



Waste from a local government perspective

Christine Pitman - Strategic Waste Management Officer
Ballina Shire Council





Overview

- To provide a brief overview of waste considerations from a regulatory, operational and consulting perspective.
- Discuss a range of waste guidelines and tools
- Overview of waste disposal requirements at both licensed and unlicensed facilities.
- Asbestos



What is waste?

- Waste legislation lives under the broad umbrella of the Protection of the Environment Operations Act 1997.
- Broadly para-phrasing, the POEO definition of waste is:
 - Any substance that is discharged, emitted or deposited in the environment that causes an alteration in the environment;
 - It also incorporates any processed, recycled, re-used or recovered substance that is applied to land or intended for sale.



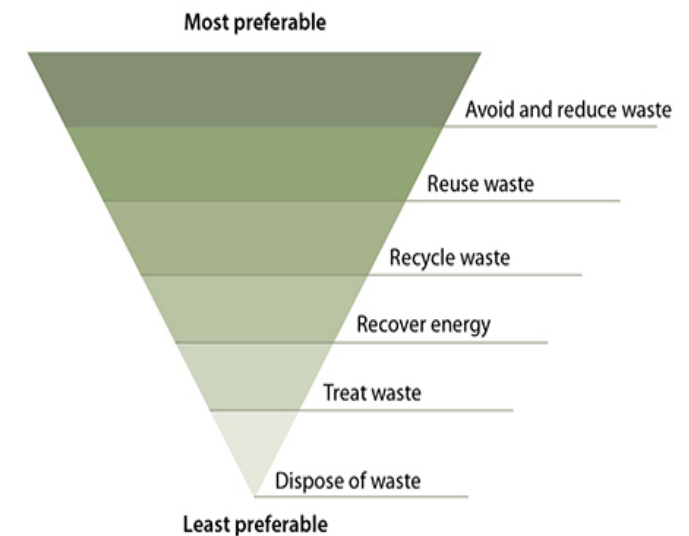
Waste generation

- The vast majority of projects will generate waste.
- It is important that waste generation, treatment and management are part of a holistic project approach and not just tacked onto the end when looking for waste disposal sites.
- Consultants and local government officers need to utilise BOTH the contaminated land management and waste management guidelines.



An alternative to waste generation?

- Avoid waste!
- Better designed DSIs will more accurately delineate areas requiring remediation and avoid unnecessary removal and disposal of soil.
- Think outside the traditional dig and dump box.
- Undertake a risk assessment and develop site specific human and ecological Tier 2 criteria.





Classifying Waste

- When classifying waste it is important to make sure you have considered all the exemptions or specific approvals that may exist for your waste. Depending on the type of material and where it is going you may need to apply one or more of the following:
 - the waste classification guidelines
 - a resource recovery exemption
 - any chemical control orders or
 - general immobilisation approvals



Waste classification guidelines

- What are they
- Made under the POEO Act 1997
- Outlines the waste classification process. Consider if the waste is:
 1. Special
 2. Liquid
 3. Pre-classified
 4. Likely to possess hazardous characteristics
 5. Requires classification using chemical assessment



Waste Classification
Guidelines
Part 1: Classifying waste

www.epa.nsw.gov.au



ballina
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Classify this?

	GSW		RSW		GSW		RSW	
	CT1 (mg/kg)	CT2 (mg/kg)	SCC (mg/kg)	TCLP (mg/L)	SCC (mg/kg)	TCLP (mg/L)	SCC (mg/kg)	TCLP (mg/L)
Lead	100	400	1,500	5	6,000	20		

- Waste from a primary school with lead 95% UCL of 980 mg/kg?
- Pre-classified as general solid waste
- Same waste, but it also contains asbestos?
- Special waste (asbestos)



Classify this?

	GSW		GSW		RSW	
	CT1 (mg/kg)	CT2 (mg/kg)	SCC (mg/kg)	TCLP (mg/L)	SCC (mg/kg)	TCLP (mg/L)
Lead	100	400	1,500	5	6,000	20

- Waste from an industrial site with lead 95% UCL of 980 mg/kg?
- Hazardous waste
- Waste from an industrial site with lead 95% UCL of 980 mg/kg a lead TCLP of 7 mg/L and asbestos?
- Special restricted waste (asbestos)



General immobilisation approvals

- Check the EPA website for the list of the 11 general immobilisation approvals.
- An application is not required to dispose of waste under a general immobilisation approval.
- Landfill operators also need to be aware of these approvals as there are some specific disposal requirements.
- May also have some record keeping and notification requirements.
- Can apply to the EPA to consider a specific immobilisation approval.



