

# HIGH DENSITY TAILINGS SLURRY ENGINEERING





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WWL Engineering (WWL) professional team, led by PhD Gordon McPhail, has been involved in several projects for design new Tailings Storage Facilities (TSF), our experience cover conventional and high density tailings deposition. The list below shows the most recent projects that WWL has been involved in.

## Design of new Tailings Storage Facilities (TSF)

Product	Dam	Tonnage (T/month)	Area (ha)	Client
Platinum	Paardekraal 1	550,000	80	Rustenburg Platinum Mines Ltd
	Waterval East	550,000	40	
	Klipfontein East	150,000	40	
	Amandelbult	300,000	60	
	Ivan	80,000	45	
	Potgietersrust	250,000	80	
	Atok	80,000	30	Impala Platinum Limited
	Karee	180,000	50	Western Platinum Limited
Gold	Joel	80,000	40	H J Joel Mine/JCI
	Winkelhaak 4&5	200,000	200	Winkelhaak Mines Limited
	Olympic Dam	800,000	180	Western Mining Corporation
Lead/Zinc	Pering	80,000	40	Pering Mine Ltd
Gypsum	Kynoch Potch	20,000	25	Kynoch Fertiliser s(Pty) Ltd (formerly Triomf)
Ash	AECI dam 6	22,000	20	AECI Ltd
Copper - Gold	Osborne	115,000	56	Placer Dome Asia Pacific
Iron Ore	Robe, Mesa J TSF3	400,000	180	Pilbara Iron/Robe River Iron Associates
	Robe Mesa J TSF5	400,000	150	Pilbara Iron/Robe River Iron Associates

In addition to TSF design, the WWL team has developed several beaching predictions. The list below shows the most recent projects that WWL has been involved in.

## Beaching Prediction

Mine	Tonnage (T/month)	Country	Client
Osborne Mining Operations	120,000	Australia	Chinova Resources
Rössing Uranium Limited	1,200,000	Namibia	Rio Tinto
Caserones	3,500,000	Chile	Lumina Copper Chile
Collahuasi	4,350,000	Chile	Anglo American & Glencore
Mantos Blancos	300,000	Chile	Anglo America Chile
Chuqucamata	4,500,000	Chile	Codelco
Radomiro Tomic	4,000,000	Chile	Codelco
El Abra	3,750,000	Chile	Freeport McMoran
Minera Centinela	3,000,000	Chile	Antofagasta Minerals
El Tofo	3,600,000	Chile	Compañía de Acero del Pacifico
Minera Florida	72,000	Chile	Yamana Gold
Antamina	4,500,000	Perú	BHP Billiton & Glencore
Sierra Gorda	3,300,000	Chile	Sierra Gorda SCM
Minera Centinela Norte	3,900,00	Chile	Antofagasta Minerals
Toromocho	2,700,000	Perú	Minera Chinalco del Perú
Racaycocha	1,800,000	Perú	Minera Peñoles del Perú
Two Oil Sands operations	Confidential	Canada	Confidential