

Operational Waste

Aim of the Credit

To recognise best practice solutions that facilitate the recycling of resources and reduce operational waste going to landfill.

Credit Criteria

There are two options for demonstrating compliance with this credit. Project teams must choose one option to demonstrate compliance.

1	Operational Waste Management – Predicted Performance	1 point is awarded when: 1.1 A Waste Management Plan has been developed, by a qualified waste auditor, that addresses best practice requirements as outlined in this credit.
2	Operational Waste Management – Prescriptive Deemed-to-Satisfy	1 point is awarded when the following criteria are met: 2.1 Separation of Waste Streams - bins or containers are provided for general public use that allow for separation of the applicable waste streams; 2.2 Dedicated Waste Storage Area - a dedicated, sufficiently sized storage area for the separation and collection of various waste streams is provided; 2.3 Access to Waste Storage Area - best practice access requirements for waste collection, as described in this credit.

Compliance Requirements

There are two options for demonstrating compliance with this credit. Project teams must choose one option to demonstrate compliance:

1. Operational Waste Management – Predicted Performance
2. Operational Waste Management – Prescriptive Deemed-to-Satisfy

1 - Operational Waste Management – Predicted Performance

These requirements are to be used by project teams that have a dedicated waste auditor, or other waste professional specialist, as part of the project team.

1.1 - Waste Management Plan

Operational Waste Management Plans (OWMPs) are usually implemented by building owners or operators, as they can influence the amount of waste recycled and generated by occupants, tenants and visitors. For the purposes of this credit, the OWMP must be developed for implementation at the site and building level, and be applicable to the Green Star project boundary.

The OWMP may be a standalone plan, or part of a more comprehensive Environmental Management System, as long as it is also implemented at a building level, and meets the requirements outlined in this credit.

At a minimum, the OWMP must:

- identify the objectives of the plan, by setting diversion from landfill targets and / or target for reducing total materials generation (general waste materials + recyclable / reusable materials);
- clearly identify the areas to which the OWMP applies. For instance in a shopping centre, the OWMP may not cover 'Majors', as individual shops may be responsible for their own waste management. Where this is the case, this must be clearly identified within the OWMP;
- clearly identify waste streams (which must include general waste, paper and cardboard, glass and plastic);
- clearly identify applicable bins for various waste streams, that allow for separation of recyclable streams;
- clearly identify at least one other waste stream that can be recycled, and for which recycling facilities are provided. Examples of other waste streams that can be recycled include: food waste, cooking oil, batteries and electronics;
- clearly identify storage areas for all waste streams identified in the OWMP;
- outline best practice access requirements for the collection of all waste streams identified in the OWMP;
- outline individual roles responsible for delivering and reviewing the OWMP;
- outline monitoring and measurement procedures for waste and recycling streams by weight
- incorporate a review process to assess the success of the OWMP and make improvements, based on lessons learned.

The OWMP must be developed by a qualified waste auditor. A qualified waste auditor, for the purposes of this credit, is defined as:

- An auditor holding Environmental Management Systems Auditor certification issued by Exemplar Global (formerly RABQSA Inc.). To find a certified auditor,

please refer to the 'Search for Certified Individuals' section of the Exemplar Global website (<http://www.exemplarglobal.org/what-we-offer/search-for-certified-individuals-or-organizations/>);

OR

- An auditor employed by a waste management organisation, possessing a minimum of five years experience, working in waste auditing in the built environment, with specific experience in conducting commercial audits in line with guidelines issued by State/Territory waste authorities.

OR

- A waste auditor or waste specialist, working for a consultant, building owner or contractor, possessing a minimum of three years experience developing OWMPs.

Currently, the credit outlines compliance requirement for a 'qualified waste auditor'. Do you support this approach? Or should it be up to the project team to demonstrate they meet the OWMP requirements regardless of who develops it?

2 - Operational Waste Management – Prescriptive Deemed-to-Satisfy

These requirements are to be used by project teams that may not have a dedicated waste auditor, or other waste professional specialist, as part of the project team. These prescriptive requirements are considered a deemed-to-satisfy option to achieving best practice outcomes in operational waste management.

