

SOUTH AUSTRALIA 2015

WASTE SUMMIT

Waste Summit 2015 summary report

Environment Protection Authority
Zero Waste SA

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Waste Summit 2015 summary report

Environment Protection Authority and Zero Waste SA

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Abbreviations

(The) Act	<i>Environment Protection Act 1993</i>
EPA	South Australian Environment Protection Authority
GISA	Green Industries SA
NSW EPA	New South Wales' Environment Protection Authority
WDF	Waste derived fill
ZWSA	Zero Waste SA

1 Introduction

This report summarises the proceedings of the South Australian Waste Summit 2015 held on 3 March 2015, convened and introduced by the Hon Ian Hunter MLC, Minister for Sustainability, Environment and Conservation with support from the Environment Protection Authority and Zero Waste SA.

The format of the summit was designed to provide an update on the state of play in the waste management and resource recovery industry and allow discussion on key issues.

The Environment Protection Authority (EPA) and Zero Waste SA (ZWSA) conducted the forum as one part of their stakeholder and engagement programs regarding regulatory directions and support of the waste and resource recovery industry. It was designed to expand upon regular interactions with the Waste Management Association of Australia (SA Division), the South Australian Waste Industry Network and the Local Government Association as well as specific consultation processes on draft policies and regulation. Delegates at the summit comprised a mix of senior representatives from the following sectors:

- Waste and resource recovery industry
- Local government
- Urban renewal representatives
- Community representatives
- Interstate government (NSW and VIC)
- EPA and ZWSA Boards

The summit was also supported by a mix of senior state government officers.

The EPA and ZWSA acknowledged and thanked all delegates for their important contributions at the summit. (A list of delegates is given in Appendix 1.)

The summit provided valuable feedback on all issues presented for discussion. The concerns identified and knowledge imparted will be used to help inform:

- the consultation process for directions for Green Industries SA,
- the waste reform program,
- future EPA project priorities, and
- what the EPA will consult on in the future.

An initial summary of the key themes emerging from the summit was presented to the EPA Board on 10 March 2015.

The key themes and all comments on the distribution of the waste levy, Green Industries SA and the draft Waste Strategy were presented to the ZWSA Board on 26 March 2015 and will be taken into account by ZWSA in summarising and presenting the outcomes of consultation on the *Establishment of Green Industries SA* discussion paper and draft Waste Strategy.

Diverse opinions were expressed by delegates on the various topics discussed and the Government may not agree with all of the views expressed. However, certain actions arising from the Summit are clearly supported:

- Continue active consultation throughout revision of the WDF Standard to find the correct risk balance, including for the management of asbestos.
- Pursue consultation on mass balance reporting and upfront levy liability schemes drawing from the NSW model.
- Pursue the development of an Energy from Waste position statement.
- Explore the potential for additional legislative tools to tackle illegal dumping and support waste management reform, including consideration of recent NSW reforms.

2 Opening address by the Hon Ian Hunter MLC, Minister for Sustainability, Environment and Conservation

The Chair and facilitator for the summit, Mr John Phillips OAM, Executive Director of Keep South Australia Beautiful (KESAB) and Vice-President of the Waste Management Association of Australia (SA Division), started by welcoming guests and introducing the Minister.

Minister Hunter officially opened the Summit. In doing so, he:

- Highlighted the significant achievements of SA with regard to recycling and various progressive initiatives that other states have followed.
- Outlined that the Government is determined to create an enabling environment for the waste and resource recovery sector to flourish.
- Identified the steps that will be taken by the Government to support business growth in the state, including the establishment of a new body focussed on investment protection and job creation, reform of the tax system and the release of the State Tax Review Discussion paper, and the establishment of Green Industries SA.
- Discussed the intended role of Green Industries SA to keep South Australia at the forefront of green innovation.
- Encouraged participants to be bold in generating ideas and comments to put before the Government for consideration.



