/06/2013	Original Issue
24/03/2016	Transfer to TasNetworks format
1/12/2016	Review and update

Contents

1. Waste management heirarchy

The management of waste described in this procedure should follow the waste management hierarchy options listed below in order of priority:

- Avoid
- Reduce
- Reuse
- Recycle
- Recover
- Landfill

1.1 Avoid

Where possible look for opportunities to avoid unnecessary consumption and generating controlled wastes. Waste avoidance can be achieved through behaviors such as:

- avoiding disposable goods and single use materials;
- avoiding the use of hazardous substances in preference for non-hazardous substances;
- avoid disturbing contaminated soils where practicable; and
- education of workforce on waste avoidance.

For example, avoid putting contaminated materials into recycling bins which could result in the entire contents of the bin becoming contaminated and no longer suitable for recycling.

1.2 Reduce

Where possible, opportunities to reduce waste should be identified prior to the procurement of equipment and materials. Waste reduction can be achieved through behaviours such as:

- identification and segregation of re-usable materials;
- procure products with longer life cycles;
- use products with recyclable or reusable packaging;
- print double sided paper; and
- education of workforce on waste reduction.

For example, the purchase of supplies in bulk to minimise packaging waste.

1.3 Reuse

Where possible, reuse materials in preference to purchasing new materials. This can be achieved by behaviours such as:

- reuse excess fill from other projects for your project avoiding purchasing new fill and saving on landfill charges for the other project;
- use rechargeable batteries;
- purchase recycled office materials; and
- education of workforce on waste stream segregation.

For example, collect and reuse pallets, form work and concrete boxing.

1.4 Recycle

Where possible, waste material suitable for recycling will be collected and segregated. This can be achieved by:

- identification and segregation of recyclable materials;
- placement of designated recycling bins in appropriate locations; and
- education of workforce on recycling.

For example, collection of used cardboard packaging, plastics, cans and bottles for recycling.

1.5 Recover

Where further recycling is not feasible, it may be possible to recover the energy from the material and feed that back into the economy where this is acceptable to the community.

For example, waste insulating oil used in the process of making cement.

1.6 Landfill

Finally, the waste hierarchy recognises that some types of waste, such as hazardous chemicals or asbestos, cannot be safely recycled and direct treatment or disposal is the most appropriate management option.

2. Identification and planning

Before commencing an activity such as design, procurement, construction, or maintenance, determine the types and quantities of waste that will be generated.

Plan procurement to avoid over-ordering, to minimise packaging and to maximise use of recycled products. Consider the waste hierarchy when establishing a preferred items list with suppliers.

Plan construction methodologies considering opportunities for reduction of generated waste through implementation of the waste management hierarchy.

Prepare controlled waste management plans for handling, storing and disposing of controlled wastes, refer to Section 3.1.1.

Consideration of waste disposal options to include investigation of opportunities for onsite reuse or recycling in preference to offsite disposal.

Waste collection bins to be provided for the expected waste and recycling types to promote separation of waste and recyclables.

3. Waste streams

3.1 Controlled waste

Appendix C outlines the recommended steps for identifying a controlled waste.

Where there is a suspicion or knowledge that there is potential for waste to be contaminated with a controlled waste category code in Appendix A, sampling and analysis must be undertaken.

The sampling must be done by a suitably qualified person in accordance with relevant TasNetworks Standards and Australian Standards e.g. AS 4482.1-2005 and AS4482.2-1999 Guides to investigation and sampling of potentially contaminated soil.

Samples must be undertaken by a NATA (National Association of Testing Authorities) registered laboratory for testing unless otherwise approved by the Environmental Protection Authority (EPA).

Waste must be classified according to these results to determine appropriate storage, transport and disposal requirements.

If the soil or material is a controlled waste, approval from the EPA and landfill/treatment facility or site operator is required before the soil or material is disposed of, treated or reused.

3.1.1 Controlled waste management plan

To manage a controlled waste a controlled waste management plan must be developed and implemented.

The plan shall:

- provide details of the type of controlled waste;
- identify the risks with the controlled waste;
- any safe handling, storage, and disposal requirements including all approvals and authorisations required by EPA and landfill/treatment facilities; and
- any licensing, tracking and reporting requirements.

With respect to its risk management component the waste management plan must manage risk by:

- specifying the risks associated with the work;
- describing the measures to be implemented to control the risks; and
- describing how the risk control measures are to be implemented, monitored and reviewed.

A plan could be a procedure or work practice. The plan must be updated when circumstances change e.g. quantities, transport or storage methods etc. For assistance in preparing and implementing a plan contact the HSE Team.

3.1.2 Temporary storage and transport of contaminated soil, waste oil and asbestos

TasNetworks has an exemption to transport and temporarily store contaminated soil, waste oil and asbestos. Refer to Appendix D for details.

3.1.3 Contaminated soil and construction waste

The requirements for the management of contaminated soil and construction waste (for instance, containing some carcinogens and heavy metals) is detailed in the EPA Information

Bulletin No. 105 Classification and management of contaminated soil for disposal – November 2012 (IB105). The EPA uses four categories to classify contaminated soil and construction waste. These categories determine where and how the soil and construction waste can be disposed. Contaminated soil and construction waste needs to be tested in accordance with IB105 and the results of the test then need to be compared with Table 2 of IB105 and this will determine the category of the contaminated soil and construction waste and where it can be disposed.

Contaminated soil and construction waste that is being stored prior to testing and disposal will be covered where practicable to do so to protected it from rainfall so potential contaminants will not leach into the surrounding environment. Contaminated soil and construction waste will be stored separately until the results of the soil test is known. After the test results have been obtained the soil can be grouped with other soil of the same category, ready for disposal.

3.1.4 Hazardous substances

The disposal of a hazardous substance shall be undertaken in accordance with the SDS and relevant legislation. Hazardous substances may be controlled wastes (e.g. asbestos) and must be transported and disposed in accordance with the relevant legislation.

Before a waste collector can collect the hazardous substances waste a Controlled Waste Manifest Form needs to be completed. This is designed to collect, convey and record, clear information about the hazardous substances ready for disposal which in most cases is needed for legal requirements e.g. EPA and ADG Code regulations.

Before waste is collected, complete Appendix F: Controlled Waste Manifest Form and give this to the waste collector along with the hazardous substances for disposal.

Further information (applicable to the substance) may be obtained from the HSE Team, the manufacturer/supplier or the local trade waste authority.

