

# STUDIES AND DESIGN

## Our approach

Water and tailings storage does not live in isolation to the rest of your operations and neither should the studies used to make decisions about them. Our studies and designs are founded on a fundamental understanding of your overall operational context so that the outcomes and recommendations of our work are practical, realistic and aligns with your operations.

From tailings throughputs to mine pit availability and processing technologies to mine and waste planning and closure, our studies consider it all from the start. The outcomes from studies and designs should provide responsible and safe storage solutions that align with your business objectives and goals. We aim to be engaged at the earliest possible stage of a project, so that the opportunities that we identify can be realised.

By adopting a holistic approach which considers the wider operational context your project, operational and overall business objectives and goals are automatically included as underlying criteria in our studies and designs.

## Services

We provide a full range of studies and design services including planning studies, concept designs, order of magnitude studies, feasibility studies, detailed designs and closure studies.

Our water dams and tailings capability covers all required design aspects such as embankment design, hydraulic structures, risk assessment (including failure modes and effects analyses), flood studies, dam break modelling, seepage and stability analyses, water balance and freeboard assessments and preparation of detailed design, tender and construction documentation, and construction support services.

Our core dams and tailings engineering and geology is supported by our network of trusted partners providing hydrology, hydrogeology, geochemistry, mechanical, drafting and GIS services. Our integrated team delivers the full suite of design and engineering services you need.

## Our experience

Our personnel have a proven track record of delivering studies and designs at all life stages for various mining operations, from small / mid-tier miners to major tier 1 mining companies across the world. We have experience across all types of TSFs, including cross valley, paddock, in-pit and dry stack facilities. We bring this experience to every study and design we deliver to you.

HATS has successfully completed the following studies and design:

- Roy Hill process water storage design.
- RTIO tailings life of mine studies and storage facility expansions.
- RTIO mine water management studies and design detailed construction documentation.

## Contact us

Partner with HATS for your next water storage or tailings study or design project and experience the true value we bring to the process.

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