Minister Hunter officially opens the South Australia 2015 Waste Summit

3 Presentation by Mr Vaughan Levitzke PSM, Chief Executive, Zero Waste SA

Mr Levitzke discussed the upcoming transition from ZWSA to Green Industries SA (GISA), addressing:

- Climate change adaptation, economic diversification and activity, job creation and employment growth being key imperatives driving the establishment of the new agency,
- The global megatrends that should be taken into account when considering future waste management opportunities here and internationally,
- The six key questions being asked in stakeholder consultation on the role of GISA to best build on the successes of ZWSA,
- The Government's policy goals in promoting the green economy and the possible scope and role of GISA to achieve these,
- Key themes arising from stakeholder feedback regarding the transition from ZWSA to GISA to date, and
- A range of other ideas that have been raised during the GISA consultation process and where they fit with EPA and ZWSA waste reform efforts.



Vaughan Levitzke, Chief Executive Zero Waste SA

4 Presentation by Mr Tony Circelli, Chief Executive, SA Environment Protection Authority

Mr Circelli outlined the benefits of the environmental regulations and reforms being pursued by the EPA, addressing:

- SA's unique environment being vital to many parts of our economy,
- Key themes for the EPA when engaging with business as identified through the EPA Round-table 2014,
- Current issues faced by the waste and resource recovery industry,
- The overall objectives that the EPA seeks for the industry as we move to the future,
- The overarching compliance and enforcement approach used by the EPA, the key operations, actions undertaken over 2013-14 and current actions,
- The series of staged projects that together comprise the EPA's current waste reform program, including current priorities and linkages with other potential reforms to support an enhanced risk-based approach to urban renewal, and
- That good environmental regulation has been demonstrated to bring significant economic advantages and a summary of the benefits that particular types of reform should support.



Tony Circelli, Chief Executive EPA

5 Presentation by Mr Stephen Beaman, Director Waste and Resource Recovery Branch, NSW Environment Protection Authority

Mr Beaman described key elements of the series of reforms being introduced in NSW in a staged manner, with his presentation addressing:

- The NSW reforms chosen after significant NSW EPA surveillance operations identified the key issues arising within parts of the industry (noting that these are very similar to the issues identified in SA),
- The key elements and objectives of the five-year \$465.7 million Waste and Resource Recovery Initiative, and the political circumstances that helped support the establishment of this initiative,
- The intent and character of the new upfront levy liability scheme that will commence in August 2015, including details of how levy liability will be incurred and discharged or payments triggered,
- The nature of new minimum standards within the industry, relating to licensing thresholds, weighbridge requirements, record-keeping requirements, and reporting requirements,
- The details of the proximity principle that has been introduced to better regionalise waste management in NSW to achieve local environmental and financial benefits,
- The expanded use of resource recovery orders and exemptions under NSW legislation in support of a risk-based approach to reuse and recovery of a range of materials,
- The amendment of processes for managing on-site reuse of materials at landfills to support accountability,
- The introduction of custodial penalties and vehicle seizure and forfeiture provisions for repeat illegal dumping offenders and the tightening of the land pollution offence to better cater for problematic wastes, and
- The approaches being pursued to better utilise technology to enhance compliance and enforcement efforts.



Stephen Beaman, Director Waste & Resource Recovery Branch, NSW EPA

6 Other presentations

Mr Ian Harvey, Director Operations, ZWSA briefly outlined the intent of the draft Waste Strategy 2015-2020 relative to the existing strategy and noted key features and changes. He highlighted the upcoming consultation process for the draft Strategy.

Ms Tiana Nairn, Waste Reform Program Manager, Policy, EPA identified the different policy and compliance elements relevant to achieving better management of waste soils and fill (whether clean or contaminated). She then discussed why the Standard for the production and use of Waste Derived Fill is required and the strategic objectives and structure being sought through its review before outlining a potential fill management approach to support subsequent stakeholder discussion.

Mr Steven Sergi, Waste Reform Program Manager, Technical, EPA introduced asbestos management considerations and the range of the challenges in this area. He then explored the potential balance that may be appropriate in fill management, including through consideration of two case studies, to support subsequent stakeholder discussion.