3.1.5 Asbestos

Asbestos bins located at Response Centres can be taken to the nearest Resource Centre before they exceed 10 square metres and emptied into the larger asbestos bins provided. You do not need to be a controlled waste transporter for less than 10 square metres of asbestos. Refer to Appendix D.

For the management of asbestos refer to the TasNetworks Asbestos Management Plan.

3.1.6 Insulating oil

Once used oil has been permanently removed from a piece of equipment it becomes a controlled waste. For the management of insulating oil refer to the TasNetworks Management of Insulating Oil Procedure.

3.1.7 Oil filled assets

For the disposal of PCB free and PCB contaminated transformers and other oil filled assets refer to the TasNetworks Management of Insulating Oil Procedure.

Details of disposal must be recorded on the TasNetworks Controlled Waste Disposal Register.

3.1.8 Oil contaminated soil and vegetation

Once oil contaminated soil or vegetation has been collected from site it becomes a controlled waste. For the management of oil contaminated soil or vegetation refer to the TasNetworks Management of Insulating Oil Procedure.

Details of disposal must be recorded on the TasNetworks Controlled Waste Disposal Register.

3.1.9 Pole Ash

Ash from burnt Copper Chrome Arsenic (CCA) treated poles should be collected in hessian bags that have a double lined plastic bag inside (or something similar) and secured in a clearly labelled bin prior to removal. Correct PPE must be worn before handling the ash and is to be disposed with the ash waste when used. Refer to Section 4 Personal Protective Equipment.

3.2 Other waste including scrap, valuable waste and salvageable material

References to disposal of assets must comply with the current TasNetworks Asset Disposal Policy.

3.2.1 Poles

3.2.1.1 CCA treated poles and crossarms

CCA treated poles and cross arms can be reused, recycled or disposed of in a level 2 landfill. Recycled treated poles and cross arms shall not be used for structural purposes, as a combustible material (e.g. firewood), in school playgrounds or any areas where prolonged physical contact would be possible.

3.2.1.2 Untreated poles

Untreated poles can be reused, recycled or disposed of in a level 1 landfill. Recycled untreated poles shall not be used for structural purposes.

3.2.1.3 Steel/concrete (stobie) poles and steel light poles

Cannot be reused and can be recycled.

3.2.2 Steel, copper and aluminium

Steel, copper and aluminum can be reused or recycled. ABC conductor is a separable portion of this waste.

3.2.3 SF_6 Equipment and used gas

Reuse or recycling of used Sulphur Hexafluoride Gas (SF_6) gas should be prescribed wherever possible. Refer to the Sulphur Hexafluoride Gas Management Procedure and AS 2791 – 1996 - High-voltage switchgear and control gear—Use and handling of sulphur hexafluoride

(SF_6) in high-voltage switchgear and control gear- section 6 'End of life of SF_6 filled equipment.

SF_6 equipment that is to be decommissioned must include consideration of draining and testing SF_6 gas and subsequent decontamination of the equipment, which must be performed by a suitably qualified service provider. Refer them to the Disposal of SF_6 Equipment Work Practice.

Waste SF_6 must be sent to a certified agency for disposal/recycling and a disposal certificate must be obtained and kept on record (recycling can be provided by ABB and Alstom and Schneider can dispose of waste SF_6 in approved fashion).

A Disposal Certificate must be provided by an accredited disposal company for any SF_6 and SF_6 containing equipment that is disposed of in an approved manner. Should the equipment be sold or given to a fellow authority such as Hydro Tasmania then a record of this transaction is required from that company. This record needs to include:

- the identity of the authority taking over the equipment;
- the quantity of SF_6 gas that was in the redundant circuit breaker; and
- the date on which this transaction occurred.

3.2.4 Meters, meter panels and other electrical equipement excluding oil insultated transformers and equipement

Meters are to be collected and returned to Resource Centres for scrap or reuse. Meters suitable for reuse are to be returned to the Cambridge Resource Centre.

Meter panels and other equipment such choke boxes, street lights and fuses must be assessed for the presences of any asbestos components. Refer to Section 3.4 Asbestos.

Any equipment such as air insulated switchgear and circuit breakers containing components with stored energy (e.g. springs) must be identified and disengaged. Details must be passed onto the waste contractor.

If there is a suspicion the equipment is painted in lead based paint test the paint to determine if it is hazardous. If the test is positive or it is already known to be lead based paint, details must forwarded to the waste contractor.

3.2.5 Cable, cable insulation and jointing kits

Waste cable can be separated from other waste in a designated hook bin for recycling. Explore opportunities for recycling waste cable insulation.

3.2.6 Light globes

Used globes can be recycled and can be placed in comingled recycling bins provided.

Fluorescent light tubes contain a small concentration of mercury. This waste can be reduced by purchasing low mercury tubes

3.2.7 Batteries

TasNetworks has introduced a battery recycling initiative to promote responsible environmental management of batteries at end of life. Recycling is available in 120lt wheelie bins, 11lt and 5lt buckets at the following locations:

- Maria Street reception;
- Rocherlea Warehouse and Admin Building;
- Devonport warehouse and Admin Building (hot desk room); and
- Cambridge steel roller door lockup, Admin Building in front of BSO desks and in hallway outside team leaders office.

Many types of batteries can be recycled including:

- Alkaline Batteries - single use batteries typically used in cameras, smoke detectors, and torches.
- Nickel Cadmium, Nickel Metal Hydride and Lithium Ion - rechargeable batteries typically used in cordless power tools, cameras, two-way radios, mobile phones and laptops.
- Button Cell – typically used in watches.

Separate bins are available for used lead acid batteries which must not be mixed with other batteries due to the risk of acid electrolyte leaking and reacting with alkaline electrolytes.

Larger used batteries not suitable for the recycling bins should be taken directly from site to a recycler and not stored at TasNetworks sites.

3.2.8 Packaging, pallets, and cable drums

Plastic and cardboard packaging are to be separated into separate bins for recycling. Pallets are to be collected and returned to the nearest Resource Centre for reuse. Cable drums in good condition are reused by the supplier and are collected upon notification.

3.2.9 Gas cylinders

Gas bottles should be refilled or swapped for reuse where possible. Gas cylinder storages should be inspected periodically and any empty gas cylinders should be returned to the supplier/manufacturer.

If it is not possible to return the gas cylinder to the supplier/manufacturer then it can be sent to a recycler. Under no circumstances cut/puncture bottles for the scrap metal recycling bins.

