

# Outline of Process: Statewide Waste and Resource Recovery Infrastructure Scheduling

## Purpose of this document

Regional implementation plans must include an infrastructure schedule (Schedule). The EP Act prescribes the content of each Schedule, and includes existing resource recovery and landfill infrastructure as well as identifying infrastructure in the region for at least the next 10 years.

Under the EP Act EPA may refuse to consider an application for a works approval, licence or licence amendment in relation to a waste management facility if it is inconsistent with the schedule.

This document has been prepared by Sustainability Victoria with the waste and resource recovery portfolio agencies and provides stakeholders with an overview of the process for a Waste and Resource Recovery Group (Group) to develop the Schedule for its regional implementation plan.

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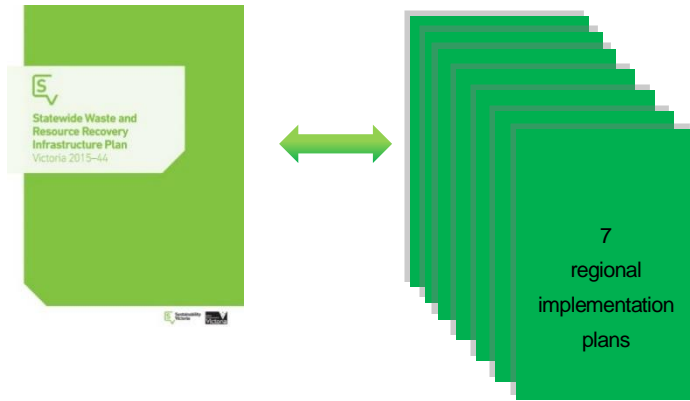
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# Victorian Waste and Resource Recovery Infrastructure Planning Framework

The *Environment Protection Act 1970* (EP Act) establishes the Victorian Waste and Resource Recovery Infrastructure Planning Framework (the Framework). The Framework provides the structure for strategic planning for waste and resource recovery that integrates state, regional and local planning. It requires the preparation, integration and implementation of the Statewide Waste and Resource Recovery Infrastructure Plan (state infrastructure plan) and seven Regional Waste and Resource Recovery Implementation Plans (regional implementation plans).

**Figure 1 – Integrated suite of plans in the Framework**



The objectives of the Framework are to:

- ensure long-term strategic planning for waste and resource recovery infrastructure at state and regional levels
- facilitate the integration of state wide directions for the management of waste and resource recovery infrastructure and regional infrastructure needs
- enable waste and resource recovery planning to be:
  - effectively integrated with land use and development planning and policy
  - effectively integrated with transport planning and policy
- ensure Sustainability Victoria (SV) and the Waste and Resource Recovery Groups (Groups) work together to integrate the
- enable waste and resource recovery infrastructure planning decisions at the appropriate level of the Framework.

## Purpose of infrastructure schedules

The regional implementation plans seek to meet local and regional objectives as well as to implement the goals and strategic directions of the state infrastructure plan. Each regional implementation plan must include a Schedule of existing and required waste and resource recovery infrastructure within its region. The purpose of a single schedule is *to holistically plan for the management of waste and, where viable, make infrastructure decisions that prioritise resource recovery over landfilling*<sup>1</sup>. There are two parts to the Schedule:

### Infrastructure Schedule Part A: Resource Recovery

The purpose of scheduling resource recovery infrastructure is to enable Groups to identify gaps and capacity needs and plan holistically for future resource recovery infrastructure needs. This includes planning for the availability of suitable sites for new or expanded facilities.

### Infrastructure Schedule Part B: Landfills

The purpose of scheduling landfill infrastructure is to:

- ensure that each region has an adequate amount of landfill capacity and to ensure the safe and sanitary disposal of wastes that are not recovered, for at least the next 10 years
- minimise the development and use of landfills for the management of waste in Victoria as per paragraph 9(3) of the Victorian Government's [Waste Management Policy \(Siting, Design and Management of Landfills\), 2004](#) (Waste Management Policy- Landfills)
- propose the sequence for the filling of available landfill sites for at least the next 10 years
- provide estimations of the intended or likely closure date for the landfills that are listed in the schedule
- report on the rehabilitation status for closed landfills within the Group's region that have been recently closed (in the past 30 years) to drive effective rehabilitation and to ensure that the public are informed of landfills that require more active management
- ensure that future landfill capacity needs are planned for to enable appropriate buffers to be known and defined, allowing for sound planning decisions to be made for land development in the vicinity of any new landfills that are listed in the schedule.

