

UQ Experimental Minesite Environmental Management System (EMS) Guide to Water Disposal

# **Minerals Processing Area - Pilot Plant**

# **Process and Clean-up Water**

Water generated from Pilot Plant 1(Building 638) and the external pad is collected, pumped to a settling tank, and the clear effluent disposed of to the stormwater system. Stormwater quality is monitored periodically.

Solids are extracted into 44 gallon drums. When the drums are full they are disposed of as general waste.

The process and clean-up water from Pilot Plant 2 (Building 639) is collected for treatment. The water is disposed of to trade waste under licence.

Solids are settled out in a trap which is inspected annually, pumped out and disposed of as per the trade waste licence.

Sediment from Pilot Plant 1 and and the external pad may end up in the stormwater system and the reed bed filtration system.

## **Stormwater collection**

Stormwater that falls on building roofs is piped directly to a reed bed filtration system, which drains into Witton Creek.

Stormwater that is collected from the external concrete pads is collected by the grated drainage system, or a spoon drain system.

Water collected by the spoon drain system bypasses the settling tank and flows directly to the reed bed filtration system.

### **Reedbed Filtration System**

The reed bed is periodically cleaned out to remove sediment by Property and Facilities Division to ensure effective filtration.



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**Mine and Mining Laboratory** 

## **Dust Mine Dewatering**

A dewatering system pumps mine water to the surface to dewater the mine after heavy rain.

The mine water is pumped to the stormwater system as the seepage water from the mine has been tested and been found to be comparable with the local groundwater quality.

## **Dust Supression**

Piped water from town supply is used for dust suppression and clean-up.

Wastewater is to be disposed of to trade waste.