3.2.10 Waste from vegetation clearing

Vegetation waste generated from vegetation management works shall be recycled wherever possible. Empty herbicide containers can be disposed of through Drum Muster. Vegetation waste may be left in rural situations or forested areas, where it will not pose a safety risk, to decompose naturally or be used by the landowner. The mulching of or removal of vegetation

debris may be required in other situations. The mulch generated may be left on site to stabilise the site or removed from site and given to local councils, community organisations etc.

Where debris from exotic and/or invasive weed species is likely to self-propagate then the vegetation waste should be removed to the local landfill site or treated to prevent propagation.

3.2.11 Excavated spoil and construction waste

Construction material, soils and rocks which have not been contaminated with any substance are classified as fill material. It can be reused onsite or at another location or disposed of in landfill where no other option exists.

Low level contaminated soil or construction waste may be suitable for reuse as fill or leveling material on an industrial or commercial site. Refer to IB105 for details.

3.2.12 General office waste

Office waste management is supported by:

- bins for paper recycling located throughout the facility;
- printer cartridge recycling; and
- general recycling and waste bins located in the lunch room area.

All wastes must be separated and placed into the appropriate bins.

3.2.13 IT assets, office furniture and equipment

Obsolete IT equipment shall be collected and items such as hard drives wiped ready for disposal. Items suitable for disposal can be distributed to charity organisations or sent to auction. Where that's not possible this equipment can be either recycled for its metal, or dismantled and reused for spare components.

Surplus facilities, such as office furniture and equipment may be scrapped, sent to auction or placed for sale via The Zone to staff.

3.2.14 Waste water

Oil containment pits and tanks, interceptor traps/separators will be inspected periodically to assess need to remove any waste water including oily sludge and sediment. Where there is known contamination or suspicion of contamination, the waste water will be tested to determine disposal options.

3.2.15 Wastes to Sewer

No solid wastes are permitted to sewer. Black water (from toilets) and grey water (from kitchens, bathrooms and wash bays) are the only liquid wastes that are allowed to be disposed to the sewer without approval from TasWater. Under specific circumstances, wastes other than black and grey water may be disposed to sewer with approval from TasWater.

Flammable substances are not to be put into a sewer under any circumstance.

3.2.16 Sharps waste

Sharps include hypodermic needles, scalpels, blades, or any other item that can penetrate the skin. Refer to the Handling Sharps Work Practice for disposal instructions.

3.3 Acid sulfate soils

Waste associated with acid sulfate soils shall be managed in accordance with the Environmental Handbook.

3.4 Bushfire waste

For burnt pole ash refer to section 3.1.9, for transformers refer to section 3.1.7 and oil spills refer to the Management of Oil Spills Procedure and the work practice, Control and Clean Up Oil Spills.

For all other waste:

- Establish likely waste volumes based on degree of damage to infrastructure.
- If required, appoint appropriate person to oversee the waste management process.
- Establish Waste Transfer Station(s) at a convenient location(s) in or adjoining the affected area. Site considerations include:
    - Access for trucks to deliver and remove waste;
    - Room for waste to safely sorted into waste streams; and
    - Central location that reduces transport time.
- Ensure ample bins are provided from scrap metal contractor and general waste contractor.
- Liaise with Stores regarding recoverables. Clarify process for dealing with recoverables and what exactly is recoverable.
- Engage contractor to remove waste from the field and bring back to the transfer station. This may be a labour hire company with appropriate licences where necessary.
- Engage contractor/staff to separate waste into various streams. Aluminium, steel, copper, general waste, recoverables.

4. Personal protective equipment

At TasNetworks, minimum personal protective equipment (PPE) requirements are non-negotiable; workers must follow the practices described in the TasNetworks Personal Protective Equipment Procedure. PPE must NOT be used as a substitute for engineering, work practice, and/or administrative controls. PPE may be used in conjunction with these controls.

A review of the SDS and risk assessment will determine if additional PPE is required when handling hazardous substances, for example all workers handling or removing asbestos or burnt pole ash must be trained and issued with appropriate PPE:

- a disposable P2 respirator;
- safety glasses with side shields or chemical goggles;
- impervious gloves (e.g. PVC, Nitrile);
- disposable boot covers for shoes with laces; and

- overalls.

This PPE will be available from the TasNetworks stores.

5. Waste collection locations and bins

Separate bins or containers will be provided for wastes collected at each Resource and Response Centre, including other locations such as the Primary Store, refer to Appendix E. Refer to Section 6 for storage requirements.

Resource Centres:

- Cambridge
- Burnie
- Devonport
- Rocherlea
- Lenah Valley

Response Centres:

- Bridgewater
- Campbell Town
- Deloraine
- Huonville
- New Norfolk
- Queenstown
- Scottsdale
- Smithton
- St Marys

Other locations:

- Bridgewater Primary Store
- Denison Lane Archives
- Mornington

Bins will be emptied upon notification or agreed collection cycle.

It is the responsibility of all site users to use the waste management facilities provided. Failure to do so can result in unsightly and unsafe conditions and can attract vermin.

6. Handling and storage

Handling and waste storage requirements include:

- flammable liquid wastes is to be stored and handled in accordance with of AS 1940 – The storage and handling of flammable and combustible liquids - section 12 ‘Waste storage and disposal’;
- corrosive substance waste is to be stored and handled in accordance with of AS 3780 – The storage and handling of corrosive substances - section 9 ‘Waste storage and disposal’; and
- toxic substance waste is to be stored and handled in accordance with of AS 4452 – The storage and handling of toxic substances - section 9 ‘Waste storage and disposal’.

For all other waste the following handling and storage practices must be adopted:

- different waste types should be separated at the generation point for possible reuse and recycling, particularly contaminated wastes from clean wastes;
- place wastes in secure and correctly labelled bins, containers or stockpiles (in the case of waste spoil);
- remove all wastes from site for reuse, recycling and/or disposal;
- wastes can be sent to a TasNetworks waste collection facility or directly to a recycler or landfill as long as they are licenced to receive the waste;
- the containers must be clearly labelled with the type of waste to be placed in them (e.g. copper, steel, treated wood, recycled batteries etc.);

- ensure ample bins are provided from waste contractor and there is suitable access for trucks to deliver and remove waste;
- wastes should be regularly disposed of and not allowed to stockpile in storage areas. Don't overfill or overload waste bins;
- make sure containers are in good condition and placed on impervious surfaces, especially skip bins as they may leak;
- position waste storage away from drains and waterways, and hazards such as incompatible substances or potential fire hazards;
- provision shall be made to contain any leakage or spillage from the waste stored and to prevent it from contaminating the surrounding soil or from entering any watercourse or water drainage system;
- cover wastes that can be washed or blown away, but still accessible for loading and unloading; and
- use bunds for containers of liquid waste and have spill kits available near the liquid waste storage.

