

**STRATEGIC WASTE INFRASTRUCTURE PLANNING WORKING GROUP  
CONSULTATION WORKSHOP**

Venue: Pagoda BCD Ballroom, Esplanade River Suites, Como  
2:00pm, Thursday 26 September 2013

**WORKSHOP SUMMARY**

**1. INTRODUCTION**

Linton Pike (facilitator) welcomed participants to the workshop and outlined the process. The workshop agenda is provided at Attachment One.

**2. WELCOME AND OPENING PRESENTATION**

Neil Foley, Co-Chair of the Strategic Waste Infrastructure Planning Working Group (SWIPWG), presented the following:

**Western Australian Waste Strategy - 'Creating the Right Environment'**

**Strategic objective 1**

Initiate and maintain long-term planning for waste and recycling processing, and enable access to suitably located land with buffers sufficient to cater for the State's waste management needs.

**Waste & Recycling Infrastructure Plan for the Perth metropolitan and Peel regions**

Aim of the Plan:

- Assist in achieving the targets of the Waste Strategy;
- Plan for the waste management infrastructure required to meet the needs of the Perth and Peel '3.5 million city'; and
- Set out the planning, governance and funding instruments needed to establish this infrastructure.

**Strategic Waste Infrastructure Planning Working Group (SWIPWG)**

- A committee has been set up to provide input into the *Waste and Recycling Infrastructure Plan for the Perth metropolitan and Peel regions*;
- Membership: Waste Authority, DER, WMAA, WALGA, FORC, Department of Planning, Water Corporation, CCI;
- Established in late 2012; and
- Consultation sessions at key project milestones.

**Four main elements of the *Waste and Recycling Infrastructure Plan for the Perth metropolitan and Peel regions*:**

1. Planning and Approvals
2. **Facilities and Sites**
3. Technology
4. Governance and Funding

What next?

- Work will continue on each of project areas;
- Ongoing consultation sessions on the project;
- SWIPWG due to present a draft report to Waste Authority in February 2014; and
- Waste Authority due to report to the Minister for the Environment June 2014.

**Contacts / information**

We welcome your input!

Website: [www.wasteauthority.wa.gov.au](http://www.wasteauthority.wa.gov.au)

Email: [swipwg@der.wa.gov.au](mailto:swipwg@der.wa.gov.au)

A question and answer session followed as summarised below.

<b>Q</b>	<p>Why must the areas to be assessed for their potential for enclosed waste facilities be zoned industrial under the MRS, identified as potential industrial areas, or Water Corporation nominated areas? Other sites may be suitable for Alternative Waste Treatment (AWT) facilities (e.g. Red Hill). Is there a risk of eliminating sites such as Red Hill as a result of this process?</p>
<b>A</b>	<p>We are looking for potential waste facility sites to fit in with existing WAPC and Department of Planning (DoP) land use planning processes (e.g. the WAPC's <i>Economic and Employment Lands Strategy</i>). When planning new sites to 40 year horizon these areas are the logical start point. This does not exclude development of waste facilities at other suitable sites (such as Red Hill). Secure land is critical for the future and must be planned for, because it may be hard to find when needed. Local Planning Scheme zoning is an important part of this consideration as well as Region Planning Scheme zoning/reservation.</p>
<b>Q</b>	<p>If we fast forward to the end 2014, how will the Plan be used and implemented?</p>
<b>A</b>	<p>We are working with DoP to influence sub-regional Structure Plans for the Perth and Peel regions. These spatial plans outline the broad land use structure for the area. We are also trying to “define” waste from a town planning perspective, and further integrate waste management into land use planning processes/policy. We will be seeking to secure appropriate sites (and buffers) for development of waste facilities.</p>
<b>Q</b>	<p>Some waste facilities could be compatible with rural areas. If a site in a rural area meets the criteria, it should be considered and we shouldn't limit ourselves to industrial land only.</p>
<b>A</b>	<p>This is acknowledged but at this stage our focus is on enclosed waste facilities, which are generally industrial-type land uses. Rural areas may be considered in future stages of the assessment process.</p>
<b>Q</b>	<p>We need to ensure we don't artificially exclude sites in light of potentially emerging technology.</p>
<b>A</b>	<p>This is acknowledged. We are looking for flexible sites that may be suitable for both the types of facilities that already exist in Perth and Peel, and other technologies that are operational in other states/countries</p>