Under the EP Act, EPA must refuse to consider an application for a works approval in relation to a new landfill unless the landfill is provided for in the proposed sequence for filling of available landfill sites in a relevant schedule of existing and required waste and resource recovery infrastructure within a regional implementation plan.

Landfills are part of Victoria's waste and resource recovery infrastructure system. In the case of landfill infrastructure, the Waste Management Policy - Landfills requires Groups to minimise the development and use of landfills, whilst providing sufficient landfill airspace need for the disposal of residual waste. Reflecting this policy, a goal of the state infrastructure plan is to use *landfills only for receiving and treating waste streams from which all materials that can be viably recovered have been extracted* – to reduce our reliance on landfill. To this end, new or expanded landfill airspace is only planned for and scheduled if there is a demonstrable need after taking into account resource recovery options.

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<sup>1</sup> Victorian Government, Guideline: Making, amending and integrating the Statewide Waste and Resource Recovery Infrastructure Plan and Regional Waste and Resource Recovery Implementation Plans (Guideline), section 4.6

## Process for scheduling new or expanded infrastructure

The following principles guide the process for scheduling new or expanded infrastructure:

- i. The principles of environment protection set out in the EP Act<sup>2</sup> apply to this process:
  - integration of economic, social and environmental considerations
  - the precautionary principle
  - intergenerational equity
  - conservation of biological diversity and ecological integrity
  - improved valuation, pricing and incentive mechanisms
  - shared responsibility
  - product stewardship
  - wastes hierarchy
  - integrated environmental management
  - enforcement
  - accountability
- ii. The principle of evidence-based decision making and the following principles of environmental justice set out in the statewide infrastructure plan:
  - environmental benefits and impacts should be distributed proportionately
  - affected communities should be able to participate in decision-making.

Groups will undertake a transparent process, including articulation of the considerations and evaluation methodology, to seek applications from potential proponents for inclusion on the Schedule. There are a range of options available to Groups to undertake this process.

### **Process for Part A – new or expanded resource recovery infrastructure**

To develop their regional implementation plans, Groups will engage with the market to identify options for future resource recovery infrastructure, including infrastructure options in other waste and resource recovery regions. Industry responses may assist Groups to identify the potential for valuable materials to be recovered and can also be used to determine the required landfill airspace needed for at least the next 10 years. This information **may** also inform Part A of the Schedule; in which case this will be clearly communicated to proponents and probity arrangements will be in place. Alternatively the market sounding and scheduling processes may be conducted separately.

In the interests of statewide consistency, Groups are encouraged to apply the considerations in Table 1, however the weightings applied to each consideration may differ to address local differences of each region. Groups will assess the applications and schedule proposed infrastructure solutions that meet the region's infrastructure needs.

Listing on the Schedule is not essential for any approvals purposes for resource recovery infrastructure.

### **Infrastructure is located in another region**

A regional implementation plan cannot list infrastructure on its schedule that is located in another region. If a Group identifies resource recovery infrastructure which it may need to use but that is located in another Group's region, the Group will work with the potential "host" Group to determine whether it is appropriate to include that infrastructure on the "host" Group's schedule.

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<sup>2</sup> Sections 1B – 1L