2.1 - Separation of Waste Streams

Bins or containers are provided for general public use that allow for separation of the applicable waste streams. The following waste streams must be provided with separate bins or containers:

- general waste,
- paper and cardboard,

- glass,
- plastic,
- at least one other waste stream.

These bins or storage containers must be clearly marked for each stream. Bins or storage containers must be provided within an even distribution throughout the public areas for general public use that allows for separation of the applicable waste streams as specified in the Credit Criteria.

2.2 - Dedicated Waste Storage Area

A dedicated, sufficiently sized area for the storage and collection of various waste streams, as outlined in criterion 2.1 *Separation of Waste Streams*, must be provided.

The storage area must be sized to accommodate all bins or containers for the various waste streams, for at least one collection cycle. The calculations used to demonstrate that the area provided is adequately sized to handle the recyclable waste streams specified in the Credit Criteria, must be based on:

- Waste generated by project; and
- Collection frequency for each waste stream.

The calculations for waste generation rates must be based on figures outlined within third-party best practice guidelines, such as the City of Sydney's *Policy for Waste Minimisation in New Developments (Appendix B)*. Other third-party best practice guidelines issued by other city councils (or other waste authority) may also be used to calculate waste generation rates.

It is acceptable to provide more than one dedicated storage area in providing the appropriate waste storage space for the project. However, all storage areas dedicated to recycling must meet all the Credit Criteria.

2.3 - Access to Waste Storage Area

Best practice access requirements for waste collection areas must be adhered to, in order for this Compliance Requirements to be met.

These access requirements must be as outlined within third-party best practice guidelines, such as the City of Sydney's *Policy for Waste Minimisation in New Developments (Section A and C)*. Other third-party best practice guidelines issued by other city councils (or other waste authority) may also be used to calculate waste generation rates.

Guidance

Standards and guidelines noted in this credit

City of Sydney's *Policy for Waste Minimisation in New Developments*, latest edition

Definitions

Alternative Waste Treatment (AWT)

AWT refers to facilities and/or technologies that accept and process mixed waste (such as municipal solid waste, or waste that would be sent to landfill) and extract recyclable materials and organic waste, before the residual waste goes to landfill.

General Waste Materials

General waste materials include all waste streams not clearly identified as being recyclable or reusable.

Materials Recovery Facility (MRF)

MRF is a specialised facility that receives, separates and prepares recyclable materials for marketing to end-user manufacturers. This may also be referred to as municipal/mixed recycling or recovery facility, and usually involves mechanical sorting and separation of materials. An MRF does not process residual organic waste, or cover sites that are mainly transfer stations (Australian Waste Management Report 2010).

Off-site recycling

Where recyclable waste is taken off-site to be sorted and hence equipment for the different recyclable waste streams will not be provided, additional documentation will be required to demonstrate that a contract is in place for the waste to be removed and sorted and that the waste is sorted into the streams required by the Compliance Requirements of this credit.

Recyclable / Reusable Materials

These are materials that can be made into new products, or reused, to prevent them from being sent to landfill. This reduces the consumption of raw materials, as well as the environmental impacts associated with sending waste to landfill.

Documentation Requirements

‘Design Review’ Submission (Optional)

Project teams are to submit information/documentation marked with an asterisk* for ‘Design Review’.

As Built Submission

All project teams are to submit the following documentation:

Submission Template

- Summary of how the project meets the credit criteria*

Project teams are required to provide documentation supporting credit compliance. The following documents may be used to demonstrate compliance, depending on the approach taken by project teams:

- **Copy of Operational Waste Management Plan**
Including all relevant compliance requirements as outlined in the Submission Template.
- **Evidence of Waste Auditor qualifications**
CV or project list outlining previous experience and qualifications.
- **Site Plan and/or Architectural Plans**
Highlighting all relevant areas as referenced by the OWMP.

Please provide feedback on the technical content of this credit:

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