Q	Who is responsible for assessing sites against the assessment criteria?
A	The SWIPWG will engage a consultant to undertake the Stage 1 assessment process. The criteria are broad brush at a strategic level, the basis for a 'first pass' assessment. This process does not replace environmental or planning approvals processes, so when a development application for a waste facility is received, more detailed scrutiny will result.
Q	The stage 2 criteria include cultural sensitivity, but this should be more broadly interpreted to include the sensitivities of those living or working in affected area/s. The risk is that we get a land use that is not consistent with community expectations or reflect a special interest. It is always a contentious issue when seeking sites for land uses such as this.
A	Noted. One of the reasons we are focussing on industrial and potential industrial areas is because these waste facilities in these areas are less likely to impact sensitive land uses (such as residential areas).
Q	The timing of this process is short, compared with equivalent plans elsewhere in Australia. How is that being factored in?
A	It is a tight timeline but also a good opportunity to integrate waste management into other planning initiatives that are currently underway.
Q	The definition of "waste" has negative connotations and rebranding to reflect the value it can offer may be worthwhile to change the prevailing paradigm and influence opinion and build support.
A	Noted and agreed.
Q	The provision of cheap landfill discourages recycling. Why not include landfill in this process?
A	Landfills are not specifically part of this Stage 1 area assessment process. However, landfills will continue to be part of the waste management mix and infrastructure network into the future.
Q	How have different types of industrial ecology (e.g. use of outputs, partnering, industry requirements, statutory provisions) been considered?
A	There are many considerations, including the examples provided. Efficient use of industrial land and industrial ecology are a part of the draft <i>State Planning Strategy</i> and <i>Economic and Employment Lands Strategy</i> , and therefore it is important to provide opportunities for these to occur through the site selection process.
Q	If we see waste as an essential service like roads, power, water, etc, at what point will waste management reach a critical tipping point that cannot be met?
A	Rough calculations suggest that without intervention (and assuming no new landfills are built) there may be a shortfall in putrescible landfill in the mid-2020s.
Q	There are a number of old landfill sites and contaminated sites around the metropolitan area; have they been considered?
A	Not specifically but could be potential sites. The focus of the Stage 1 assessment process is indicative locations rather than site specific locations.
Q	Is there consideration of remediation of former waste facility sites as part of this process?
A	Not at this time but it is worth noting.

Q	If we look long term, why not include a broader project area (outside Perth and Peel) and consider identifying less challenged sites?
A	Our Terms of Reference focus on waste infrastructure planning in Perth and Peel at this stage, and other regions in future stages.
Q	Perth and Peel Region waste infrastructure needs should not necessarily be restricted to sites within the Perth and Peel region.
A	Noted. It may be the case that sites outside Perth and Peel are required, but at this stage we are looking for opportunities within Perth and Peel.
Q	Is exporting waste an option being considered?
A	It is illegal to export mixed waste, but baled paper or recyclable product can be shipped.

### 3. SITE ASSESSMENT CRITERIA FOR WASTE FACILITIES

Cecilia Jordan, Department of Environment Regulation, explained the Site Assessment Criteria for Waste Facilities noting the following key points.

**Four main elements of the *Waste and Recycling Infrastructure Plan for the Perth metropolitan and Peel regions*:**

1. Planning and Approvals
2. **Facilities and Sites**
3. Technology
4. Governance and Funding

Facilities and Sites:

- The existing capacity of waste facilities in the Perth metropolitan and Peel regions, and likely waste infrastructure needs for 2015, 2020 and the '3.5 million city'.
- Potential and preferred sites for development of new waste facilities, including opportunities for co-location, waste precincts, and industrial ecology.

**Strategic objective 1 of the Waste Strategy:**

*Initiate and maintain long term planning for waste and recycling processing, and enable access to suitably located land with buffers sufficient to cater for the State's waste management needs.*

**Site Selection Objective:**

The objective of the site assessment process is to identify sites that will potentially suit a range of waste facility types.

The sites should enable facilities to contribute to the Waste Strategy landfill diversion targets by operating as efficiently as possible, with a minimum of negative impacts on the surrounding community and environment, as part of an integrated waste management network in the Perth metropolitan and Peel regions.

**Site assessment process:**

The site assessment process will be broken down into several parts:

**Site assessment criteria**

- **Stage 1 Site Assessment Criteria:** broad 'first pass' assessment relating to some of the practical aspects of siting waste facilities; and
- **Stage 2 Site Assessment Criteria:** more detailed assessment of the sites assessed to be potentially suitable for waste facilities using the Stage 1 criteria.

