



KLeeNwater™ SCRUBBER FINES DEWATERING CASE STUDY

The Client's Challenge

A newly commissioned FGD Fines Thickening Clarification System was not performing as expected. No viable solutions were being offered by the incumbent water treatment company, design build engineers or the OEM supplier of the equipment. The problems below were identified

- Underflow from clarifiers could not be pumped to belt presses or gypsum blending
 - The sludge continued to thicken as it was pumped plugging transfer lines.
 - This rendered the system unusable until maintenance unclogged the pipes and pumps
- Supernate quality did not meet limits
 - Insufficient settling leading to TSS issues
 - Current one size fits all treatment program did not meet the needs of the facility.

Problem Assessment and Analysis

EES collected samples of the waste stream, performed laboratory analysis, provided treatment options, and executed onsite testing of coagulant and flocculant blends. An onsite trial was conducted with the following goals

- To solve the pumping issue
- To improve supernatant quality
- To increase the solids percentage going to the gypsum blending.

The EES KLeeNwater Result

This EES recommended specialty chemical solution enabled

- Reduced costs and manpower required for maintenance and out-of-service equipment.
- Elimination of compliance issues
- Improved solids percentage and gypsum blending capability thus improved gypsum profit.
- Plant completed factory acceptance of the system