7. Waste disposal facilities

Some landfills and waste water treatment plants in Tasmania can accept certain controlled wastes. It is important that TasNetworks, or an agent acting on behalf of TasNetworks, contact the treatment or disposal facility to ensure the facility has approval to receive the waste in question and is currently able to receive it.

8. Transportation

When transporting wastes:

- if it is a controlled waste the transporter must be registered as both a controlled waste transporter and controlled waste agent to handle specific controlled waste categories. Refer to the EPA website for a list of controlled waste handlers and the controlled waste codes they are authorised to transport;
- safely secure all containers on the vehicle;
- carry spill kits suitable for the liquid waste being transported;
- cover loads to prevent spillage, loss of waste and emission of odours; and
- comply with transportation, licensing, waste tracking, record keeping and reporting requirements.

9. Licensing, tracking, reporting and records

Requirements must be in accordance with the *Environmental Management and Pollution Control (Controlled Waste Tracking) Regulations* and include:

- if the soil or material is a controlled waste, approval from the EPA and landfill/treatment facility or site operator is required before the soil or material is disposed of, treated or reused;
- ensure the waste disposal facility is appropriately licenced to accept the waste;
- for interstate waste movements a NEPM consignment authorisation must be obtained from the environment protection agency in the State or Territory of destination (this is an authorisation for transport of the waste into that State or Territory);

- if required, ensure any waste storage facility is appropriately licenced to store the waste;
- obtain consignment approval for liquid and hazardous waste from the waste disposal facility; and
- make sure the transporter is appropriately licenced to transport the waste;
- complete and sign the waste transport certificate and comply with record keeping requirements as per Section 16 Records.

10. Incidents

All incidents involving waste, particularly controlled wastes, including near misses, shall be reported in accordance with the TasNetworks Incident Management Procedure.

11. Training

Information, training and instruction should include the following:

- the nature of the waste/s involved and the risks to the worker;
- the control measures implemented, how to use and maintain them correctly;
- the arrangements in place to deal with containing and cleaning up spills;
- the labelling of containers of waste, the information that each part of the label provides and why the information is being provided;
- the availability of SDS for all hazardous waste (e.g. PCB's), how to access the SDS, and the information that each part of the SDS provides; and
- the work practices and procedures to be followed in the use, handling, processing, storage, transportation, cleaning up and disposal of waste.

Information, training and instruction must be provided in accordance with TasNetworks procedures and work practices and in a way that it is easily understood.

12. Audits

Implementation of this procedure shall be audited as a Tier 2 audit in accordance with the TasNetworks HSEQ Auditing Management System Procedure. Site audits can include the waste management plan, approval, handling, storage, transport, reuse, recycling and disposal of wastes.

13. Records

Records that must be maintained include:

- audit reports;
- risk assessments for handling, storing, transporting and disposing of waste;
- waste management plans;
- licensing, tracking, reporting and records;
- details of any trade waste water agreements/permits held with TasWater;
- records of training provided to workers should be kept, documenting who was trained, when and on what.

Records must be maintained in accordance with the TasNetworks Documentation and Records Management Procedure.

14. Responsibilities

14.1 TasNetworks

Businesses have duties to manage the risk associated with waste, including controlled wastes under the *Environmental Management and Pollution Control Act 1994*, *Environmental Management and Pollution Control (Waste Management) Regulations 2010* and *Environmental Management and Pollution Control (Controlled Waste Tracking) Regulations 2010*.

14.2 Senior Leaders

- a duty to ensure any legal requirements are complied with.

14.3 Engineering and Design Group Leader

- apply the hierarchy of waste management in the selection of construction materials and methodologies.

14.4 Project Delivery and Contracts Group Leader

- ensure a copy of this standard is issued to the contractor as part of the contract documentation; and
- randomly inspect the contractors work practices to ensure compliance with this procedure.

14.5 Program and Planning Group Leader

- ensure appropriate waste facilities are available at each TasNetworks Resource Centre.

14.6 Program Team Leaders

- apply the waste management hierarchy to the management of all waste;
- ensure there are appropriate bins and containers at each stores location to segregate waste for reuse, recycling or disposal; and
- follow the requirements for each waste stream associated with the stores including the general handling and storage requirements identified in this procedure.

14.7 Facilities Team Leader

- apply the waste management hierarchy to the procurement of materials and management of waste;
- ensure there are appropriate bins and containers at each facility location to segregate waste for reuse, recycling or disposal; and
- follow the requirements for each waste stream associated with facilities including the general handling and storage requirements identified in this procedure.

14.8 Team Leaders

- apply the waste management hierarchy to the management of all waste;
- ensure appropriate waste collection containers and bins are available at each TasNetworks Resource Centre;
- develop waste management plans for dealing with controlled wastes;
- ensure that current Safety Data Sheet (SDS) for any hazardous wastes are available to workers;
- ensure all waste is removed from site;
- ensure workers handle, store, transport and dispose of wastes appropriately;
- provide spill containment systems for wastes, if necessary;
- supply a controlled waste manifest form to waste contractor for disposal of hazardous and controlled wastes;
- ensure the waste contractor has appropriate licences and authorisations to handle and dispose of the waste;
- ensure approvals from the EPA and landfill/treatment facility or site operator are in place before soil or material that is classified as a controlled waste is transported, disposed of, treated or reused; and
- ensure workers are appropriately informed, trained and supervised in waste management;
- keep records of waste management plans, laboratory analysis, waste transport certificates (interstate waste movements), consignment authorisations, and waste disposal certificates.

14.9 Health, Safety and Environment Leader

- to champion the management of waste management hierarchy;
- ensure changes to environmental legislation regarding waste substances, review and revise waste substances related documentation are communicated, including this procedure;
- ensure advice and assistance regarding this procedure is provided;
- maintain any exemptions to store and transport controlled wastes;
- investigate ways in which targets could be used to reduce waste;
- look for new recycling stream opportunities;
- perform audits to ensure the implementation of this procedure;
- provide information, training and instruction to workers.

14.10 Workers (including staff at all levels, contractors and subcontractors)

- comply with the TasNetworks policies and procedures and use TasNetworks training, work practices, tools and all reasonable instructions to manage the risks associated with waste (for example, this procedure, IB105, waste management plans).
- follow the hierarchy of waste management;
- use the waste management facilities provided;
- remove all waste from site;
- follow handling, storage, transport and disposal requirements in this standard;
- if applicable read the Safety Data Sheet (SDS) and follow recommended actions;

- use appropriate PPE where required;
- when transporting waste under the exemption to the Controlled Waste Tracking Regulations 2010, ensure that you comply with the conditions of the permit;
- report incidents regarding waste as per the Incident Management Procedure;
- must not bring unauthorised substances onto a TasNetworks site, handle or dispose of substances incorrectly; and
- ensure that their own systems of work as a minimum address the requirements set out in this procedure.