**Stage 1 Site Assessment Criteria:**

**Planning Criteria:**

- Zoning
- Land use and ownership
- Buffers and proximity to sensitive land uses

**Technical Criteria:**

- Size
- Access to transport routes
- Access to services and utilities
- Access to electricity generation connection points
- Advantages and disadvantages to the use of this site for waste facilities
- What types of waste facilities are suitable for development at the site?
- Site Priority:
  - 1 = highest priority, well suited to development of a range of different waste facilities
  - 2 = medium priority, suitable with some conditions or site modifications
  - 3 = low priority, numerous barriers to construction and operation of waste facilities at the site
  - 4 = not suitable for development of waste facilities

**Stage 2 Site Assessment Criteria:**

**Sensitive Area Constraints:**

- Environmentally sensitive areas
- Culturally sensitive areas

**Technical Criteria:**

- Flexibility and capacity for facility expansion
- Cost
- Timeframe of site availability
- Opportunities for waste facility co-location and precincts
- Opportunities for industrial ecology

**Environmental Criteria:**

- Topography, geology and soil type
- Surface and groundwater
- Native vegetation

**Social Criteria:**

- Access to potential workforce

**Site assessment process:**

The site assessment process will be broken down into several parts:

**Waste facility types:**

Enclosed facilities

- AWT (waste-to-energy and MBT)
- MRFs (clean and dirty)
- Recyclers
- Composting facilities (enclosed)
- C&D recyclers (enclosed)
- Transfer stations

Non-enclosed facilities

- Open windrow composters
- Non-enclosed C&D recyclers

Drop-off facilities

- Waste and recycling drop-off points accessed by the general public

Not specifically assessing sites for their suitability for landfills as seeking to divert waste from landfill.

**Step 1:**

The site assessment process will be undertaken in several stages. The first step will be the assessment of **industrial, potential industrial and Water Corporation nominated areas** in Perth and Peel using **Stage 1** (broad) criteria to determine their suitability for **enclosed waste facilities**.

**Types of potential waste facility sites to be assessed:**

- Industrial (MRS/PRS)
- Potential industrial areas (EELS)
- Water Corporation nominated areas

**This step 1 site assessment process will:**

- Broadly identify areas that are potentially suitable for the development of enclosed waste facilities.
- Prioritise sites in relation to their suitability for development of enclosed waste facilities.
- Give a general indication of the types of enclosed waste facilities that may be suitable (or not suitable) for development at each site.

**This step 1 site assessment process will NOT:**

- Identify particular lots/blocks of land for the development of waste facilities.
- Identify sites for the development of specific waste facilities (i.e. specify the exact type and capacity of a facility to be developed on the site).
- Replace the normal planning and approvals processes for development of waste facilities.

**Other activities:**

- Integration of potential new waste facilities with existing waste facilities.
- WA land use planning system: ways to secure sites for waste management activities into the future and support the development of new waste facilities (e.g. MST, SPP).
- Modelling: different combinations of waste facilities/technologies; waste facility capacity over time.
- Mechanisms for the potential acquisition, management and development of waste facility sites.
- Governance and funding models which could facilitate the development of the required waste infrastructure.

**Seeking input today:**

The Strategic Waste Infrastructure Planning Working Group is seeking comments/feedback on:

- The site selection objective
- The Stage 1 site assessment criteria
- The Stage 2 site assessment criteria
- The sites to be assessed
- The site assessment process in general

**Providing Feedback:** The SWIPWG would welcome your input. Please email comments or feedback to [swipwg@der.wa.gov.au](mailto:swipwg@der.wa.gov.au)

A question and answer session followed as summarised below.

<b>Q</b>	What does “rural” mean in this context?
<b>A</b>	Rural zoning under the MRS or PRS.
<b>Q</b>	Consideration must also be given to logistical factors. There is potential for significant vehicle movement with major associated cost if transport logistics are not considered.
<b>A</b>	Noted. Transport/logistics issues are considered in the Stage 1 criteria (access to transport routes) and Stage 2 criteria (the costs associated with using the site, access to potential workforce, opportunities for precincts, co-location and industrial ecology).
<b>Q</b>	How will we determine the number of sites required?
<b>A</b>	The number of sites required will be informed by the technology stream of this project. As well as new sites, there are also existing sites that can potentially be expanded.
<b>Q</b>	Industrial ecology and complex systems require innovation and self-organising and we shouldn’t be too prescriptive. We need to create opportunities for this to occur.
<b>A</b>	That is the case but we also have learnt from other similar projects there is also a need to provide some level of control.
<b>Q</b>	There is no regulatory compliance requirement for enclosure of waste facilities now – is it implied that this will be legislated in the future?
<b>A</b>	No – we are focussing on enclosed facilities at this stage, but it is not assumed that all waste facilities will be required to be enclosed in the future.

