

# Case Study

## Waste Reduction

📍 Contaminated site clean-up early works  
👤 Undisclosed client

**\$700K**

Project Value

**\$700K**

Contract Value



**12.8%**

disposed of safely in onsite landfill



**0.2%**

truck tyres, electrical engines, metal and concrete separated and sent offsite for recycling at no cost to client



**87%**

of waste beneficially reused onsite instead of importing material

Savings to Client  
**\$5M**

## Project Description

This project involves a 200ha site that was sold for development. SoilCyclers were engaged by the former landowner to complete a site clean-up of an illegal landfill prior to the transfer of ownership and development.

### The problem

Prior to handover of the site, the client needed to clean-up an illegal landfill that had been abandoned by a former tenant.

The site contained 140,000m<sup>3</sup> of stockpiled green waste mixed with soft plastics and other unsuitable waste. The material was wet, and during the project, flooding occurred with the entire site under more than a metre of water for almost a week.

The large quantity and the wet, sticky nature of the material meant our client had doubts about whether they would be able to meet the agreed timeframes for sale and redevelopment of the site.





## Our solution

After a number of site visits and a trial where we demonstrated the ability of trommel screens to reduce oversize by up to 80%, with almost triple the amount of throughput of the existing flatdeck screen they had been attempting to use, the client engaged SoilCyclers as principal contractor to undertake early works clean-up of the site prior to handover to council.

Our contract involved sieving and sorting 140,000m<sup>3</sup> of waste and disposing of soft plastics into the onsite landfill. This engagement was twice the size of the largest project we had ever completed at the time. The project had a tight timeframe, so we engaged additional operators and commenced training them so we could work split shifts and do extended hours, as well as weekend work to maximise utilisation of our existing machinery.

Due to the height of the stockpiled material and the variable nature of the waste, there was very limited space. We chose to complete the bulk of the project by leaving the existing bund wall in place and working inside it. Our team commenced work in one corner of the site and gradually worked our way across the entire site area to reduce the chance of contamination of materials and minimise the number of onsite moves that needed to be completed. As we took the time to investigate the project in detail and complete a trial, we were able to quote a rate that would cover the wetness of the material. We completed the entire project with only one variation, which was at the request of our client.

## Benefits to the client

By using mobile recycling machinery rather than carting material away to landfill, SoilCyclers was able to divert 140,000m<sup>3</sup> of waste from landfill and take 7,000 truckloads off local roads. We estimate the saving to our client was in excess of \$5 million.

By separating waste from soil, our client was able to leave the soil onsite. Some of the wetter material was dried out and screened a second time in order to separate all soil material from soft plastics so they could be disposed of safely in the onsite landfill cell. By utilising trommel screens and working to minimise our oversize rates, we were able to reduce the amount of waste by 87%. We were also able to separate clean concrete, metals and tyres for recycling, meaning that no waste was exported offsite to landfill. All of the waste was either recycled as clean streams of waste offsite at no cost to the client or disposed of in the onsite soft plastics landfill cell.”

**“SoilCyclers processed 140,000m<sup>3</sup> of soil mixed with plastic and rubbish and reduced our waste disposal cost significantly. They were professional, easy to work with and honest. I’d be happy to recommend them to others looking to reduce onsite waste and avoid unnecessary costs.”**

Client’s General Manager Sustainability