How everyone contributes to managing health, safety and environmental matters in general is provided in the TasNetworks HSEQ Responsibilities Procedure.

Refer to the following table to determine who has responsibility or shared responsibility to ensure the handling, storage and disposal of waste at each TasNetworks site is consistent with this procedure.

Site	Responsibility
Resource Centres: Cambridge, Rocherlea, Devonport and Burnie	Program and Planning Group Leader Facilities Team Leader
Response Centres: Campbell Town, Deloraine , Huonville, New Norfolk, Queenstown, Scottsdale, Smithton, St Marys	Team Leaders Facilities Team Leader
Other locations: Mornington training centre Primary store Denison Lane Archives Data Centres Trevallyn and Chapel Street Substations	Facilities Team Leader

Table 1: site responsibilities.

15. Reference Documents

The following documents were reviewed as part of developing this procedure:

Legislation
• *Environmental Management and Pollution Control Act 1994* • *Environmental Management and Pollution Control (Waste Management) Regulations 2010* • *Environmental Management and Pollution Control (Controlled Waste Tracking) Regulations 2010*

Codes of Practice, Industry Codes, etc.
• *National Environment Protection Measure (Used Packaging Materials)* • *National Environment Protection (Movement of Controlled Waste between States and Territories) Measure* • AS4482.2-1999 Guides to investigation and sampling of potentially contaminated soil • AS 1940 – The storage and handling of flammable and combustible liquids - section 12 'Waste storage and disposal' • AS 3780 – The storage and handling of corrosive substances - section 9 'Waste storage and disposal' • AS 4452 – The storage and handling of toxic substances - section 9 'Waste storage and disposal'
TasNetworks Documents
Forms
Other Documents/Resources

16. Records Arising from this Procedure

Record	Storage Location
Stored Documents and associated correspondence and approvals etc.	Record Point, Wasp, TVD, Promapp ZONE- Intranet site
Controlled waste disposal certificates	ZoNe
Consignment authorisations	ZoNe
Waste Transport Certificates (Interstate Movements).	ZoNe

17. Glossary & Abbreviations

CCA – copper chrome arsenic

Controlled waste – Controlled waste is the most hazardous category of waste and includes those substances that exhibit toxicity, chemical or biological reactivity, environmental persistence, or the ability to enter the food chain such as PCB's.

For the purposes of the definition of "controlled waste" in Part 2 of the *Environmental Management and Pollution Control (Waste Management) Regulations 2010*, a waste is prescribed as a controlled waste if the substance or item:

- is listed in Appendix A; or

- exhibits levels of contaminants equal to or above low level contaminated soil (level 2) as defined in EPA Information Bulletin No. 105 – Classification and Management of Contaminated soil for Disposal; or
- exhibits an **environmentally significant characteristic** and is derived or arises from:
    - an agvet chemical; or
    - dangerous goods as defined in the Dangerous Goods (Road and Rail Transport) Act 2010; or
    - a poison as defined in the Poisons Act 1971; or
    - a scheduled waste within the meaning of a National Management Plan; or
- is a waste within the meaning of the Quarantine Regulations 2000 of the Commonwealth, as amended; or
- is sewage sludge, sewage residue, nightsoil or sludge from an on-site waste water management system; or
- is a tyre.

Drum Muster - is the national program for the collection and recycling of empty, cleaned, non-returnable, crop production and on-farm animal health chemical containers.

Environmentally significant characteristic – refer to Appendix B.

EPA – Environmental Protection Authority

EPG – Emergency Procedure Guides

IB105 – Information Bulletin No. 105 Classification and Management of Contaminated Soil for Disposal

Level 2 Landfill -

NATA – National Association of Testing Authorities

NEPM – National Environment Protection Measures

PCB – Polychlorinated biphenyl

Resource Centres – Cambridge, Burnie, Devonport, Rocherlea

Response Centres – Bridgewater, Campbell Town, Deloraine, Huonville, Lenah Valley, New Norfolk, Queenstown, Scottsdale, Smithton, St Marys

SDS – Safety data sheet

SF_6 - Sulphur hexafluoride gas (SF_6) is a fully fluorinated compound (FFC) which is recognised as being a particularly potent greenhouse gas. It is known that SF_6 has up to 24,900 times the global warming potential of carbon dioxide (CO_2).

SWMS – Safe work methods statement

Waste - means any –
- discarded, rejected, unwanted, surplus or abandoned matter, whether of any value or not; or
- discarded, rejected, unwanted, surplus or abandoned matter, whether of any value or not, intended –

    - for recycling, reprocessing, recover, reuse or purification by a separate operation from that which produced the matter; or
    - for sale.
- Wastes include, but are not limited to:
    - Insulating oil;
    - Excavated spoil;
    - Contaminated redundant electrical equipment, materials, and protective clothing;
    - Redundant cables and conductors;
    - Pesticides/herbicide spray residues;
    - Used drums, containers and other packaging;
    - Green waste;
    - Discharges to air, both point source and diffuse, controlled or fugitive;
    - Liquid effluent to waterways, sewer, or stormwater;
    - Contaminated stormwater or firewater runoff, sediment in runoff; and
    - Solid workshop wastes and construction wastes.

Appendix A: Controlled waste category codes

The following list provides Tasmanian waste category codes and descriptions for each of the controlled waste categories listed in the *National Environment Protection (Movement of Controlled Waste between States and Territories) Measure 2004* (Schedule A, List 1) and the *Environmental Management and Pollution Control (Waste Management) Regulations 2010* (Regulation 5).

It is the responsibility of a controlled waste producer, agent, transporter or receiving facility operator to accurately describe controlled waste for the purpose of any handling or transport documentation. It is therefore important that the correct waste code and description are selected from the list below.