Ms Kym Pluck, A/Manager, Environment Assessment, EPA briefly reported that the EPA and Department of Planning, Transport and Infrastructure have been working together to develop a new Site Contamination Framework for the assessment of site contamination in the planning system to replace the existing out-of-date planning advisory notice. It will introduce a risk-based approach to contamination consideration. Following early stakeholder engagement, a second draft of the Framework is now to be finalised and released for consultation.



Ian Harvey, ZWSA



Tiana Nairn, EPA



Steve Sergi, EPA



Kym Pluck, EPA

7 Summit engagement processes

The summit provided two opportunities for delegate engagement:

- The opportunity to ask questions, via the Chair Mr John Phillips, of a panel comprised by Mr Vaughan Levitzke, Mr Tony Circelli and Mr Stephen Beaman.
- To provide comments on key topics as well as any other waste reform measures during a consultation session facilitated by Ms Sally Jackson.

In the panel session, nine questions were asked by a mix of community, local government and industry delegates.

For the consultation session, delegates were invited to discuss seven key topics as well as any other waste reforms. The topics were chosen having regard to key issues identified through previous engagement with the waste and resource recovery industry over time. The topics were circulated to delegates ahead of the summit and, on the day, thought-starter questions were provided for each topic. The topics discussed were:

- Green Industries SA and SA's Waste Strategy
- Supporting urban renewal through enhanced assessment processes
- Waste derived fill management
- Asbestos management
- Application and use of the waste levy
- Upfront levy and mass balance reporting
- Energy from waste
- Other waste reforms (either existing projects or other ideas).

Delegates were assigned seating at tables comprising a mix of stakeholder representation (ie local government, industry, urban renewal and community) together with a senior EPA or ZWSA representative. Through the session, each delegate had the opportunity to make comments on any or all of the seven key topics as well as any other waste reforms followed by subsequent group reporting on each topic.

The summit was closed by Mr John Phillips who commented on the value of the presentations given, acknowledged the valuable contributions made by all participants, reinforced that the EPA and ZWSA were committed to providing delegates with a summary report that would also be submitted to the Minister, and thanked the organising team.



Sally Jackson (EPA), Tiana Nairn (EPA) and John Phillips (KESAB)

8 Summary of key themes

All comments submitted by delegates on each topic are listed in Attachment 2. The topics that attracted the most comments were:

- 1 Application and use of the waste levy
- 2 Green Industries SA & SA's Waste Strategy
- 3 Upfront levy and mass balance reporting
- 4 Energy from waste.

The key themes as reported by table representatives and arising from examination of the comments on each topic are as follows (in order of number of comments received):

Application and use of the waste levy

- The general theme was “use the levy for what it was set up for”. The levy should be used as an effective economic instrument to promote reduced disposal, increased recycling, waste innovation and projects.
- A significant number of submissions were made suggesting that the levy should be increased.

Green Industries SA and SA's Waste Strategy

- Money is constraining the operational scope of Green Industries SA - sufficient funding is required and resources appear to be inadequate to achieve the desired outcomes.
- The core scope for Green Industries SA should be waste (increasing the value of the waste stream) and recycling, and within a broader strategy on green industry market development.
- Market development suggestions were provided, including use of government procurement policies.

Upfront levy & mass balance reporting

- Comments generally supported an upfront levy liability to stop rogue operators from speculative stockpiling.
- No significant issues were raised around implementing mass balance reporting.
- Balance will need to be found between stockpile management regulation and legitimate business needs.

Energy from waste

- Energy from waste should be recognised as part of resource recovery framework, however, there needs to be higher order recovery first (ie supporting the waste management hierarchy).
- The development of a clear policy position is supported.
- Regional opportunities should be considered i.e. forestry residues.
- Increased levy was suggested.

Waste derived fill

- Decisions need to be based on risk based decision making.
- The scope of early investigation undertaken for soils will be important to adequately manage risk for their use as fill.
- Changes should be made to allow reduced scope audits and there should be recognition that there are multiple valid pathways to enable fill use.

