Waste

Waste items generated by Metropolitan Coal can include:

- tyres;
- oil;
- sewage effluent;
- paint;
- lead acid batteries;
- coal rejects;
- drift waste rock;
- office waste (e.g. paper, plastics, aluminium cans and printer cartridges);
- scrap metal;
- general inert waste (e.g. concrete, timber, pipe, rope, rags);
- underground waste (e.g. packaging, cloths, pipe);
- oil/fuel filters;
- absorbents (e.g. spent oil spill material); and
- food waste.

Waste generated at the Project has been monitored on a monthly basis through waste disposal receipts provided by Metropolitan Coal's waste contractors.

Approximately 193,050 kilograms (kg) of general waste was disposed of to a licensed landfill facility during the reporting period (1 January to 31 December 2014) (Figure 1). Some 283,000 kg of scrap wood, scrap metal, lead acid batteries and cardboard/paper/plastic were recycled during the reporting period (Figures 2 to 5). Some 6,700 litres of waste oil were recycled in 2014 (Figure 6). No paint was recycled in 2014.

Visual inspections of on-site waste storage areas have been conducted on a regular basis by Metropolitan Coal to confirm that waste materials are being suitably stored.

Waste streams have been kept separate where practicable to improve waste handling and classification, minimise costs associated with disposal and improve environmental outcomes. For example, hazardous waste has not been mixed with non-hazardous waste and where practicable, recyclable waste has been separated out from other waste.

The underground emplacement project has reduced the off-site disposal of coal reject material by some 80,991 tonnes (t) to date (Figure 7). Some 240,603 t of coal reject was disposed of at the Glenlee Washery in 2014 (Figure 8). The emplacement of reject material in unused workings will continue in the future.

During the reporting period five personnel dedicated to the management of the emplacement of coal reject underground have been employed by Metropolitan Coal. Extensive test work has been undertaken to investigate and optimise the composition of the emplacement material including alternative additive testing, moisture testing, loop testing, beach angle testing and thickener underflow direct addition. The test work will continue in the next reporting period.

Improvements to the Pilot Coal Reject Emplacement Plant were also made during the reporting period including replacement of the main power pack, overhaul of the hydraulic system and backfill pump, and design and construction of fines separation chute. Underground activities included the development of roof support, routing of piping reticulation and bulkhead design and construction. Metropolitan Coal continues to be a leader in underground emplacement design and processes in Australia.

The performance of waste management has been assessed against the performance indicators detailed in the Metropolitan Coal Waste Management Plan. The assessment indicated:

- Waste generation has been minimised.
- Waste has been separated and stored according to type in appropriate storage facilities (e.g. sealed containers for liquid waste).
- The transport of particular waste types has been tracked in accordance with the Office of Environment and Heritage waste tracking requirements.
- Metropolitan Coal's waste management contracts, where relevant, specify that the waste is to be transported by an appropriately licensed contractor and disposed of at an appropriately licensed facility.

None of the performance indicators were exceeded during the reporting period.

METROPOLITAN COAL - ENVIRONMENTAL MONITORING SUMMARY

General Waste

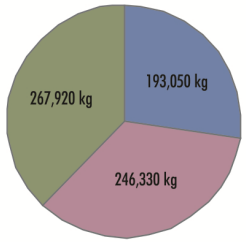

Figure 1

Scrap Wood

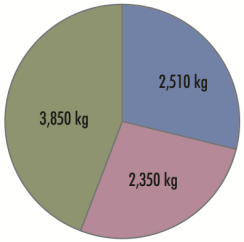

Figure 2

Scrap Metal

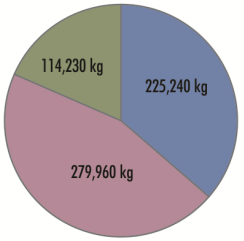

Figure 3

Batteries

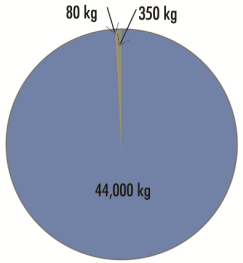

Figure 4

Paper/Cardboard/Plastic

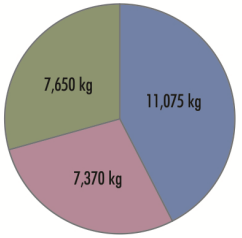

Figure 5

Waste Oil

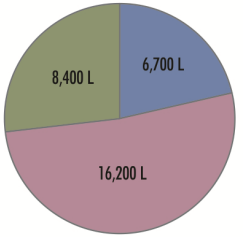

Figure 6

Coal Reject Disposal - Underground Emplacement

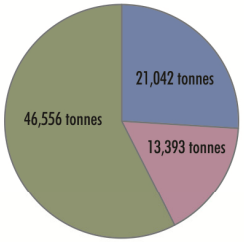

Figure 7

Coal Reject Disposal - Glenlee Emplacement

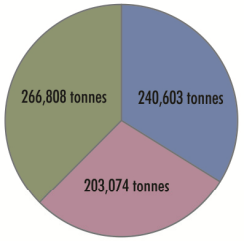

Figure 8

LEGEND
- January to December 2014
- January to December 2013
- January to December 2012

METROPOLITAN COAL

FIGURES 1 - 8
Comparison of Waste Generated and Recycled, 2014 with the 2012 and 2013 Calendar Years

METROPOLITAN COAL