Waste Code	Waste Category Description
A100	Waste resulting from surface treatment of metals and plastics
A110	Waste from heat treatment and tempering operations containing cyanides
A130	Cyanides (inorganic)
B100	Acidic solutions or acids in solid form
C100	Basic solutions or bases in solid form
D100	Metal carbonyls
D110	Inorganic fluorine compounds excluding calcium fluoride
D120	Mercury; mercury compounds
D130	Arsenic; arsenic compounds
D140	Chromium compounds (hexavalent and trivalent)
D150	Cadmium; cadmium compounds
D160	Beryllium; beryllium compounds
D170	Antimony; antimony compounds
D180	Thallium; thallium compounds
D190	Copper compounds
D200	Cobalt compounds
D210	Nickel compounds
D220	Lead; lead compounds
D230	Zinc compounds
D240	Selenium; selenium compounds
D250	Tellurium; tellurium compounds
D270	Vanadium compounds
D290	Barium compounds (excluding barium sulphate)
D300	Non toxic salts
D310	Boron compounds
D330	Inorganic sulfides
D340	Perchlorates
D350	Chlorates
D360	Phosphorus compounds excluding mineral phosphates
E100	Waste containing peroxides other than hydrogen peroxide
E120	Waste of an explosive nature not subject to other legislation
F100	Waste from the production, formulation and use of inks, dyes, pigments, paints, lacquers and varnish
F110	Waste from the production, formulation and use of resins, latex, plasticisers, glues and adhesives
G100	Ethers
G110	Organic solvents excluding halogenated solvents
G150	Halogenated organic solvents
G160	Waste from the production, formulation and use of organic solvents

Waste Code	Waste Category Description
H100	Waste from the production, formulation and use of biocides and phytopharmaceuticals
H110	Organic phosphorus compounds
H170	Waste from manufacture, formulation and use of wood-preserving chemicals
J100	Waste mineral oils unfit for their original intended use
J120	Waste oil/water, hydrocarbons/water mixtures or emulsions
J160	Waste tarry residues arising from refining, distillation, and any pyrolytic treatment
K100	Animal effluent and residues (abattoir effluent, poultry and fish processing waste)
K110	Grease trap waste
K130	Sewage sludge, sewage residue, nightsoil or sludge from an on-site waste water management system
K140	Tannery wastes (including leather dust, ash, sludges and flours)
K190	Wool scouring waste
M100	Waste substances and articles containing or contaminated with polychlorinated biphenyls (PCBs), polychlorinated naphthalenes (PCNs), polychlorinated terphenyls (PCTs) and/or polybrominated biphenyls (PBBs)
M150	Phenols, phenol compounds including chlorophenols
M160	Organohalogen compounds - other than substances referred to in this list
M170	Polychlorinated dibenzo-furan (any congener)
M180	Polychlorinated dibenzo-p-dioxin (any congener)
M210	Cyanides (organic)/nitriles
M220	Isocyanate compounds
M230	Triethylamine catalysts for setting foundry sands
M250	Surface active agents (surfactants), containing principally organic constituents and which may contain metals and inorganic materials
M260	Highly odorous organic chemicals (including mercaptans and acrylates)
N100	Containers which are contaminated with residues of substances referred to in this list
N120	Soils contaminated with a controlled waste
N140	Fire debris and fire washwaters
N150	Fly ash excluding fly ash generated from Australian coal fired power stations
N160	Encapsulated, chemically-fixed, solidified or polymerised wastes (referred to in this list)
N190	Filter cake contaminated with residues of substances referred to in this list
N220	Asbestos
N230	Ceramic-based fibres with physico-chemical characteristics similar to those of asbestos
Q100	A waste within the meaning of the Quarantine Regulations 2000 of the Commonwealth, as amended
Q200	Exhibits an environmentally significant characteristic and is derived or arises from an agvet chemical as defined in the Dangerous Substances (Safe Handling) Act 2005
Q300	Exhibits an environmentally significant characteristic and is derived or arises from dangerous goods as defined in the Dangerous Goods (Safe Transport) Act 1998
Q400	Exhibits an environmentally significant characteristic and is derived or arises from a poison as defined in the Poisons Act 1971
Q500	Exhibits an environmentally significant characteristic and is derived or arises from a scheduled waste within the meaning of a National Management Plan*
R100	Clinical and related wastes
R120	Waste pharmaceuticals, drugs and medicines
R140	Waste from the production and preparation of pharmaceutical products
T100	Waste chemical substances arising from research and development or teaching activities including those which are not identified and/or are new and whose effects on human health and/or the environment are not known.
T120	Waste from the production, formulation and use of photographic chemicals and processing materials
T140	Tyres
T190	Residues from industrial waste treatment/disposal operations
T200	Oxidising Agents
T210	Reactive chemicals
T220	Reducing agents

*National Management Plan means a plan:

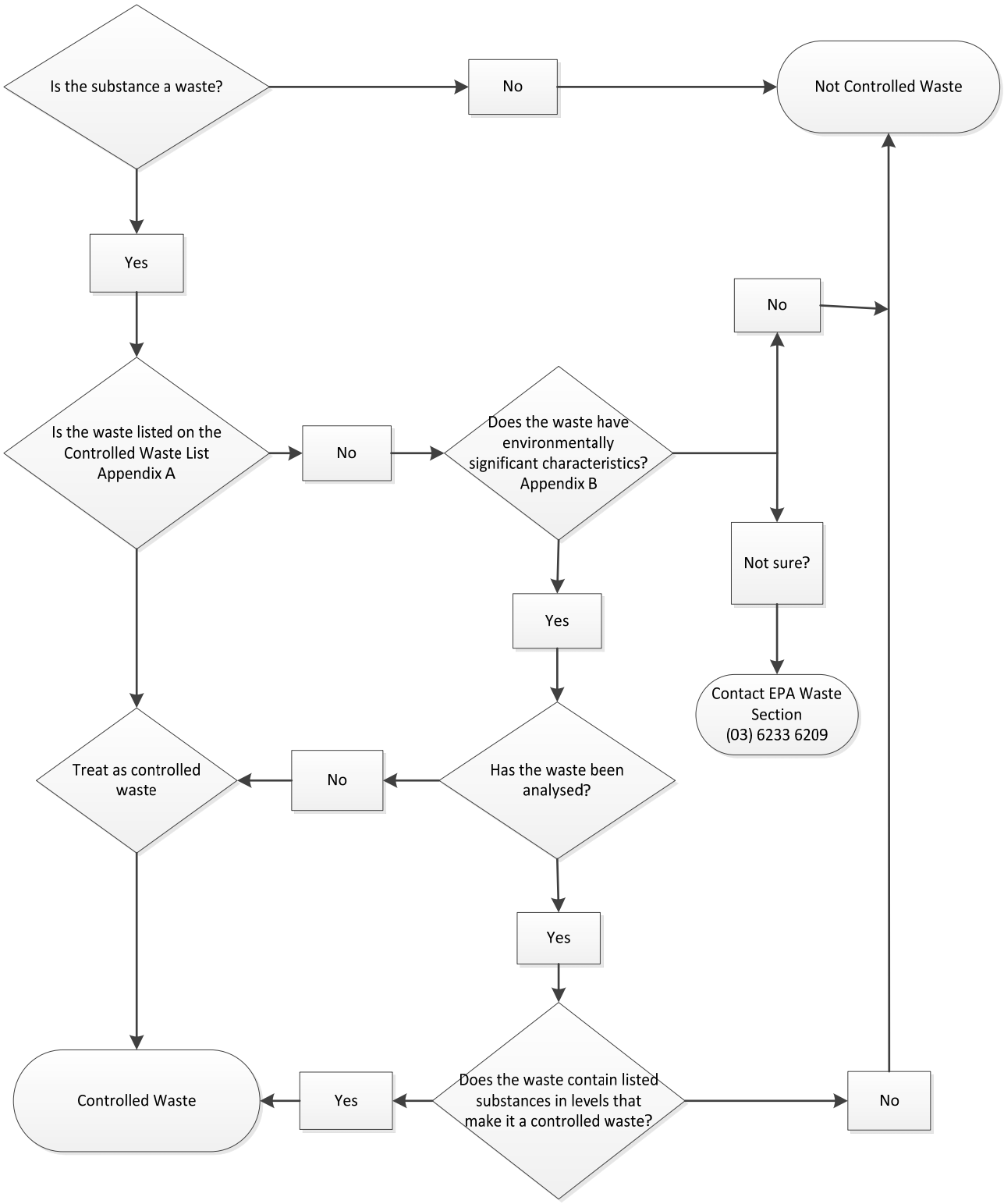
(a) in respect of a material or waste; and