Asbestos management

- Funding issues were raised, idea of no levy on asbestos at landfill to reduce waste disposal costs.
- Need education and guidance.
- Technical discussion on appropriate measurements.
- Importance of alignment between agencies raised.

Other Waste Reforms

- Further comments were received about the importance of using the levy for its intended purposes
- Regulation also needs balanced enforcement to be effective.
- A discussion around the need for harmonisation simplification on the definition of waste is required.
- Tracking of waste is viewed positively.

Urban Renewal

- The processes of managing and assessing waste soil and fill can be improved to facilitate urban renewal by:
 - clarifying process and limits of assessment of site contamination in planning
 - clarifying waste derived fill standards.



Summit delegates discuss key topics

9 Next steps

The EPA and ZWSA committed that information gathered at the summit would be compiled into this report and, following an opportunity for delegates to ensure that their views have been appropriately reflected, distributed as a final report to delegates, provided to the Minister and made available on the EPA and ZWSA websites.

An initial summary of the key themes emerging from the summit was presented to the EPA Board on 10 March 2015.

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Diverse opinions were expressed by delegates on the various topics discussed and the government may not agree with all of the views expressed. However, certain actions arising from the Summary are clearly supported:

- Continue active consultation throughout revision of the WDF Standard to find the correct risk balance, including for the management of asbestos.
- Pursue consultation on mass balance reporting and upfront levy liability schemes drawing from the NSW model.
- Pursue the development of an Energy from Waste position statement.
- Explore the potential for additional legislative tools to tackle illegal dumping and support waste management reform, including consideration of recent NSW reforms.

Appendix 1 Delegates

First Name	Last Name	Organisation
Stephen	Beaman	NSW EPA
Fraser	Bell	Thomson Geer
Linda	Bowes	EPA Board
Tony	Circelli	EPA
Brendon	Corby	Master Builders' Association
Des	Craig	BlueSphere Environmental, on behalf of the Urban Development Institute of Australia
Sarah	Crossie	NSW EPA
David	Davis	Sims Metal Management Limited
Ben	Dearman	McMahon Services
David	Diprose	Northern Adelaide Waste Management Authority
Megan	Dyson	ZWSA Board
Jim	Fairweather	Tyrecycle, Victoria
Peter	Farmer	Sims Metal Management Limited
Adam	Faulkner	Eastern Waste Management Authority
John	Fetter	SA Waste Industry Network, Davis Advisory
Ian	Flitcroft	SITA-Resourceco
Adam	Gray	Local Government Association
Robert	Harding	Housing Industry Association
Ian	Harvey	ZWSA
Anne	Harvey	ZWSA Board
Mike	Haywood	Mike Haywood's Sustainable Resource Solutions
Greg	Hill	Mid-Murray Council
Mark	Hindmarsh	Southern Region Waste Regional Authority
Trevor	Hockley	Waste Care, TJH Management Services
John	Hogarth	Peats Soil and Garden Supplies
Allan	Holmes	EPA Board
Minister	Hunter	Minister for Sustainability, Environment and Conservation
Sally	Jackson	EPA

First Name	Last Name	Organisation
Simon	Jenner	Transpacific Industries Group
Lucy	Jensen	Ministerial Advisor
Brian	Johnston	WMAA (SA) Secretary
Geoff	Johnston	One World Environmental Solutions
Vikram	Kenjele	Australian Industry Group
Laurie	Koslovic	Veolia Australia
Stan	Krpan	Sustainability Victoria
Vaughan	Levitzke	ZWSA
Paul	Lightbody	Tonkin Consulting
Andrew	Manning	Lucas Engineering representative
Phil	Martin	Recyclers SA
Liam	Martyn	Visy
Kevin	McGuinness	ZWSA Board
Ashley	Moule	Mott MacDonald
Grant	Musgrove	Australian Council of Recyclers
Tiana	Nairn	EPA
David	O'Loughlin	President, Local Government Association
Jean Paul	Pearce	Australian Contaminated Land Consultants' Association
John	Phillips	Waste Management Association of Australia (SA) Vice-President, Keep South Australia Beautiful
Kym	Pluck	EPA
Mark	Rawson	Waste Management Association of Australia (SA) President, Rawtec
Kirk	Richardson	Onkaparinga Council
Luke	Schepen	SITA Australia
Peter	Scott	EPA
Steve	Sergi	EPA
Matt	Size	Adelaide Resource Recovery
Max	Spedding	Australian Landfill Owners' Association
Angelo	Stratis	SITA Australia
Dom	Tenace	SKM Recycling

