ACID RECOVERY PROJECT

KAYELEKERA URANIUM MINE

BMS Engineers commissioned the world's first membrane Acid Recovery Plant within the Uranium industry.

Commissioned in October 2013 at the Kayelekera Uranium Mine in Malawi, the plant has exceeded its design acid recovery. Its operation has enabled significant acid cost savings, significant reduction in neutralising chemical costs and increased Uranium production.

BMS Engineers have successfully proven nano-filtration technology in extremely aggressive acids with a verified payback period of less than 6 months.

PROVEN RESULTS

- Average of 34 t/day* of 98% sulphuric acid
- Peak daily recoveries up to 48 t/day** of 98% sulphuric acid
- Neutralising chemical requirements reduced by over 85%
- Significant other process improvements:
  - Increased uranium production
  - Improved yellow cake quality
  - Reduced water consumption

* 34 t/day of acid recovered represents 56% of acid available to be recovered

**48 t/day of acid recovered represents 79% of acid available to be recovered

BMS Engineers have successfully undertaken:

- Detailed design, installation and commissioning of the acid recovery plant
- Training of site staff and operators on membrane plant operations and maintenance
- Provision of ongoing remote technical support
- Performed membrane change-outs and membrane trials
- Performed project feasibility reviews

Recovered acid and concentrated uranium

BMS ENGINEERS
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