

## CONTACT DETAILS

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## EoR CORE TEAM

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 BE (Civil & Construction) (Hons)  
 MIEAust CPEng NER  
 Principal Consultant

**James Thorp**  
 BEng (Civil) (Hons), MIEAust  
 Senior Consultant

**Ryan Singh**  
 BEng (Civil Engineering) (Hons),  
 BCom (Finance)  
 Senior Consultant

**Julia Bota**  
 MSci (Geol) (Hons), FGS  
 Principal Engineering Geologist

## EoR SUPPORTING DISCIPLINES

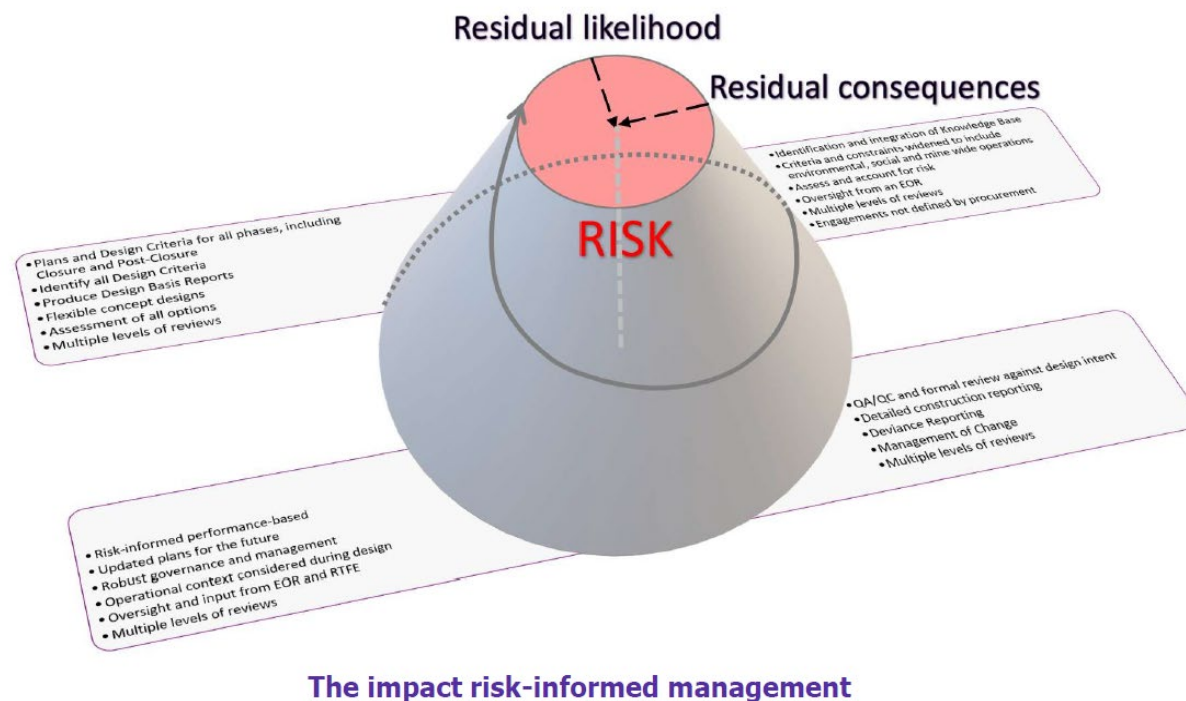
- Hydrology
- Hydrogeology
- Geochemistry
- Mechanical
- Drafting
- GIS

## NEXT STEPS

Contact HATS to discuss how we can assist you with providing EoR services for your operation.

## IMPORTANCE OF ENGINEER OF RECORD

The EoR is a key role in tailings management with an overarching responsibility for verifying that the design, construction and operation of a TSF is carried out to minimise the risk and comply with applicable regulations, statutes, standards and guidelines. We believe an effective EoR can reduce the risks throughout the life of a TSF by decreasing the likelihoods and consequences of failure over time through risk informed management as outlined in the GISTM.



## FOUNDATIONS OF A SUCCESSFUL EoR ENGAGEMENT

### Technical Excellence

- We employ only the highest quality people
- We are active in the development of technical understanding within industry
- We are members of ANCOLD and ICOLD committees and working groups

### Performance-Based Risk-Informed Management and Decision Making

- We have developed unparalleled risk assessment and management tools
- Impact of all activities area assessed against the risk profile of the TSF and prioritised

### Holistic Understanding and Stakeholder Engagement

- We consider operations beyond the TSF, such as processing, mining, and site water management
- We engage directly with stakeholders, focussing on areas of risk such as approvals processes
- We adopt a one team, partnership approach

### Focus on Deliverables

- We document all activities with formal deliverables as required by the GISTM
- Formal documentation facilitates effective Management of Change
- A deliverables focus allows for tasks only related to delivery which improves project efficiency

## OUR SERVICES

HATS was formed with the mission to provide services to owners striving for responsible tailings management regardless of the location or the perceived risks. We see the EoR role as integral to the TSF safety and thus we seek entering a partnership with our clients on the basis of shared values and tailings management objectives.

### SAFETY REVIEW AND RISK ASSESSMENT

Understanding the overall site operations, history of a facility and the context for studies or projects is paramount to responsibly and effectively fulfilling the EoR role.

We undertake a Safety Review as an essential first scope item for any site we are engaged as EoR. We carry out the Safety Review in accordance with the requirements defined in ANCOLD, CDA and other applicable guidelines.

As part of the Safety Review we complete a risk assessment, critical controls assessment and compliance assessment to identify gaps and TSF aspects that control the facility risk profile together with ways of improving the identified deficiencies.

### ONGOING OPERATIONAL SUPPORT

Ongoing operational support includes regular meetings, site inspections, monitoring and instrumentation data reviews, storage capacity updates, responses to incidents, input and development of owners documentation such as Operating Manuals, Tailings Management Plans, Trigger Action and Response Plans and Emergency Action and Response Plans and regular compliance audits including annual audits and training.

We provide deliverables documenting all activities to assist with defensible, risk-informed and performance-based management and maintaining a documented knowledge base in line with the principles of the GISTM.

### PLANNING, STUDIES, DESIGN AND CONSTRUCTION SUPPORT

Planning, studies, designs and construction support / verification are provided over the facility life. We provide a full range of engineering services including planning studies, concept designs, order of magnitude studies, prefeasibility studies, feasibility studies and detailed designs. We also provide site construction support services as part of the EoR role.

We integrate hydrology, hydrogeology, geochemistry, mechanical, drafting and GIS services with our core dams and tailings engineering and geology offering to deliver the full suite of design and engineering services.