



Boral Recycling – Doing As_best_os we can to minimise contamination



Key Discussion Points

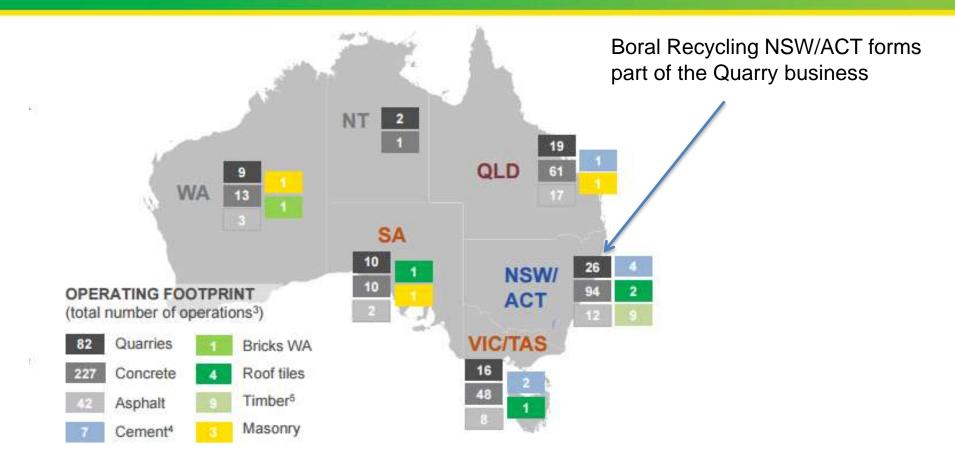
- About Boral Recycling NSW/ACT
- C&D Resource Recovery Products
- Asbestos Containing Material Risks
- Boral Recycling Safety
- Boral Recycling Receival Protocol
 - Asbestos Awareness Training
 - Demolition and Material Source Sites
 - C&D Waste Receival
 - > Weighbridge
 - Material Tipping
 - C&D Processing
 - Loading and processing
 - Picking station
 - Quality Assurance
 - Methods for handling asbestos loads
- Summary





Boral Australia Division





- 3. As at November 2016
- Includes cement manufacturing plant, bagging plant and lime plant in NSW, a clinker grinding plant in Vic and a clinker grinding JV in Qld
- 5. Includes 8 Boral Hardwood mills and 1 JV Softwood operation

Boral Recycling NSW/ACT

- Commenced C&D Recycling in 1993
- Currently approved to receive and process > 1 million tonnes C&D materials per annum
- Currently operate out of five sites
 - Widemere (Wetherill Park)
 - St Peters
 - Kooragang
 - Eraring (bottom ash etc.)
 - Mugga Quarry (ACT)

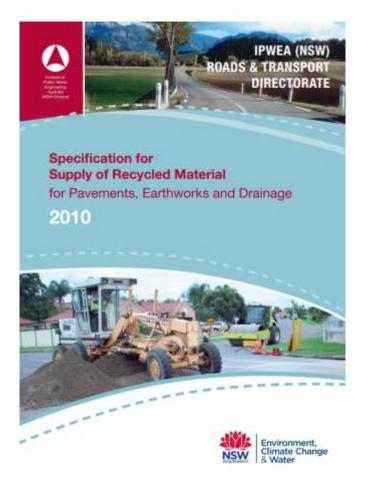






Aim to produce quality resource recovered products

- The C&D Resource Recovery Industry has worked closely with the NSW RMS and Councils in gaining specifications for the supply of recycled products produced from C&D wastes.
- Managing the source and type of your inputs is essential in being able to produce a quality recycled product
- Contaminants/foreign objects can impact quality and value of products produced.



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Aim to produce quality resource recovered products

- Asbestos is of considerable concern and poor management by any operator or poorly managed community concerns can quickly tarnish the resource recovery industry.
- If we as an industry can not sell our products (quality or community concerns), we can not continue to accept products for resource recovery.
- Minimising foreign contaminants, including asbestos, requires more than inspecting loads at the weighbridge



Westconnex asbestos blunder

Posted September 7, 2016 by Joanna Grace & filed under City Hub, City News.

Illegal waste site fined \$37,500 in Sydney

Anna Hitchings 🗌 Australian Associated Press 🛛 🌍 🚱	9 📀

Boral Recycling Safety

Boral Recycling aims to achieve excellence in all areas in our business with "zero" harm to our people, contractors and the community. At Boral Recycling,

Health and safety is non-negotiable The health and safety of one's self and others comes before production.

Boral Recycling is a processor and employer with a responsibility to ensure we meet industry best practice in relation to the processing of construction and demolition materials.

