Dungog Water Treatment Plant Project

Dungog Water Treatment Plant

1988

Operator:
HunterWaterCorporation, NSW

Quantity:
370 m3 C & S Filter Coal (1987)

Filter Media:
C & S Coal ES=1.6-1.8 mm UC=1.35 max 800 mm deep

Silica Sand ES=0.7-0.8 mm UC=1.35 max 400 mm deep

Support Layer:
Graded Silica Gravel 400 mm deep

Height Of Washout:
Troughs above media 1300 mm

Process:

Contact Filtration through 10 open gravity filters, treating 150 ML/day, completed in 1987 at a cost of A$20 million. This plant deserves special mention for several reasons.

It was the first contact filtration plant in Australia to use large Effective Size media, following original pilot plant work by the Hunter Water Corporation. Nowadays, a deeper bed would be used with media of this Effective Size, but the plant is nevertheless a forerunner of many plants in Australia which use a contact filtration or direct filtration process with Deep Bed Coarse Dual Media filtration technology.

It is also the first plant to use C & S Filter Coal, and the excellent results obtained with this media over eight years of continuous operation confirms the durability and stability of C & S Filter Coal, and also its ability to produce a filtered water of the highest quality.