Over the past 30 years GHD has gained a high level of local and international recognition for its cost-effective, practical and innovative methods in tailings storage design and management. This has included consideration of integration of other mine wastes to develop robust solutions and also modification of tailings properties by thickening or chemical modification to achieve desirable outcomes.

GHD is active in the tailings industry and is represented on national and international technical committees, including the Australian National Committee on Large Dams (ANCOLD), the AusIMM, and the Australian Centre for Geomechanics.

Identifying needs

Successful tailings and mine waste management must incorporate many disciplines to produce safe and reliable solutions. GHD provides many of these skills in-house and customises project teams to provide a focused service that meets each client’s needs.

Services

Out tailings management services include risk management, planning and approvals, geochemistry evaluation, optimisation studies, investigation and design, procurement and commissioning, operation and maintenance, environmental management, and closure and rehabilitation.

Investigation and design – GHD’s philosophy is to tailor site investigations and tailings storage facility (TSF) design to minimise construction and operating costs, while providing safe, innovative and technically robust solutions for our clients. Our investigation and design services include geotechnics, risk assessment, hydrology and hydraulics, slurry handling and processing systems, TSF design (civil, mechanical, electrical, instrumentation and control), seismic and liquefaction assessments, water management systems design and waste rock design and optimisation.

Construction and commissioning – Construction and commissioning of any TSF requires specialised support from experienced engineers. GHD prepares cost estimates and construction contract documentation. We provide full or part time construction services to give technical support and to assist with driving safe, on time completion. GHD assesses construction performance, quality control and quality assurance requirements; and certifies design compliance for the appropriate authorities. We assist with commissioning TSFs though commissioning planning and on-site support services.

Operations and maintenance – The ongoing performance of TSFs is critical to satisfy business, operational, environmental, safety and regulatory requirements. GHD provides services to optimise the operational capacity of the TSF and to help maintain the integrity of the facility. Our operation and maintenance services include operation manuals, operator training, tailings discharge management plans, water balance modelling and predictions, dam safety emergency management, annual licensing inspections and certification, performance and integrity monitoring.

Benefits

GHD offers services throughout the whole project life cycle and we aim to develop long-lasting relationships with our clients. Our services go beyond the scope of individual projects as we aim to be the trusted, first point of contact for all tailings management issues.

What to expect

Engage GHD on your next tailings project and we’ll work with you to manage your business risk and liabilities, reduce project costs, improve cash flow, leverage innovations, support effective operations and deliver outstanding project outcomes.

To learn more about tailings management, contact: ghd.com.au/global/services/tailings

“We apply a holistic approach to tailings management, considering all aspects of sustainability, providing you with an optimal solution, aimed at reducing expenditure, and meeting regulatory requirements, while going beyond compliance to demonstrate environmental and technical leadership”