

FACTSHEET

Blaxland Resource Recovery and Waste Management Facility (RRWMF)

Past, present and future



The Site

The site occupies approximately 31 hectares at the northern end of Attunga Road, Blaxland. Approximately 16 hectares are currently being used for waste activities including waste burial, recycling stockpiling materials and front entrance customer service facilities. The current and completed landfill areas will eventually cover approximately 14.5 Ha.

The site is owned by the Crown but Blue Mountains City Council is charged with the care, control and management of the site. The site is zoned "SP2 wmf – Special Purpose Waste Management Facility" under Council's Local Environment Plan 2015.

The facility currently receives around 45,000 tonnes of waste per year for recycling, reuse or landfill, including waste transported from Katoomba RRWMF.

Short Site History

Waste activities commenced in the 1950's. These operations were generally informal and uncontrolled and some waste was burned until the early 1980's. There was an incinerator which was used at the site to burn waste during the 1970's, however, this was decommissioned to protect local air quality in 1976.

Formal regulation occurred in 1985 when the Environmental Protection Authority (EPA) was created. Council had to make formal management plans and comply with new environmental protection legislation.

Septic tank pump out (or night soil) was disposed of at the site until 1990 in shallow trenches where the sludge would infiltrate into the soil and evaporate.

Recent improvements to the site have included:

- Fully lined landfill cells to ensure waste does not come in contact to soil.
- Upstream and downstream groundwater protection works which prevent leachate travelling through the soil to contaminate groundwater aquifers.
- Construction and installation of new pump station to dispose of leachate to sewer under a Trade Waste Consent from Sydney Water.
- Protection of Cripple Creek waters by a new diversion pipeline. The new pipeline has multiple layers of protection to prevent leachate contamination of the surface waters flowing through the site.
- Fully lined leachate dam for capture, storage and management of leachate to protect surrounding environment from this polluted water.
- the upgrading of resource recovery and customer facilities, relocating the gatehouse and weighbridge and a reuse shed.

The Future

The recent landfill extension is expected to provide 15 to 20 years of landfilling capacity based on current disposal rates. Current trends indicate that the Blue Mountains community is producing less waste, if this continues it may last longer.

Environmental management systems and infrastructure will continue to be improved to raise the level of protection of **groundwater**, weed control and Cripple Creek water quality.

The Present

Site operations are controlled by several main pieces of legislation and regulations including the Protection of the Environment Operations (POEO) Act, EPA Environmental Guidelines for Solid Waste Landfills and Occupational Health and Safety Act. The operations must also comply with the EPA Licence 10039 and a Landfill Environmental Management Plan which has been approved by the EPA.

The site has a **weighbridge**. Customers pay for waste disposal by weight. This provides accurate information for waste management and environmental reporting.

The new site entrance and waste sorting facilities have been designed so that small and large vehicles are able to tip separately for safety reasons.

The Landfill where waste is buried must be covered at the end of each day to prevent windblown litter, vermin and odour. The cover may be clean soil or a space-saving Alternative Daily Cover such as a tarpaulin or spray on foam.

The site has facilities for free **recycling** - scrap metals, glass, paper and cardboard, PET plastic, aluminium cans and steel containers. Used engine oil, car batteries and gas bottles, expanded polystyrene (EPS), TVs and computers are accepted for recycling. Mattresses are also accepted at a cost.

Large volumes of **green waste** are mulched on-site. A contractor then transports the mulched green waste to their facility in Kings Plains (between Bathurst and Blayney) where it is further processed for their clients in the agricultural, farming and mining sectors.

The new **landfill** extension has an impermeable lining system to protect the groundwater from leachate contamination. **Leachate** in the landfill is collected in a system of pipes under the waste and disposed of into the local sewerage system by an on site pumping station.

The site has surface water management systems to divert stormwater **runoff** away from operational areas into large sedimentation dams. The water is de-silted in these dams prior to discharged into Cripple creek.

Cripple Creek flows under the new landfill extension through a pipe with a diameter of 1.8 metres. The pipe is made from impermeable HDPE, encased in concrete and installed under the landfill liner. This has been done to ensure that there are multiple layers of protection against leachate infiltration.

Environmental management of the site incorporates routine environmental monitoring of surface water, ground water, dust, landfill gas and noise.

Terminology

- **Landfill** – the engineered deposit or disposal of waste into or on to land
- **Weighbridge** – a mechanical device used to weigh large loads eg cars and trucks
- **Leachate** – liquid that has come into contact with waste and is contaminated with waste by-products
- **Recycling** – reprocessing waste materials into new products
- **Runoff** – water which comes directly from rainfall
- **Green waste** – all vegetation - branches, trunks, stumps, leaves etc
- **Groundwater** – underground water sources