First Name	Last Name	Organisation
Stephen	Van Schaik	Van Schaik's Organic Soils & Bio-gro
Peter	Wadewitz	Peats Soil & Garden Supplies
Marina	Wagner	Fleurieu Waste Regional Authority
Andrew	Watson	Resourceco
Geoffrey	Webster	Waste Management Association of Australia Board, Keep South Australia Beautiful, Waste and Management Services
Craig	Wilkins	Conservation Council SA
Larissa	Willoughby	BlueSphere Environmental, on behalf of the Urban Development Institute of Australia
Daniel	Willsmore	Naracoorte Luncindale Council
Mark	Withers	City of Charles Sturt
Andrew	Wood	EPA
Serena	Yang	ZWSA

Appendix 2 Notes from discussion (Comments attributed when author has nominated this option)

Application and use of the waste levy

How do you think the waste levy should be altered in coming years?

- Treasury must start to engage in discussions about spending of the money
- Can the NSW model be a 'goat' for SA?
- Transparency of expenditure and investment of LFL back into industry
- Transparency of levy and how it can be used to generate progress in the waste industry and create a better synergy between the waste producer and waste receiver
- Needs to be greater clarity on use of waste levy funds and how it is used for promoting / growing waste and recycling initiatives throughout the industry
- SWL must remain as an effective market tool - not as a government fundraiser - and then apply funds collected in the WRF to deliver Green economy objectives
- Spend it on the industry. Invest in innovation / new methodology processes
- Needs to be unlocked to provide a higher per capita spend on waste Innovation program, policy and regulation
- Levy needs to be better hypothecation to waste recovery and used to improve the industry and investment
- Reinvestment of waste levy into GISA ie LED lighting, energy efficiency, supporting local government
- A clear policy objective for the waste levy over a 5 year planning horizon and commitment to spread the money raised
- Long term commitment of key funds to agencies and investments in programs and infrastructure
- Use as a market instrument and use the funds in line with its objectives – not general revenue
- Waste Levy is a blunt tool that works in an industry which is essentially a 'market' economy
- Future funding / levy sourced. High community / net worth programmes eg hazardous waste collection educators
- How to manage Waste Levy? What should it achieve? Perhaps Resource Recovery Industries Infrastructure
- Use the levy to apply across areas such as education, etc. Price increases alone won't improve outcomes.
- Levy should be used as a bank for government and environment, and grant funding
- Waste levy should be used for regulation enforcement and education for grants
- Utilising waste levy on local recycling and education projects (e-waste, mattress collection). Increased input into illegal dumping
- Target interventions on waste generators / producers as well as processors
- Smaller grants spread across the industry, rather than the same lucky few
- Broaden catchment to increase levy base. Use for promotion of use of recycled materials
- Increase levy to provide additional funds to manage GISA program
- Levy should be increased significantly to drive innovation, increase jobs and provide resourcing to EPA and GISA
- Levy should be increased to encourage recycling resource recovery
- Only a significant waste levy increase will drive recycling investment
- Disparity of waste levy in SA. Levy need to be increased in SA
- SA now has the lowest mainland levy = loss and investment \$ and national industry leadership