Table 1: Broad considerations for resource recovery infrastructure

Broad consideration	Key questions	Evidence
<b>Alignment with waste and resource recovery objectives</b>	<p>Does the proposal align with / help achieve:</p> <ul style="list-style-type: none"> <li>• the strategic objectives and priorities for the region – identified in consultation with local stakeholders?</li> <li>• Statewide infrastructure plan goals and strategic directions?</li> <li>• State Environment Protection Policies, Waste Management Policies and other government policies?</li> </ul>	<ul style="list-style-type: none"> <li>• Articulation of the materials proposed to be recovered or reprocessed</li> <li>• How the proposal will achieve the desired objectives – e.g. aggregation, sorting.</li> </ul>
<b>Contribution to the waste and resource recovery system, in line with the state infrastructure plan’s strategic directions and the regional implementation Plans’ objectives</b>	<ul style="list-style-type: none"> <li>• What gap, need, opportunity or risk does the proposal address?</li> <li>• What is the extent of increased recovery that the proposal may achieve?</li> <li>• Does the proposal expect to provide recovery for materials generating in another waste and resource recovery region?</li> </ul>	<ul style="list-style-type: none"> <li>• Articulation of how (and when) the proposal will address a particular gap, need or reduce risk to the system</li> <li>• An estimate of the extent of additional material (by type) to be recovered</li> <li>• Source of materials (within and beyond the waste and resource recovery region).</li> </ul>
<b>Economic and technical viability in the region</b>	<ul style="list-style-type: none"> <li>• Is the technology solution tried and tested or is it innovative – if innovative, has it been proven in similar scenarios?</li> <li>• Is the proposal viable within current policy settings?</li> <li>• Is the proposal financially viable in the current economic climate? (and also to withstand expected fluctuations in that economic environment)?</li> </ul>	<ul style="list-style-type: none"> <li>• Examples of the technology being used in similar settings</li> <li>• Outline of proposed markets for aggregated material or end products.</li> </ul>
<b>Tenure and alignment with land use planning controls</b>	<p>If a location has been identified:</p> <ul style="list-style-type: none"> <li>• Do the planning controls permit this land use?</li> <li>• Is a planning permit required? If so has a permit been issued?</li> <li>• Does the proposal adequately comply with relevant planning permit conditions?</li> <li>• Are there any land use planning issues associated with the proposal?</li> <li>• Does the proponent have tenure or agreement from the owner (as relevant)?</li> </ul>	<ul style="list-style-type: none"> <li>• Site location (if applicable)</li> <li>• Planning controls (e.g. zone, overlays)</li> <li>• Permits in place or required for the infrastructure (or expansion)</li> <li>• Proposed steps to achieve required planning approvals.</li> </ul>
<b>Regulatory compliance</b>	<ul style="list-style-type: none"> <li>• Is the proposed technology able to be progressed under the current regulatory framework? (e.g. works approval)</li> <li>• Are adequate buffers in place from sensitive uses (if relevant), and what planning controls apply within the buffers?</li> </ul>	<ul style="list-style-type: none"> <li>• Likely compliance with legislation, regulations and guidelines</li> <li>• Buffers from sensitive uses (as relevant).</li> </ul>
<b>Community acceptance</b>	<ul style="list-style-type: none"> <li>• Are there potential community concerns that should be taken into consideration?</li> <li>• Has the affected community been engaged about the proposal (if relevant)?</li> </ul>	<ul style="list-style-type: none"> <li>• Complaints to EPA or local government for existing or similar activities (and resolution)</li> <li>• Letters of support from local government or community organisations</li> <li>• Surveys conducted by local government or others.</li> </ul>

## Process for Part B – new or expanded landfill infrastructure section

Part B of the Schedule includes:

- a schedule of existing landfill sites, with an indication of the likely sequence of filling of available airspace
- landfill sites that will be in rehabilitation for all or part of the 10 year period.
- options for future landfill capacity, if a need is determined. The Group is therefore required to determine if there is sufficient approved\* landfill airspace available to meet the region's needs, for at least the next 10 years.

The Group will determine the adequacy of remaining approved landfill airspace for residual waste (as defined in the state infrastructure plan) based on a range of information, much of which is drawn together to inform the regional implementation plan. This includes:

- waste generation modelling
- cross-regional flows
- existing resource recovery activity
- the results of the market sounding process (or similar) to identify potential new or expanded resource recovery opportunities
- the likely impact of interventions identified in the regional implementation plan to support increased resource recovery and reduce reliance on landfill
- capacity of existing landfills and sequencing
- the need for contingency
- other considerations as relevant.

If the Group identifies an airspace need, it is then required to identify preferred landfill options in the Schedule. It should consider the option of disposal at a landfill located in another region and the need to schedule additional landfill airspace within the region.

