



PIONEERING SOLUTION DELIVERS VALUE WORTH \$18.5 MILLION.

TWMA pioneers drilling waste management solution to process a variety of waste streams on one of the UAE's largest fields.

LOCATION

Abu Dhabi, UAE

PRODUCTS/SERVICES

TCC RotoMill
Crusher

CHALLENGES.

- Variety of different waste streams (13,500 MT conductor drilling waste and 40,000bbl slops) had accumulated over seven years and required processing due to increasing storage costs and lack of space
- Remote location meant that processing would require a large and costly logistical operation with increased health, safety and environmental risk
- Conductor drilling waste and slop waste are notoriously difficult to process and no one process existed to remove the waste at the time

SOLUTION.

With TWMA already on location providing drill cuttings treatment services, the waste streams were analysed to identify if they could be combined into a feedstock with similar properties of NAF drill cuttings and processed through the TCC RotoMill.

It was found that the particle size of the conductor drilling waste was too large to be processed. TWMA introduced a two stage unit to reduce the piling waste particle size to <300 microns. This solid fraction blended with the slop waste created a feedstock that could be processed via the TCC RotoMill, the output being safe enough for reinjection, ensuring all waste is eliminated at source inline with local environmental guidelines.

VALUE.

\$18.5M

Saved by processing the waste streams at source.

\$1.5M

Worth of base oil recovered from the waste and reused in the mud system.

50%

Reduction in carbon emissions due to elimination of 5,712km sea transportation.

The output of the technology was recovered solids, suitable for reinjection at source with <1% oil on cuttings. The recovered water, measuring <30ppm was suitable for reinjection in the same disposal well and 12,500bbl recovered oil was returned for reused in the active system.

This solution eliminated the requirement for, and costs associated with, transportation of waste to an offsite facility for treatment and disposal and in turn extracted recovered oil from the drilling waste. In addition, 36,669 lifts were eliminated and multi handling operations of >60,000 bbl of waste reduced personnel exposure.