- SA now has possibly the lowest mainland waste levy (ex Qld). To facilitate capital investment and jobs growth across the sector the SA waste levy must be significantly increased. The lessons from NSW around engagement and industry investment via Waste Less Recycle More must be accepted in SA. (*Andrew Watson – Resource Co*)
- The waste levy should be increased over 5 years to a level similar to other states and the money available put back into the new innovative industries to divert more recycling from land fill
- To drive industry development and jobs growth the waste levy needs to be significantly increased. 'Double the levy – quadruple the jobs created
- Increase by 25%pa for 5 years. 25% of revenue back to industry mandated, remaining 75% to state and local governments including Green industries and local government
- Differential levy to promote preferred waste management practices
- Institute differential levying. Spend all funds in waste management / resource recovery
- Impact on metal recycling industry (*Peter Farmer – SIMS Metal*)
- The levy should only be applied to things that can be recycled. Exclude Asbestos

Green Industries SA & SA's Waste Strategy

What should the scope be for GISA? What are the implications for you if the scope is too narrow or too broad?

- Scope for GISA – lift the levy. Fund it properly
- GISA – great concept, more money needed
- GISA funding inadequate, waste levy continues to increase yet expenditure decreases from waste to resource fund
- Resources appear inadequate to achieve desired outcomes
- Sufficient funding to GISA to enable it to achieve objectives
- Great opportunity to invest via GISA/ZWSA substantial funds from Solid Waste Levy (\$50m+) In sector step changes as per NSW (\$4.65m) program (*Mark Rawson – WMAA*)
- Core recycling and waste within a broader strategy on Green Industry development. Too narrow - miss opportunity. Too broad – no \$\$ to pay/fund interventions
- GISA - narrow focus and more realistic measurable goals given only \$4.1m budget. Tailored and outcomes based materials utilization programs for SMEs. Assist SA SMEs with tapping into ERF funding program (*Vikram Kenjle – Australian Industry Group*)
- Is GISA intended to be an ephemeral catalyst for innovation or a core agency? Performance indicators?
- ZWSA and GISA – use the 3 years of GISA to establish a long term sustainability strategy that brings together energy, waste, water etc for 2018 and beyond.
- Lift the ambition of GISA
- Increase effort in employments and economic growth
- Implications of making the scope too narrow is that we lose the ability to continue to improve and grow the waste and recycling industry
- Resource recovery reprocessing, circular economy, industry development, investment attraction. Too broad, no meaningful rights
- Scope – Market development. Industry (green), must be commercially viable therefore better backend markets
- Act as a corporate entity in overseas markets, using SA skills and expertise
- Should be used for promotion of use of recycled materials
- The scope should be to support industry players/manufacturers in developing best practice operations ie grant funding for regional operations

- Ongoing education, awareness and community engagement is essential. Question: How do we manage this effectively going forward?
- A green bank is essential in current economic times
- Embrace new manufacturing trends – collaborative economy, sharing, 3d technologies, be at cutting edge of change
- Government procurement policies contract specifications and processes can be used to lead the way and create a demand stream for waste derived product that others will trust and then follow.
- GISA should focus on increasing value of waste stream by identifying end user and actively encouraging use, via government procurement specifications.
- Building codes codify low standards in Australia. This should be at the core of a broad scope for GISA
- Should also consider focussing on the following opportunities: retrofitting LED lighting, support LG in planning and installing green infrastructure, support energy efficiency measures in public buildings, examine barriers to ground
- Resource efficiency programs are very scattered and not cohesive, and priority changes every year as budgets change (*Vikram Kenjle – Australian Industry Group*)
- Policing waste industry, supporting industry focus on recycling/resource recovery with Grants.
- Need more ambitious targets in Waste Strategy supported by levy to create jobs, infrastructure, carbon neutral outcomes
- Have to have a much stronger role for community to input into the new waste strategy – can't be just a conversation between business and government

Upfront levy and mass balance reporting

Would an upfront levy liability assist in achieving a level playing field in your industry? Why?

Would it be difficult for you to undertake mass balance reporting given existing record management systems?