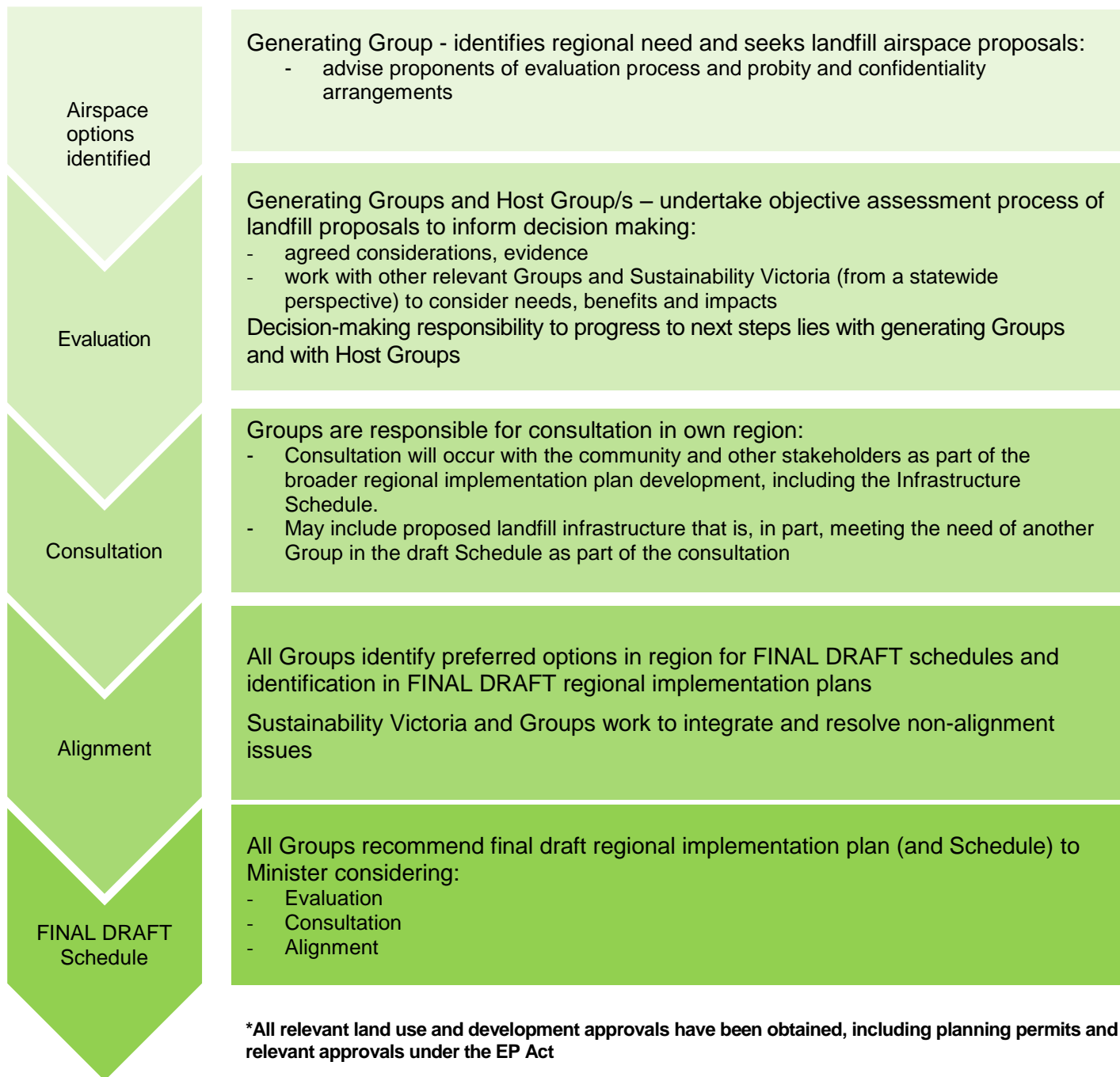
The Group will first consider whether existing landfills in the region, including approved and unapproved airspace, are adequate to meet this need. The Group may then limit the options it considers to existing landfills, in accordance with the Waste Management Policy - Landfills.

If a Group determines through developing Part B of the Schedule that a landfill site, prior to being issued a works approval, planning permit and license, is found no longer to be the most suitable option, then it may be removed from the Schedule and suitable alternative landfill sites be scheduled if new infrastructure is still required (refer Guideline (section 4.6.4)).

Figure 2 summarises the process from the point at which additional landfill airspace has been determined to be required and integrates with the broader process for the development of the regional implementation plans.

