Clyde Terminal Western Area Remediation Project

The Western Area

The Western Area is approximately 40 hectres (ha) in land size and was previously used for refining operations including hydrocarbon processing, fuel storage and transfer.

Long-term and historical use has resulted in contamination impacts to the soils and groundwater.

Following completion of the remaining demolition activities, Viva Energy intends to commence environmental remediation of the Western Area to ensure the site meets the current standards for Commercial/Industrial land use.

Works Plan

The project is expected to take approximately three years to complete involving a number of stages that will run concurrently. In general, five main stages are involved:

STAGE 1 — **Preparation works** to set up the works area including the installation of temporary erosion and sediment controls
Duration: *three months*

STAGE 2 — **Removal of redundant infrastructure and wastes** such as underground redundant pipework and concrete to clear and prepare the area for remediation
Duration: *up to 36 months*

STAGE 3 — **Remediation** including setting up the areas and trialing specific remediation methods
Duration: *up to 28 months*

STAGE 4 — **Landforming** of the area to return to current levels
Duration: *22 months*

STAGE 5 — **Completion works and demobilisation** including the progressive removal of plant and equipment

About the Remediation Works

The remediation will be focussed at shallow depths of the site. It is estimated that approximately 105,000m3 of soils require remediation.

The type of remediation involved will depend on the nature and extent of the contaminants found and will be across targeted areas of the Western Area.

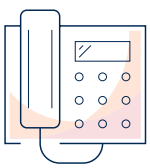
Environmental Impact Statement

The Environmental Impact Statement (EIS) has found that the Project can proceed with minimal and manageable risk to the community and the environment.

The EIS is a comprehensive document requiredas part of the development approvals process, to address potential impacts of the Project. It includes extensive studies with modelling and data on potential impacts including soil and groundwater, environmental, noise, air quality and traffic.

Key findings of the EIS

Potential Impacts	Measures to mitigate or manage potential impacts
Soil and Groundwater	
• Movement and disturbance of contaminated soils including excavation • Erosion to soils could potentially impact the environment	• Implementation of the measures detailed in the NSW Government's 'Blue book' • Management Plans • Erosion controls on the final landform, including swales and grassing
Air Quality and Odour	
• Impacts were below the relevant NSW EPA criteria with the exception of particulate matter PM2.5 and PM10 and at times, odour • The largest PM2.5 contributors are from the direct thermal desorption (DTD) unit plant screen and the mobile crushing plant	To reduce these predicted impacts: • An enclosure on the DTD plant screen with water sprays placed on the outlet • Use of a particulate filter on the mobile crushing plant • Air quality may be monitored during the project
Noise and Traffic	
• Noise levels generated throughout all stages of the project were predicted to be well below the applicable Noise Management Levels for all hours • Traffic modeling predicted that the Project will have no impact on the level of service for key intersections	• A Traffic Management Plan will be in place and include routes for heavy and private vehicles to access the Western Area
Ecology and Heritage	
• Fauna habitat that is present within the Project Area is of little value and any vegetation currently present does not support high quality habitats for locally threatened fauna • The Lower Duck River Wetlands and key population of Green and Golden Bell Frog centered around the Wetland present in the north-east are outside of the Project Area	• Direct impacts from the former Conversion Project to the heritage value of the former Clyde Refinery have already been mitigated by previous archival recordings as part of the Conversion Project



Contact

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