- Excellent idea and should be implemented by the EPA following the NSW model
- Ensure a level playing field and stockpile management
- Get rogues out
- Yes, rogue operators would be forced to pay levy upfront therefore not being able to stockpile and avoid disposal costs
- It has merits in creating a more level playing field. Very important that an appropriate structure/methodology is created
- Upfront levy liability will work as any business requires financial levers
- Upfront levy systems are essentially regulatory tools
- Beware of businesses' reinventing themselves as the 12 month liability comes due, to avoid payment
- No, opportunity for rorting
- Absolutely critical in moving the industry to higher compliance. Why just a liability? Pay the levy monthly on the net difference
- Make the levy payable up-front. Force the facility to prove resource recovery
- How can I compete with quarries that have 50 years of raw material available, ready to process, when I can't keep my raw material for more than 12 months?
- Differential levies are a good rest stop after upfront levies
- Use mass balance to drive rogues out of the market
- MBR is key to managing material flows
- MBR is essential for all reprocessing facilities

- Ensure robust data capture systems are in place
- Systems are easy to implement to capture
- No – easy licence condition
- No, mass balance reporting should be enforced and should not be difficult if proper/transparent systems are in place
- EPA and GISA should develop more tools to assist industries, particularly SMEs, to better understand their own internal mass-balance and energy mass balance, so that their raw material utilisation is improved, which in turn will reduce generations of waste in the first place

Energy from Waste (EFW)

What should be the role of the EFW proposals in managing waste in SA? How could EFW proposals be potentially financially viable in SA?

- EFW should be a component of a fully integrated resource recovery process not the reason for it (*Mike Haywood*)
- This is not incineration. We must ensure this is understood
- Just above landfill, anaerobic digestion = composting
- Divert materials away from landfill
- When is Waste to Energy resource recovery? Does Waste to Energy attract the waste levy?
- Pre-sorting must be a requirement. Don't undermine existing resource recovery
- How do we protect resource recovery and higher order options?
- Business case must exist for EFW, must not undermine higher value recycling re-use activities
- Energy from waste should focus on uniform waste streams rather than complex waste streams
- Energy from Waste has a role but it's part of the solution not the silver bullet
- Priority should be based on emissions reduction, not necessarily waste-for-landfill, or waste hierarchy in those cases where these factors would otherwise dictate a different priority
- Stop the noise – it is twice the cost of current. Understand is there a demand at that price?
- EFW proposals should be given priority as an employer of future. Take up the slack from diminishing manufacturing industry
- Too much focus only on solar PV and incentivising packets of renewable energy sector. Lost opportunity on creation of energy from waste materials, particularly organics, bio diesel
- We should start with source separated smaller EFW facilities
- Use this opportunity to invest in regional SA and resolve localised waste challenges
- EFW in SA could be financially beneficial to SA – as a means of infrastructure and value adding to waste forestry residual left from harvesting
- Build better infrastructure for collection of organic waste from commercial, residential, industrial facilities and build more biogas plants in SA and sewerage to energy plants. Helps commercialisation of small and medium sized on-site biogas boilers/energy generators and assist with erection of renewable energy certificates.
- [Could be financially viable] when coal prices increase
- [Could be financially viable] with increased levy
- Early regulation - set limits for incineration vs energy recovery
- Clear policy position on EF supported tech specs and innovative funding channels
- EPA should be involved in start to finish of product use. – test the WDF, track movement, test and monitor stacks.

Waste Derived Fill Management

Is the balance proposed for managing waste soils right? Why? What are the barriers to making use of fill and how could these be overcome?