Q	What is the time imperative or driver? There is a risk that we don't have time for effective public engagement.
A	Draft report timeframes are driven by the Waste Authority and government process already underway (e.g. WAPC planning activities, Metropolitan Local Government Review). This Plan may be fairly high level with more work required subsequently. We need to act while there is a need and supporting interest. Many of those here today will be members of the various groups of interest. Please engage through your groups where represented via the Working Group to provide as much input as possible.
Q	Will this be a high level document with subsequent iterations?
A	Yes, it will be set at a strategic level initially and flagging future needs.
Q	What is the associated lead time from today to get to sites ready for use? Industry wants to do something today with many blockers to achieving anything. This will take too long.
A	In part this is why the "short" project period exists. We recognise industry's position and we are doing what we can. The Plan will include both long term strategies and also measures that should hopefully reduce some of the constraints on the development of waste facilities in the short to medium term.

#### 4. DISCUSSION

Linton encouraged participants to comment on the proposed assessment CRITERIA. The following feedback related to a number of structured questions.

**Do you support the criteria, are there suggested additions or changes? What do you think?**

- Planning
  - We should seek sites that are isolated by virtue of other land uses, e.g. airspace corridors or buffers to other land uses.
  - Some buffers aren't gazetted and should be considered.
  - With the PRS - Strategic Resource Centres are identified and Basic Raw materials provides for transitional land use as a consideration.
  - How will environmental criteria be used to consider sensitivity – will it be a general catch-all with enclosed and non-enclosed impact for buffers too?
  - TOD (transit-oriented development) in Perth is an emerging infill strategy. We need to lock areas away for facilities now.
- What about economic criteria such as transport cost?
- Operational logistics – location, cost, land availability and constraints should be considered/balanced.
- Have we considered Waste Precinct areas similar to Wingfield in South Australia?  
Example of potential precinct based solution in Shenton Park: WWTP, wastewater recycling, methane extraction from former landfill site and waste transfer station/AWT facility. Sensitive area.
- Environmental Strategic Assessment with federal involvement if possible.

## Environment

- We need to include fauna as well as flora.
- What is meant by topography, geology and soil type? (*Assessing for things like ASS, drainage problems, unsuitable soil type and the developability of a site*).
- Many of the criteria are generic and would apply to any industrial/manufacturing or other comparable land use.
- Include air, noise, odour and other environmental considerations.
- Sustainability measures – whole of life cost – operations, maintenance, logistics, disposal of co-product, including leachate or organic matter, waste heat, etc.
- In essence the list could be consolidated into one environmental criterion with the others relabelled as engineering so long as they are addressed.
- Social amenity and other local area impacts should be considered, but the sites must also be accessible.

## Process from here:

- The initial focus will be on enclosed facilities and applying the stage 1 criteria.
- A further information session will be held in early December 2013 to present an update on the total project – all four areas.

We are committed to including everything we can on the website and we will place a summary of the notes from today's session on the Waste Authority website in response to the request for a summary of the outcomes.

## 5. WORKSHOP CLOSURE

Neil Foley and Cecilia Jordan thanked participants for their input.

The workshop closed at 4:00pm.

## ATTACHMENT ONE - AGENDA

## Strategic Waste Infrastructure Planning Working Group (SWIPWG) Consultation Workshop

**Date:** Thursday 26<sup>th</sup> September 2013  
**Time:** 2:00 PM – 4:00 PM  
**Afternoon tea:** 1:30 PM – 2:00 PM  
**Location:** Pagoda BCD Room – Esplanade River Suites  
 112 Melville Parade COMO WA 6152

	TIME	ITEM	OFFICER
1.	1:30 PM	Arrival Tea and Coffee (afternoon tea)	
2.	2:00 PM	<b>Welcome and Opening Presentation:</b> <ul style="list-style-type: none"> <li>• Overview of SWIP</li> <li>• Role of SWIPWG</li> <li>• Progress to date</li> <li>• Question time</li> </ul>	Neil Foley (SWIPWG Co-Chair)
3.	2:20 PM	<b>Presentation: Site Assessment Criteria for Waste facilities</b> <ul style="list-style-type: none"> <li>• Background</li> <li>• Site selection objective</li> <li>• Site assessment process and criteria</li> <li>• Waste facility types</li> <li>• Sites to be assessed</li> <li>• Question time</li> </ul>	Cecilia Jordan (DER)
4.	2:40 AM	<b>Discussion</b> <ul style="list-style-type: none"> <li>• Facilitated discussion</li> <li>• Provision of feedback on the site assessment criteria and process</li> </ul>	Linton Pike (Estill & Associates)
5.	4:00 PM	Consultation Workshop Ends	Neil Foley Cecilia Jordan