



Tailings Disposal System



State-of-the-Art Design

PJ team has extensive experience in the design of a wide variety of state-of-the-art tailings disposal systems that couple experienced and innovative design approaches with the latest materials and technology. Our solutions include gravity flow, open channel flow, energy dissipation, and disposal using both centrifugal pumps and high-pressure positive displacement pumps. The understanding of the deposition plan and consideration of the wide process ranges are fundamental to tailings engineering.

A new era of responsibility

The evolution of tailings storage facility (TSF) designs and the expectations for security and integrity of both existing and green field projects in recent times, has been at the forefront for mining operation management planning. PJ is fully aware of these heightened technical responsibilities, sensitivities and the overall importance of a robust TSF strategy. The TSF has become a high-profile component of mine development and operations, understandably the related scrutiny by governmental agencies and NGO's, is a critical aspect of TSF engineering globally. Communication is key and PJ systems allow the appropriate level of transparency to satisfy these agencies.

Type of tailing projects

- Recovery, Reprocessing, and Relocation of Existing Tailings
- Surface Disposal of Conventional, Thickened and Paste Tailings
- Sub-sea Tailings Placement (STP) Systems
- Open Channel Flow (Launder System)
- Packed Flow Pipeline Systems
- Tailings Deposition
- Conventional Tailings Disposal
- Water Reclaim Systems

Engineering Services

- Conceptual development through system start-up
- System Audits and Optimization Studies
- Laboratory Testing/ Tailings characterization
- Loop Testing Programs
- Tailings classification
- Risk Assessment
- Transient and hydraulic pressure Analysis
- Pump and Pipeline Materials Selection
- System Control SCADA and Telecom System
- Pump, Choke, Valve, and Cyclone Station Design
- Site and Route Selection
- Operations Training/Operations
- Leak Detection