Ready to start moving soil?





Moving soil to an unlicensed site

- Material needs to comply with either the waste classification guidelines (eg VENM) or resource recovery exemptions (eg ENM).
- The legal definition of a "waste facility" like that for "waste" is very broad. A waste facility covers any premises used for storing, treating, reprocessing, sorting or disposing of waste. If you use material brought from another site to build a dam or a driveway on your property then this might mean your land is being used, in the legal sense, as a waste facility.
- Check if Council planning requirements or EPA approvals are required to permit the application of waste to land.



s.143 notice (POEO Act)

- Prudent to use a s.143 notice for all waste not going to a licensed landfill or resource recovery facility.
- s.143 requires waste to be transported to a place that can lawfully accept it.
 - The owner of the waste **and** the transporter are each guilty of an offence when waste is transported to a place that cannot lawfully be used as a waste facility.
 - Once completed and signed, the s.143 notice is a declaration from the “landholder” that waste of a certain type and quantity may be legally accepted for a certain use on their land.
 - www.epa.nsw.gov.au/resources/wasteregulation/160095-notices143-form.docx



Taking soil to a licensed landfill facility

- Ballina Waste Management Centre is licensed to accept general solid waste.
- Under the waste reporting definitions, there are three waste type categories for soil.
 - Virgin excavated natural material (VENM)
 - Contaminated soil (CONT SOIL)
 - Soil (SOIL)
- Ballina Council is in the process of finalising information sheets for these soil categories.



VENM

- VENM is natural material (such as clay, gravel, sand, soil or rock fines):
 - a) that has been excavated or quarried from areas that are not contaminated with manufactured chemicals, or with process residues, as a result of industrial, commercial, mining or agricultural activities and
 - b) that does not contain any sulfidic ores or soils or any other waste
- Material can be certified as VENM if it meets specific criteria. The EPA have a sample VENM certificate on their website.
- VENM to be brought to Ballina Waste Management Centre will need to be pre-booked so that Council can review the accuracy of the information in the VENM certificate.



Certifying VENM

- If you answer no to the following questions, you can consider the material to be VENM and can complete the VENM certificate
 - Has the soil been contaminated by land use activities?
 - Is the site identified within a high risk probability area for acid sulfate soils?
 - Does the material contain any form of asbestos (naturally occurring or otherwise)?
 - Is there any other waste present or has the material been processed?



Contaminated soil

- The contaminated soil waste classification (CONT) refers to soil that is contaminated and not suitable for reuse (excludes soil contaminated with asbestos).
- Contamination in this instance can include the inclusion of other wastes types such as building/demolition material and/or contamination of soil as a result of previous land use activities.
- If your waste is not pre-classified or considered special waste, the waste generators must chemically assess their waste in accordance with Step 5 to determine the waste's classification.



Soil

- The soil waste classification is used to define waste that comprises well sorted soil such as clay, sand or silt only.
- This material may have some potential to be reused following appropriate classification.
- It is material that doesn't fit the classifications for VENM or contaminated soil.
- It is likely that this material will comprise virgin material that cannot be classified as VENM either due to the source location within a high risk acid sulfate soil area or from a site where potentially contaminating activities were undertaken.



Asbestos at landfills!!!!!!

- Asbestos is a HUGE problem for all landfills.
- Asbestos containing material was banned across all uses in Australia on 31/12/2003.
- All site assessments should consider the hazardous materials component of the assessment. If not identified and managed properly, there is a great potential to contaminate the site.
- Regionally Ballina and Byron landfills will not accept asbestos waste. Fines at such landfills can exceed \$7,500.
- Special secondary screening procedures are being implemented at landfills to try and stop the contamination.



Asbestos waste

- Under the Waste Guidelines, asbestos waste is classified as special waste (containing asbestos). If in soil, this will also need to be characterised to determine if GSW, RSW or HSW.
- It is a trackable waste.
- Understand the different forms i.e. friable, non-friable (bonded) or asbestos fines and the level of training and monitoring required.
- Testing regimes for landfill disposal are limited to presence/absence testing, while site characterisation is based on the gravimetric method outlined in the NEPM.
- Asbestos will limit the potential remediation options to macro-encapsulation or offsite disposal.



Take home message

- Minimise waste generation by obtaining quality information up front.
- Be familiar with exemptions and immobilisation approvals to guide the required testing regime.
- Manage asbestos to prevent unnecessary contamination.
- Use s.143 notice to protect yourself if not taking material to a licensed facility.



Thanks for listening!
Any questions?