(b) prepared under the National Strategy for the Management of Scheduled Wastes (1993) and administered by the Environment Protection and Heritage Council, as amended from time to time.

Appendix B: Types of waste with environmentally significant characteristics

Waste Type	Description	Examples
Explosive	An explosive substance is a solid or liquid substance or waste (or mixture of substances or wastes) which is in itself capable, by chemical reaction, of producing gas at such a temperature and pressure and at such a speed as to cause damage to the surroundings.	Ramset charges Ampac gun charges
Flammable Liquids	The word "flammable" has the same meaning as "inflammable". Flammable liquids are liquids, or mixtures of liquids, or liquids containing solids in solution or suspension (for example, paints, varnishes, lacquers, etc , but not including substances or wastes otherwise classified on account of their dangerous characteristics) which give off a flammable vapour at temperatures of not more than 60.5ºC, closed-cup test, or not more than 65.6ºC, open-cup test.	Voltz Thinners
Combustible liquid	Means a liquid, other than a flammable liquid, that has a flash point, and a fire point less than its boiling point	Insulating oil
Flammable Solids	Solids, or waste solids, other than those classed as explosives, which under conditions encountered in transport are readily combustible, or may cause or contribute to fire through friction.	
Wastes which, in Contact with Water, emit Flammable Gas	Substances or wastes that by interaction with water, are liable to become spontaneously flammable or to give off flammable gases in dangerous quantities.	
Oxidising	Substances or wastes which, while in themselves are not necessarily combustible, may, generally by yielding oxygen, cause or contribute to the combustion of other materials	Sodium Hypochlorite
Organic Peroxides	Organic wastes that are thermally unstable substances that may undergo exothermic self-accelerating decomposition.	Resin Plastic Catalysts
Poisonous (Acute)	Substances or wastes liable either to cause death or serious injury or to harm humans, animals, or plants if high doses are ingested or exposed.	Herbicides
Waste Liable to Spontaneous Combustion	Substances or wastes that are liable to spontaneous heating under normal conditions encountered in transport, or to heating up on contact with air, and being then liable to catch fire.	
Hazardous Gases	Gas which may not be toxic but displaces oxygen in the atmosphere therefore presents the risk of asphyxiation.	Sulfur Hexafluoride SF6
Infectious Substances	Substances or wastes containing viable microorganisms or their toxins known to cause disease in animals or humans or plants.	
Corrosives	Substances or wastes that, by chemical action, will cause severe damage when in contact with living tissue, or, in the case of leakage, will materially damage, or even destroy, other goods or the means of transport; they may also cause other hazards.	Acids, Alkalies
Liberation of Toxic Gases in Contact with Air or Water	Substances or wastes that by interaction with air or water, are liable to give off toxic gases in dangerous quantities.	
Toxic (Delayed or Chronic)	Substances or wastes that, if they are inhaled or ingested or if they penetrate the skin, may involve delayed or chronic effects, including carcinogenicity.	Lead (Pb), Asbestos, Mercury (Hg)
Ecotoxic (1)	Substances or wastes that, if released, present or may present immediate or delayed adverse impacts to the environment by means of bioaccumulation and/or toxic effects upon biotic systems.	PCB contaminated oil
Ecotoxic (2)	Capable, by any means, after disposal, of yielding another material, eg, leachate, which possesses any of the characteristics listed above.	Contaminated Soils CCA treated poles

Appendix C: Controlled waste identification decision tree



Appendix D: Temporary storage of contaminated soil, waste oil and asbestos

EPA TASMANIA
ENVIRONMENT PROTECTION AUTHORITY

EXEMPTION UNDER REGULATION 24 OF THE *ENVIRONMENTAL MANAGEMENT AND POLLUTION CONTROL (CONTROLLED WASTE TRACKING) REGULATIONS 2010*

I, Wes Ford, Director, Environment Protection Authority, hereby grant an exemption under regulation 24(3)(a) of the *Environmental Management and Pollution Control (Controlled Waste Tracking) Regulations 2010* from the requirement to be registered as a controlled waste transporter in relation to the waste materials described below provided that the following requirements are complied with:

Exemption issued to (The Exempt Entity):

Tas-Network Electrical Group Pty Ltd, including Contractors and Sub Contractors.

ACN:

158 935 589

Waste Description and Quantity (The Waste):

- No more than 5 m^3 of contaminated soil per vehicle per occasion;
- No more than 1,000 litres of waste transformer oil per vehicle per occasion;
- No more than 1,000 litres of oil or 1 tonne of equipment containing polychlorinated biphenyls (PCBs); and
- Less than 10 square metres of asbestos.

NEPM Code and description:

M100 Waste substances and articles containing or contaminated with polychlorinated biphenyls (PCBs), polychlorinated naphthalenes (PCNs), polychlorinated terphenyls (PCTs) and/or polybrominated biphenyls (PBBs).

