

Assessment of Resource Recovery Centres



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Resource Recovery Centres (RRCs) are an essential part of the resource recovery infrastructure network. They provide important services for rural communities that do not have access to kerbside collection services and provide for the recovery of materials not accepted in the kerbside system.

In the Barwon South West region, there are 36 council operated RRCs and 4 privately operated transfer stations.

About the RRC Assessments

Reincarnate and Randell Environmental Consulting were engaged to assess all council operated RRCs across the region against best practice standards, to identify and prioritise infrastructure improvements.

The purpose of these assessments was to:

- assist councils with infrastructure planning;
- support funding applications for infrastructure upgrades;
- provide improved economies of scale;
- maximise resource recovery at RRCs; and
- provide improved community and environmental outcomes through the management of RRCs.

This project was identified by Local Government Forum and funded through their Local Government Program.

RRC Network Strengths

The assessment identified a number of strengths with the current RRC network that need to be recognised.

• Existing Best Practice Facilities

There are several facilities in the region that have well developed infrastructure to support the recovery of materials, have good site amenity and can store materials undercover. These facilities provide a benchmark for other sites in the region.



Best practice facility - Portland Transfer Station

• Materials Accepted

There is a large number of materials accepted and recovered at most sites. For example, all sites accept comingled recyclables and e-waste and 97% of sites accept metals and car batteries.

- **Good site management**

Whilst site management across the region is varied, there are some well managed sites across the region. Even where there is little infrastructure, some sites are well managed as evidenced by no litter and well separated materials.



Steel is stored separately with no contamination at Woorndoo Transfer Station

- **Waste Infrastructure**

Most facilities have good infrastructure for the collection of residual waste such as engineered platforms and concrete hardstands.



Engineered platforms at Drysdale Transfer Station

RRC Network Improvement Opportunities

The assessment identified improvement opportunities for all sites. An overview of the improvement opportunities is provided below.

- **Lack Of Site Infrastructure**

Lack of infrastructure for the collection and storage of recyclable material is the biggest challenge for the region. Materials such as e-waste, batteries, gas bottles and mattresses are commonly stored on the ground with no hardstand or cover. Poor storage of materials can pose risks to human health and the environment through potential leaching of hazardous materials and fire risks.

Infrastructure such as hardstands and paved roads are also lacking.



Gas bottles stored on the ground

- **Site Constraints**

A number of sites have constraints that may impact on the future development of these sites. Common constraints included sites constructed on or adjacent to closed landfills, site layout and shape, lack of covered areas for recycling sheds, and poor siting of the gatehouse that does not allow for oversight of the waste disposal area. Expansion of some facilities is limited by encroachment from sensitive land uses.

• Materials Not Accepted

Whilst the region's RRCs accept a range of materials for recycling, there are some materials that are not commonly accepted. This presents a potential barrier for residents and an opportunity for councils to improve resource recovery.

Materials not commonly accepted include:

- Household chemicals and paint
- Asbestos
- Polystyrene
- Separated plastics
- Fluorescent tubes
- Separated cardboard
- Agricultural plastics
- Concrete, bricks and rubble

• Poor Site Amenity

A number of sites assessed had poor amenity, such as litter. This can negatively impact on neighboring land and the community's perception of RRCs. It encourages poor site practices such as illegal dumping.

A contributing factor to litter is poor oversight of incoming loads and disposal areas. For example, often disposal areas are not visible from the gatehouse and site attendants are not able to oversee unloading when the site is busy.



Litter is evident surrounding the skips

• Waste Oil Storage

Waste oil is accepted for recycling at 30 of the sites. At many sites, the collection and storage of waste oil does not meet best practice standards. Waste oil units often lacked a bunded hardstand and spill kits. Some sites had evidence of soil leakage onto the ground.



Oil is stored on the ground next to car batteries. There is evidence of oil leakage onto the ground

• Asbestos

The RRC Assessments identified suspected asbestos materials at three sites. This material is not easily observed when hidden in loads.

The lack of disposal options in the region is likely to be a contributing factor. This should be considered in regional infrastructure planning.



Suspected asbestos material hidden in green waste

- **Stockpiling and Fire Risk**

All RRCs in the region stockpile material to ensure there are sufficient quantities of materials to warrant collection or processing.

Stockpiled waste poses a potential fire risk and needs to be managed in accordance with the EPA's [Management and Storage of Combustible Recyclable and Waste Materials](#).

Several sites had fire risks associated with stockpiling of green waste and timber close to treed areas and long grass. These risks are compounded when potential ignition sources such as batteries are stored in the open.



Long grass presents a fire risk

- **Storage Of Hazardous Wastes**

At some sites, particularly at smaller remote RRC facilities, the management of hazardous materials such as batteries and gas bottles pose a risk to human health and the environment. For example, often materials are stored loose, on the ground and uncovered.



Car batteries stored loose on the ground

- **Green waste stockpiling**

Green waste is the most commonly stockpiled material at RRCs. Stockpiling of unprocessed green waste occurs due to infrequent onsite shredding. Some sites had stockpiles of processed green waste which had no market.

Issues observed with the green waste stockpiles included no stormwater management, no hardstands, fire risks, and contamination.



Treated timber in green waste stockpiles

- **E-waste Storage**

Only six sites complied with the storage and collection requirements specified in the Waste Management Policy (e-waste). Common issues included storage of e-waste on the ground and uncovered, in skips where breakages are likely and combined with scrap metal piles.

Since the RRC Assessments were undertaken, 10 sites have received funding to construct e-waste shedding that complies with the policy.



E-waste stored loose on the ground

Regional Priorities

Based on the assessments, regional priorities for investment included:

1. Shedding for the storage of recycled materials such as batteries, gas bottles and mattresses.
2. Infrastructure for the storage of e-waste that complies with the Waste Management Policy (e-waste). This includes the construction of shedding to store e-waste undercover and on a hardstand.
3. Improved site management including oversight of loads and litter management.
4. Reducing fire risks through appropriate storage of hazardous wastes, reduced stockpiling and managing on-site vegetation.
5. Hard-stand areas, particularly for garden waste.
6. Increased site staffing to improve site management and oversight
7. Improved resource recovery infrastructure and site efficiency at large, high volume sites. For example, transitioning to push-pit infrastructure would allow the additional recovery of material.

Each council has received a detailed assessment report and recommendations for each of their RRC facilities.

BSWWRRG will continue to work with councils to support the implementation of the RRC Assessment priorities, such as identifying funding opportunities, supporting collaborative procurement and training.

Further Information

For further information about the RRC Assessment Report please contact BSWWRRG on 5223 2622 or info@bswwrrg.vic.gov.au



Infrastructure

The RRC Assessment Report was developed with support from the Barwon South West Local Government Forum through their **Local Government Program 2017-2018**. This program is a partnership between councils that aims to deliver waste and resource recovery initiatives specific to local government needs.

Local Government Forum Members:

