

Shell RCCU Particulates Project

Geelong, Victoria, Australia



Client

Shell

Project Scope

FEED

Period of Work

September 2006 – July 2007

Project Description

Regeneration of the catalyst associated with the RCCU resulted in some of the finer catalyst particles being entrained in flue gas flow. This project was implemented to limit emission of the catalyst particles. Optional technologies including high efficiency cyclone separators, electrostatic precipitators, wet scrubbers and high temperature filtration were investigated.

The latter technology was selected to replace the final stage of the existing cyclone separation system.

Uhde Shedden were engaged to prepare the Basic Design Engineering Package including:

- Preliminary design of the support structure, layout of the equipment, detailed prediction of cooling using CFD, preliminary 3D CAD modelling of the filter, associated pipework and steelwork, design specifications for the ancillary equipment, construction methodology approach, capital cost estimate and implementation plans for the project.
- The modification took place during a shutdown of the RCCU in mid 2007.