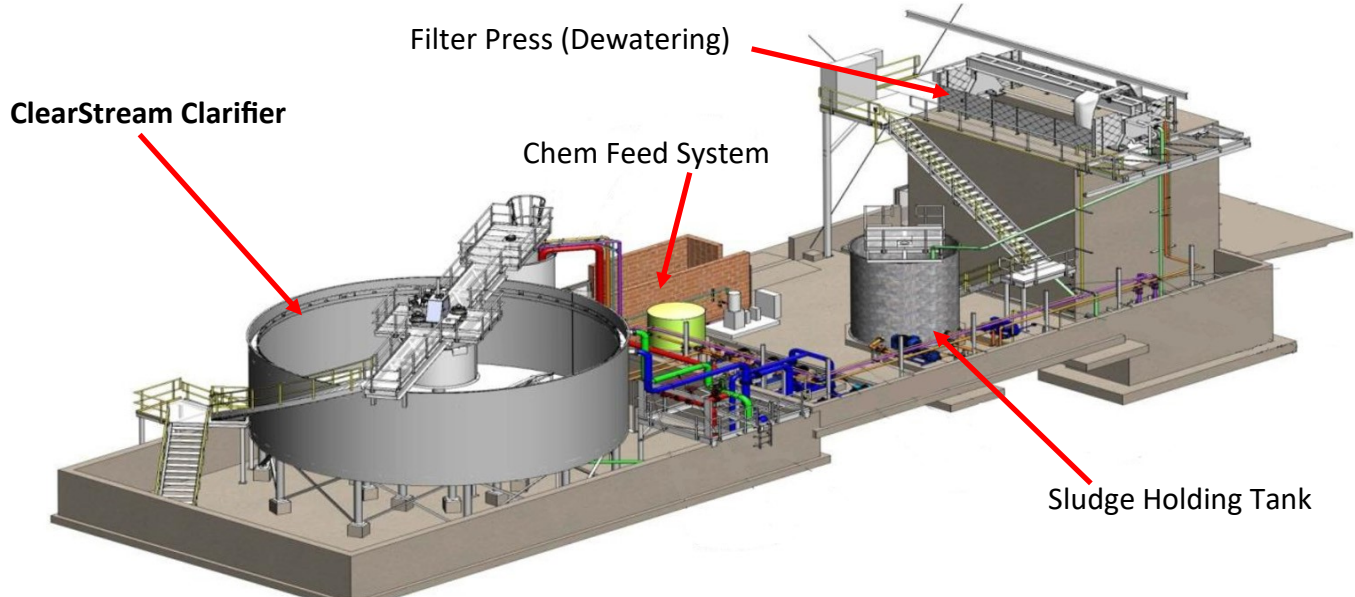




# In the Stream

## Cortez Mine - Mine Contact Water Treatment



Nevada Gold Mines is a joint venture between Barrick and Newmont. In North Central Nevada they operate the Cortez Goldmine. This mine utilizes evaporation ponds to achieve zero liquid discharge of wastewater. After a period of operations for these ponds, the mine became concerned that the ponds were filling with solids at a much faster rate than anticipated. Nevada Gold Mines engaged Pocock Industrial, Inc. to conduct a study of this problem. During the initial investigation, it was determined that the solids loading to the ponds was 30 - 50 tons per day. Pocock was tasked to determine a means whereby the solids could be removed prior to the ponds. Because of a previous history of successful projects, Pocock teamed with ClearStream to develop a solution.

As the project developed, Pocock and ClearStream generated an Engineer Procure and Construct (EPC) proposal based on the study and testing which was performed.

ClearStream provided the design, fabrication, and installation of a complete system to recover solids from Mine Contact Water. This system consisted of chemical feed system, clarifier, sludge holding tank, dewatering (filter press), piping, pumps, electrical controls, and all associated interconnecting piping and wiring, including the building and erection of the complete system.

As a part of the testing to design the system, it was discovered that the dewatered sludge contained 0.75 oz/ton of gold. This was more than twice as much as was anticipated.

The life of the existing ponds has been greatly extended as they now operate as polishing ponds rather than primary settling.



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