

SLURRY WALL



GFWA

SUSTAINABLE TECHNOLOGY



Slurry walls are an effective way for creating a cut-off barrier and preventing the flow of water. They are frequently used in dams and contaminated sites.

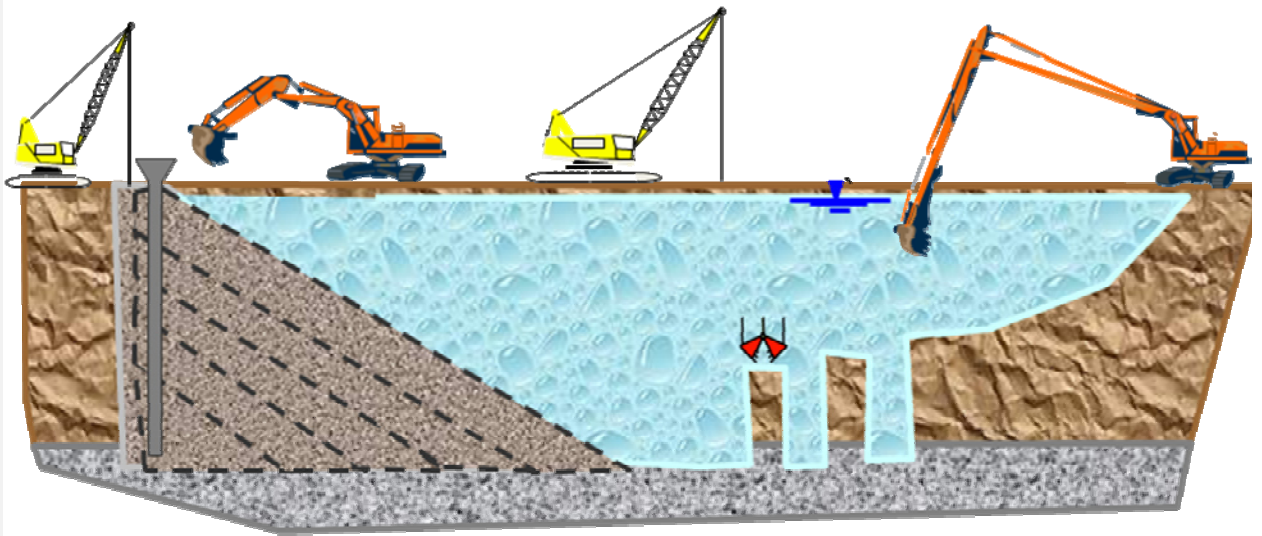
Long arm hydraulic excavators can be used to excavate trenches as deep as about 25m. Greater excavation depths may be achieved by implementing clamshell excavators. The stability of the trench is provided by a specially mixed slurry.

The cut-off wall is created by backfilling the trench with a slurry mixture of in-situ soil and added components, such as fine soils or bentonite, or with cement and bentonite to create a backfill with an appropriate property and grading. Once the trench excavation has progressed sufficiently, the material is backfilled into the trench and then placement continues along the trench in pursuit of the continuing excavation.



SLURRY WALL

Work procedure for Construction of Deep Slurry Walls

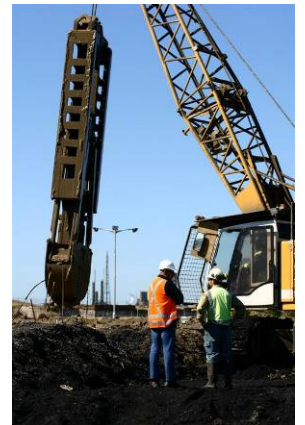


Mayfield former Newcastle Steel Works Barrier Wall



A slurry wall as deep as 50 m and 1500 m long was required to block the flow of water from the former Newcastle Steelworks site in Mayfield, NSW into Hunter River.

The strategy for site remediation of the closure area was based principally on containment through capping and groundwater control.



Recent Australian References

Fremantle Port (WA, Australia) – Port of Fremantle – *cement bentonite wall*

Alcoa Tailings Dam (WA, Australia) – Check Pty – *cement bentonite wall*

Omex Site, Bellevue (WA, Australia) – CAMS – *cement bentonite wall*

Stephenson & Ward Incinerator (WA, Australia) – Moltoni Group – *cement bentonite wall*

Harris River Dam (WA, Australia) – *cement bentonite wall*

Mayfield former Newcastle Steelworks (NSW, Australia) – Regional Land Management Corp – *soil bentonite cut-off wall*

Tempe Tip (NSW, Australia) – Marrickville Council – *soil bentonite cut-off wall*

Fisherman's Island S3A (QLD, Australia) – Port of Brisbane Corporation – *soil bentonite cut-off wall*

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