Health, Safety, Environment & Quality







Boral Recycling C&D Resource Recovery Protocol

- 1. Asbestos Awareness Training
- 2. Demolition and Material Source Sites

3. C&D Waste Receival

- A. Weighbridge
- B. Material Tipping

4. C&D Processing

- A. Loading and processing
- B. Picking station
- 5. Quality Assurance
- 6. Methods for handling asbestos loads



Asbestos and Awareness Training

 All Boral Recycling personnel and embedded contractors receive both asbestos awareness training and bonded-asbestos handling training when they commence and a refresher every 12 months BORA

- Selected customers (based on volumes and rejected loads) invited to attend annual formal awareness program
- Occupational hygiene contractors assist Hibbs and Associates
- Examples of restricted and prohibited wastes displayed at weighbridge

Asbestos and Awareness Training



Asbestos Containing Materials (ACM) examples



Photo 1 – Asbestos Cement conduit



Photo 4 – Membrane & Flashing -containing Asbestos ZEROHARMTODAY



Photo 2 – Moulded Asbestos Cement product – Cable Tray



Photo 5 – Old Train Block Fragments containing Asbestos



Photo 3 – Flat Asbestos Cement sheet fragments



Photo 6 – Fragments of Asbestos Cement sheeting on ground surface

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Demolition and Material Source Sites

- Minimising risks of contamination starts at its source either demolition sites or waste separation facilities
- A significant portion C&D waste received is through larger projects or specific facilities
- Receivals Account Managers communicate our inspection and receival protocol to customers to explain our rigour and rejected load process
- Receivals Account Managers visually inspect demolition sites and waste separation facilities
- Clearance certificates obtained for sites where asbestos has been identified and clearance certificates are required or deem necessary by Boral









C & D Receivals at site – all loads inspected at least twice

- Weighbridge
 - Customer delivering identified, details noted
 - All loads inspected, classified and weighed prior to tipping
 - If asbestos containing material is identified or suspected, the load is immediately rejected
 - Rejected loads directed off site, details noted in rejected loads register
 - Three part docket for Non-rejected loads produced
 - Signed by receival clerk as inspected and given to driver to present to 'spotter' before tipping





C & D Receivals at site – all loads inspected at least twice

- Tipping
 - Driver hands docket to Spotter
 - Load unloaded in designated raw feed stockpile area and visually inspected
 - Spotter signs docket to signify further inspection carried out and material accepted and suitable for raw feed
 - If suspected asbestos identified, load immediately isolated and handled as per 'method for handling suspected contaminated material'



C & D Processing



Throughout the processing of materials, all operators continually keep an eye out for suspect materials

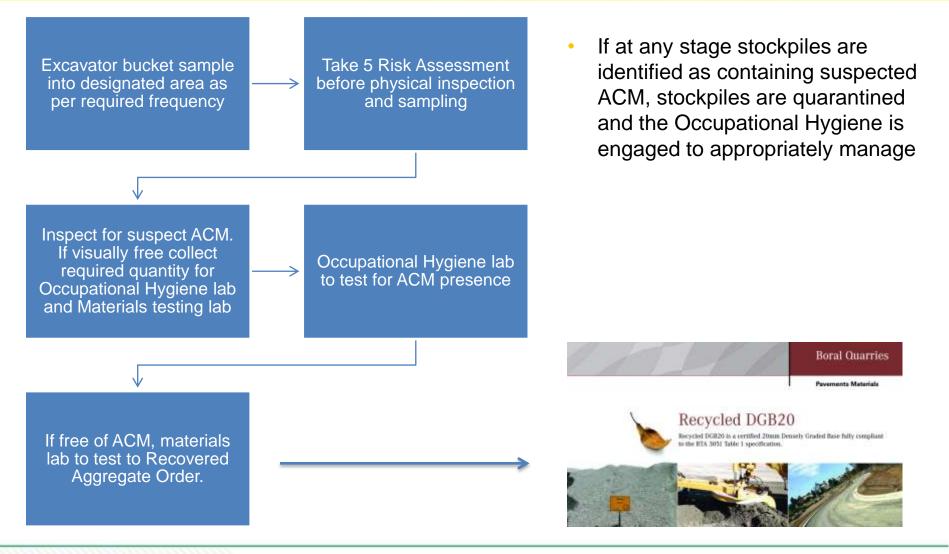




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Quality Assurance – Testing for Potential Hazardous Material

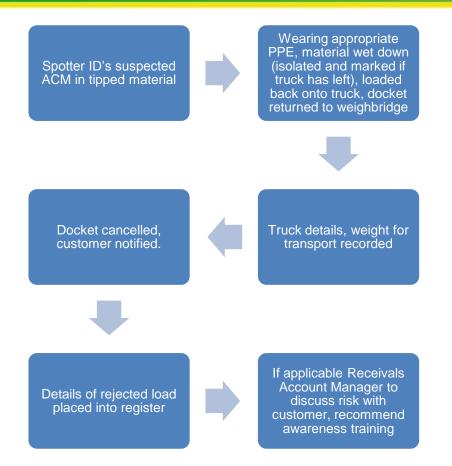




ZEROHARMTODAY

Handling and learning from rejected loads





The decision to reject a load is the responsibility of Boral Recycling only and shall be final

Summary



Minimising the risk of asbestos contamination within bulk resource recovery processes is more than inspecting incoming loads at the weigh bridge. It requires:

- Training of site operators, account managers and key customers
- Visits to source sites
- Feedback to key customers
- Multiple onsite inspections through the receipt, processing and product quality assurance
- Ability to safety reject loads, contain contaminations and learn from every find

Build something great™ Presentation Title

Name and date