The evaluation stage involves a holistic consideration of the proposal's capability to minimise impacts to the environment and the community, to contribute effectively and efficiently within the region and as part of an integrated statewide system that facilitates the achievement of the goals of the state infrastructure plan. The Waste Management Policy – Landfills and the supporting [Siting, design, operation and rehabilitation of landfills – Best Practice Environmental Management](#) (Best Practice Environmental Management (Landfill)) guideline underpin many, but not all, of the elements of the evaluation process. This evaluation does not pre-empt the regulatory role of the EPA nor does it provide assurance that a licence or works approval will be issued.

Figure 2 – High level process for scheduling of landfill infrastructure (if additional landfill airspace is required)



As part of this process Groups and SV assess the applications against the considerations (refer Table 2), although each Group may adjust (e.g. apply weightings) in accordance with regional requirements. The assessment may consider both quantitative and qualitative evidence provided by the proponent and other relevant agencies (e.g. relevant local government, EPA). This information informs the relevant Group’s determination of a preferred option/s.

Should landfill airspace option/s be listed in a consultation draft regional implementation plan, the results of the consultation process provides additional information to inform the final draft regional implementation plan and its Schedule.

**Table 2. Considerations for landfill evaluation**

CONSIDERATION		POLICY		EVALUATION CATEGORY			ASSESSOR	
		Landfill WMP	BPEM (landfill)	Environment	Social, Economic & Community	WRR system	Assessed by generating region	Assessed by host region *
Existing or new landfill (if both are being considered)	The expansion of an existing landfill site (e.g. quarry void space, extension of trench and fill method etc.) which may require planning approvals or additional works approvals compared with a yet to be established landfill	√		√	√	√	√	
Community needs	Refer below	√	√	√	√			√
Landfill type	The potential of the proposal to align with Best Practice Environmental Management (Landfill) guideline and preferred landfill types	√	√	√			√	
Groundwater	The potential of the proposal to meet the Best Practice Environmental Management (Landfill) requirements for the protection of groundwater	√	√	√			√	
Surface water	The potential of the proposal to meet the BPEM (Landfill) requirements for the protection of surface water	√	√	√			√	
Alternative potential uses for the site	The extent to which the site has limited or low value alternative uses	√	√		√			√
Buffer distances between the landfill and sensitive land uses	The extent to which the site meets the buffer distances required for landfill gas migration, safety and amenity impacts (gas, offensive odours, noise, litter and other activities that can cause nuisance ) or can be mitigated, as per BPEM (Landfill)	√	√	√	√		√	
Planning controls	The alignment of the proposal (and required buffers) with current planning controls and strategic land use planning for the area				√		√	
Geological setting	The stability of the landform where the landfill is to be proposed to be located and suitability of the mineralogy	√	√	√			√	
Flora and fauna	Whether the site supports significant flora and fauna, and the likelihood of relevant approvals being obtained	√	√	√			√	



CONSIDERATION		POLICY		EVALUATION CATEGORY			ASSESSOR	
		Landfill WMP	BPEM (landfill)	Environment	Social, Economic & Community	WRR system	Assessed by generating region	Assessed by host region *
Local infrastructure	The site has adequate access and services	√	√		√			√
Land ownership	The ownership of the land is not an impediment to the potential development	√	√	√	√		√	
Impacts on the local economy	The extent of positive or negative impact on the local economy				√			√
Community engagement	Proposed engagement with potentially affected community during development and operational phases re appropriate		√		√			√
Impacts on local community– air/odour, traffic, noise.	The potential capability of the facility to manage litter, odour, noise, dust in line with Best Practice Environmental Management (Landfill) and community need The impact of traffic on the local community is acceptable and able to be managed.		√	√	√			
Environmental management	Proposed environmental management is in line with BPEM (Landfill)		√	√			√	
Benefits to local community	The potentially affected community has some benefits from the development of the landfill over its life				√			√
Community acceptance	The extent of demonstrated community support for the proposal				√			√
Airspace need in region	The site is able to contribute to meeting airspace need from waste generating in the region					√		√
Airspace need beyond region	The site is able to contribute to meeting airspace need from waste generating outside the region					√	√	√
Mechanisms to increase recovery	The extent to which the proposed landfill is integrated with resource recovery activities to enable all materials that can be viably recovered to be extracted		√	√		√	√	√
Contribution to state system and goals	The contribution of the proposal to the WRR system at a local, regional and state level Alignment with the goals and strategic directions of the statewide infrastructure plan					√	√	√

\*Where the host is responding to a submission to meet the needs of another area