

# **INTEGRATED SOLUTIONS**

### **CONTACT DETAILS**

HATS Consulting Pty. Ltd. 21 Park Lane, Canning Vale Perth, Western Australia connect@hatsconsult.com

www.hatsconsult.com

### **BEYOND TAILINGS**

Integrated tailings solutions consider the whole mining and processing operation to identify opportunities at and upstream of the tailings facility that reduce overall risk and cost for the whole mining operation.

Examples of opportunities include changing tailings from waste to usable product, minimising tailings production volume, limiting the harmful potential of the produced tailings and achieving efficient storage options by integrating the tailings storage within the mine plan.

In applying these principles, we have achieved significant cost savings for our clients on several projects.

### **KEY TO SUCCESS**

Consider tailings management in the wider project context

Understand the process plant

Challenge traditional methods and assess alternatives

Trade-off study to identify the most beneficial solution for your whole operation, not just tailings management

## CROSS-DISCIPLINE APPROACH

A cross-discipline approach is required to truly utilise and benefit from integrated solutions. It requires effective coordination of several project areas including processing, material handling, mine planning and non-processing infrastructure.

Our knowledge of mining and processing goes well beyond the tailings storage facility design, which allows us to effectively coordinate and communicate with other disciplines in the project team.

We have meaningful cross-discipline discussions and challenge the selected technologies and equipment to reduce the overall project cost. Further, we can communicate findings with relevant stakeholders, both internal and external to the project.

### **TECHNOLOGY EXPERIENCE**

Thickened and paste tailings
Perimeter and central discharge

Tailings filtration and dry stacking

Tailings co-disposal

In-pit disposal

### **TECHNOLOGY SELECTION**

We understand that no single tailings technology is superior to others, and that each project is unique.

Through our project experience and industry research and development we understand the benefits, drawbacks, risks and suitable application of traditional and emerging tailings technologies. Further, our research into soil microstructure gives us a unique insight into tailings behaviour for various conditions and technologies.

This all translates to the ability to determine the suitability of different management strategies and deposition technologies from traditional wet tailings storages to paste facilities and dry-stacking to co-disposal within or outside the mined voids.

More importantly, we have experience in delivering trade-off studies that compare options to assist with the selection of the preferred strategy by considering not just the financial and risk impacts on tailings management, but your whole operation.

### **NEXT STEPS**

Contact HATS Consulting to discuss how we can assist you with your operation by providing integrated solution services.

HATS Consulting Pty Ltd ACN 639 804 603 ABN 886 398 046 03

### **OUR SERVICE**

HATS aims to maximise value to our clients through integrity, honesty and delivery on our commitments.

We aim to work with all other disciplines from the wider project to allow us to understand the broader project context, constraints and opportunities. In understanding the wider context, we are able to present a tailings solution that, while not being immediately obvious, is the best option from an efficiency, cost and risk standpoint for not just tailings management, but your whole operation.