

A NEW SOLUTION FOR MANAGING AND DISPOSING OF HAZARDOUS WASTE: PFAS



- PFAS are a group of man-made chemicals that have been manufactured and used in a variety of industries around the globe.

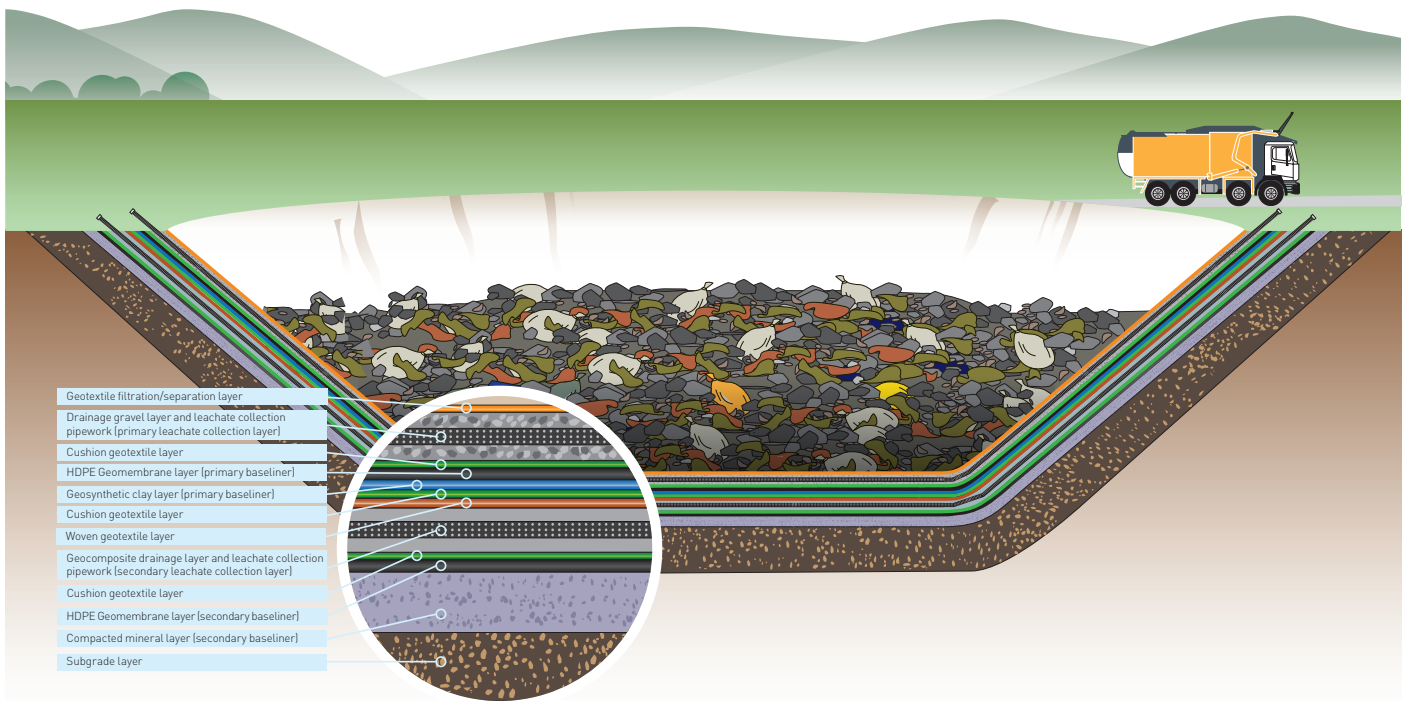
Southern Waste ResourceCo has invested in a multi-million-dollar purpose-built disposal facility in South Australia, as we move to step up our capability in managing Australia's hazardous waste.

Our construction of a highly sophisticated disposal cell raises the bar in environmental and engineering performance and has been designed to accept some of the new and emerging hazardous waste streams generated from contaminated sites including per- and poly-fluoroalkyl substances (PFAS).

The outcome is that these hazardous waste streams are moved off of source sites, where they pose a current and real risk to the environment, to a purpose-built facility where they can be safely and appropriately managed.

The Double Composite Lined Disposal Cell reflects best practice landfill design and construction, with Southern Waste ResourceCo working with the South Australian EPA, as the regulator of the facility, to bring the project to delivery.

Stage 4 Cell 3 - Double Composite Disposal Cell



A FIRST FOR SOUTH AUSTRALIA

The Cell, which uses a multi-layer liner system is the 'only one of its kind' in South Australia and one of several constructed in Australia to offer a superior level of protection when compared with traditionally lined disposal cells.

It includes the construction of three different types of liners made from processed shale materials, high-density polyethylene and geosynthetic clay liners.

AN INCREASED LEVEL OF ENVIRONMENTAL PERFORMANCE

The specific combination of liners and leachate collection and extraction systems used in the Double Composite Lined Disposal Cell, provides a high level of security that all leachate generated, collected and removed from the cell for evaporation, will be safeguarded from the environment.

Importantly it also prevents any contamination of groundwater.



October 2019

- Onsite crushed shale is utilised to prepare the processed mineral baseliner and sideliner layer.



- Excavation of the primary and secondary leachate collection sumps and installation underway of the secondary High Density Polyethylene (HDPE) sideliner.
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- Small area started for the overlapping of geocomposite drainage layer.



- The primary leachate collection layer, used to collect liquids from waste disposal operations is placed on the cell floor.
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- HDPE sideliner close to completion and awaiting final placement of a small area of geocomposite drainage layer.

The innovative engineered design has been three years in the making and is in full compliance with new South Australian EPA landfill guidelines, released in 2019.

BEST PRACTICE LANDFILL DESIGN AND CONSTRUCTION

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https://www.epa.sa.gov.au/environmental_info/waste_management/solid_waste/landfill

The double-composite-lined disposal cell will allow landholders to actively remove and clean up contaminated sites and take the hazardous waste away to a purpose-built facility of world standard.

DISPOSING OF PER- AND POLY-FLUOROALKYL SUBSTANCES (PFAS) AND OTHER TOXIC CONTAMINANTS

Perfluorooctane sulfonate (PFOS), Perfluorooctanoic Acid (PFOA) and Perfluorohexane Sulfonate (PFHxS) are the most common chemicals belonging to the PFAS group and the Double Composite Lined Disposal Cell is equipped to accept these substances.

PFAS have been commonly used in household products and specialty applications such as non-stick cookware, paints, textiles, coatings, food packaging as well as firefighting foams, hydraulic fluid and mist suppressants.

PFAS compounds readily dissolve into water which means any impacted water needs to be captured and managed appropriately.

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April 2020

LOCATION

The Disposal Cell is located at Southern Waste ResourceCo at McLaren Vale, approximately 35 kilometres south of Adelaide.

The site at 2605 Main South Road in McLaren Vale, has been operating as a major leading waste, recycling centre and soil treatment base since 1993.

FURTHER INFORMATION

Get in touch with us to find out how we can help to address the remediation of contaminated sites.

Please contact ResourceCo to find out how we can help or assist you with further details.

https://www.epa.sa.gov.au/files/14499_guide_pfas_landfill_disposal.pdf

- Completed baseliner, as a double composite design.

Call us on 1300 696 733
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ResourceCo's website:
www.resourceco.com.au