- People risk + lack understanding. Time delays in assessment. Lack of testing capacity
- PCA site source →anywhere, needs to be sampled. Can't tell if it's contaminated without sampling. Analysis based on site history and broad suite analysis and asbestos
- Concerns over proposed domestic site walkover, assessment. When does a suitably qualified person get involved, possible risk of legacy contamination being overlooked
- Need to ensure contaminated soils are treated appropriately and WDF doesn't create free dumping opportunities
- Regulatory framework is required to support good behaviour by stamping out bad behaviour, and sharing the stories for all to see
- Revise of WDF needs to be based on risk based decisions and allow it to be undertaken in an efficient manner. Achieved through use of restricted scope audits, use of broad suite of analytes when site history of source site is limited/incomplete. Greater use of audit protocol but make audit review cheaper (*J. Pearce*)
- Auditor – need to change to restricted scope audit →full audit of fill from sensitive →non sensitive use very costly and raise other issues that stop the action
- Need to change the restricted scope audit →full audit of fill from sensitive – non sensitive use very costly and raise other issues that the action
- Remove need for auditor for level 2 material of NS sites
- Specify chemical and physical criteria when audit not required
- End use is key factor
- Domestic site source – domestic site
- Multiple pathways to acceptable reuse – roads, products, infrastructure, direct reuse, treat
- Recycled fill material should be used as road base, sealed over with pavement treatment
- Chemical classifications update in accordance with revised NEPM
- Soil suitability is based on absorbed contamination. This is not sufficiently protective for the more volatile contaminants. For example TCF will often be below laboratory detection limits in wg/kg but will contain unacceptably high concentrations of TCE vapour
- How do you ensure that industry operators have the technology etc to product compliant WDF.

Asbestos management

What should the balance be for managing asbestos in waste soils? What are the barriers in handling fill and how could these be overcome?

- Zero tolerance – we are not sophisticated enough to manage the risk
- Zero tolerance, all asbestos to be disposed
- Important to minimise disposal of asbestos in environment - keep levels very stringent, but processes realistic and straightforward. Err in favour of disposal
- 0% is too low for asbestos, more education
- Reduce barriers (such as cost) to effective asbestos disposal
- Having a robust and fast method that can identify if soil is contaminated and if there is value in remediating it
- Control appropriate end use of waste soils with asbestos
- Meet/marry up with OHS&W standards

- The updated NEPM deals with the asbestos in soils quite clearly, and should be recognised/adopted by the EPA instead of reinventing the wheel
- Recommend discussion with the authors of the WA DOH asbestos guidelines on the use of 0.001%W/AV appears incorrectly used
- Will processing of ACM be allowable to reach .001% limit, how are human health risks to be mitigated if allowed?
- Should there be a trigger for asbestos contractor for EW or should all contractors have basic asbestos handling competency?
- There should be NO levy on asbestos at landfill
- Contact with councils need to be stronger, the processor should not carry the can
- Approachable EPA, education and guidance
- Education and guidance is fundamental
- Funding for detailed education about asbestos care, disposal for front line operations
- Involve community in discussion of appropriate level of safety – not just business and government.

Other waste reforms

What other reforms should the EPA be pursuing as a priority?

- Reform Waste Levy – purpose: funding government agencies vs regulation tool and drive behavioural change
- Return the levy to industry to drive future investment
- Levy places the EPA into the commercial space – it's a market instrument. Regulation drives certainty therefore investment
- Improve enforcement to create a level playing field for all operators
- Regulation without balanced enforcement should be eliminated
- EPA should introduce stockpile management rules immediately
- Strict liability offences for licence transgressions
- Extension to the CDL product range (wine bottles etc)
- Waste tracking needs to be regulated to ensure waste in with levy
- Clear definition of waste needed
- Harmonisation amongst states
- Supportive industry engagement.

Supporting Urban Renewal through enhanced assessment processes

How can the processes of managing and assessing waste soil and fill be improved to facilitate Urban Renewal?

- Community needs to be involved in conversation of appropriate level of safety
- Plan ahead – paradigm shift required. Timing, boundaries of project, knowledge of site not discovery
- Map where it is by sampling historical land use assessment. Identify technologies for in situ remediation
- Clarity of policy and strict enforcement of non-compliance
- Simplify processes for managing waste soil fill.
- Clear WDF specifications
- Guidelines for WDF to be better defined for easier more transparent process

- Information gaps / barriers of qualified WDF for proper reuse
- Change criteria to be consistent with revised NEPM after some messaging to address the need to derive specific EILs and the large range of different acceptance criteria in NEPM (ie HIL, HSL, EIL, ESL management limits)
- Reuse of soil from sites with potential volatile contaminants ie TCE
- Look for innovative finance models to drive innovation and leverage capital investment. Building update finance.