N220 Asbestos.

N120 Soil contaminated with a controlled waste.

N100 Containers which are contaminated with residues of substances referred to in this document.

J100 Waste mineral oils unfit for their original intended use.

Disposal location (The Land)

To be determined on a case by case basis in accordance with the *Environmental Management and Pollution Control (Waste Management) Regulations 2010.*

Owner of the waste:

Tas-Network Electrical Group Pty Ltd

Period for which Approval is valid:

25 August 2015 to 25 August 2017

Requirements:

1. Within 12 months from the date of this exemption and each 12 months thereafter, a report must be provided to the Director. The report must include the following information:
   - Number of incident/spill responses involving the above mentioned waste materials;
   - Location of incidents/spill responses;
   - Type and quantity of waste materials associated with the incident/spill response; and
   - Final destination of all waste materials transported under this exemption.

2. A copy of these conditions must be kept at all times in each vehicle used to transport controlled wastes and must be presented to an authorised officer upon request. The exempt entity must take all reasonable steps to ensure that all drivers of vehicles carrying waste materials under this exemption are familiar with these conditions and the NEPM Codes and descriptions to the extent relevant to their work.

3. A Spill Management Plan or Plans appropriate for all waste materials being transported must be kept at all times in each vehicle used to transport those waste materials.

4. The relevant Spill Management Plan must be presented to an authorised officer upon request.

5. The relevant Spill Management Plan must be presented to any officer from any of the emergency services (e.g. Tasmanian Fire Service, the Police, State Emergency Service) upon request in the event of an incident.

6. All drivers of vehicles collecting and transporting waste materials must be familiar with the relevant Spill Management Plan held in a vehicle, prior to collection and transport of the waste material, and must be competent in the implementation of any measures required by the Plan.

7. A Spill Management Plan must include:

   a. Details of any properties the waste material may have that may affect the environment or human health and safety;

   b. Procedures for appropriate containment and handling of the waste material during collection and transportation to reduce the potential for the emission of waste material to the environment;

   c. A list of actions to be taken to contain, treat, control, recover and dispose of any waste material which leaks, spills or accidentally escapes during loading, transit or unloading of the waste.

   d. Contact details for the person responsible for coordinating the response to any incident involving the release of the waste material, where that person is not the driver of the relevant vehicle;

   e. An itemised list of equipment and other resources necessary to contain, treat, control, recover, and dispose of any waste materials which might leak, spill or accidentally escape; and

   f. Recording and reporting procedures for incidents resulting in the emission of a waste material to the environment, which provide for a recording of the location, time and cause of the incident, the quantity of waste material released, the effect of that release, and the actions taken to manage the release.

8. Vehicles used to transport waste materials must carry equipment and other resources necessary to implement the actions specified in the relevant Spill Management Plan or Plans.

9. Unless otherwise specified in these conditions or unless otherwise approved in writing by the Director, the treatment of this waste material must be carried out in accordance with the documents provided to support the application.

10. If an incident causing or threatening environmental nuisance, serious environmental harm or material environmental harm from pollution occurs in the course of the approved activity, then the person responsible for the activity must immediately take all reasonable and practicable action to minimise any adverse environmental effects from the incident.

Wes Ford
DIRECTOR, ENVIRONMENT PROTECTION AUTHORITY

Date: 25 August 2015

Appendix E: Waste collection locations and bins

		Bin availability and pick up frequency/notification										
Resource Centre	N = Notification R = Regular collection X = Not available	Steel/Copper /Aluminium	Treated and Untreated Wood	Asbestos	Light Globes	Electricity Meters	Battery Recycling	General Recycling	Printer Cartridge Recycling	Cardboard Recycling	Paper Recycling	General Waste
Cambridge	67 Kennedy Drive, Cambridge	N	N	N	N	N	N	R	N	R	R	R
Devonport	162 Middle Road, Devonport	N	N	N	N	N	N	R	N	R	R	R
Rocherlea	1 Australis Drive, Rocherlea	N	N	N	N	N	N	R	N	R	R	R
Lenah Valley	1-7 Maria Street, Lenah Valley	X	X	X	X	X	N	R	N	R	R	R
Response Centre												
Bridgewater	75 Greenbanks Road, Bridgewater	N	N	N	N	N	X	R	N	N	R	R
Burnie	52 Three Mile Line Road, Burnie	N	N	N	N	N	X	R	N	N	R	R
Campbell Town	126 Bridge Street, Campbell Town	N	N	N	N	N	X	R	N	N	R	R
Deloraine	38 West Goderich St, Deloraine	N	N	N	N	N	X	R	N	N	R	R
Huonville	2 Tennis Court Road, Huonville	N	N	N	N	N	X	R	N	N	R	R
New Norfolk	25 Back River Road, New Norfolk	N	N	N	N	N	X	R	N	N	R	R
Queenstown	3 Sorell Street, Queenstown	N	N	N	N	N	X	R	N	N	R	R
Scottsdale	5-9 Cameron Street, Scottsdale	N	N	N	N	N	X	R	N	N	R	R
Smithton	81A Brittons Road, Smithton	N	N	N	N	N	X	R	N	N	R	R
St Marys	20 Clive Street, St Marys	N	N	N	N	N	X	R	N	N	R	R
Other locations												
Bridgewater Primary Store	75 Greenbanks Road, Bridgewater	N	N	X	X	X	X	N	X	N	N	N
Denison Lane Archives	Dension Lane, Hobart	X	X	X	X	X	X	X	X	X	N	R
Mornington	8 Mornington Road, Mornington	X	X	X	X	X	N	R	N	R	R	R

Appendix F: Controlled waste manifest form

Site Location/Collection Address		**Contact Person**	
Transported By		**Phone/fax**	
Disposed By		**Signature and date**	

Brand Name	Manufacturer	Chemical Name (Main Active Ingredient + Percentage)	Number of Containers	Container Size	Volume/Weight in Containers	Container Type	Condition (leaks etc.)	S = Solid L = Liquid SL = Sludge	DG Class	UN Number	SDS (Y/N)	Hazards/Comments

Container type codes: g = glass p = plastic s = steel/metal a = aerosol c = cardboard
Dangerous Goods Classes: 1 = Explosives 2 = Gas 3 = Flammables 4 = Flammable/Combustible Solid 5 = Oxidisers 6 = Toxic/Infectious 7 = Radioactive 8 = Corrosive 9 = Miscellaneous
UN Number: refer to ChemWatch SDS Section 14 Transport Information.