Uranium Processing

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Uranium Processing Capability

ANSTO Minerals is the leading process development facility in Australia with extensive expertise in the leaching and processing of uranium ores. ANSTO and has been active in the development and application of technology for the uranium industry for over 40 years.

Our project work has included all facets of the uranium flowsheet, including leaching (acid and alkaline, heap and in-situ), Solvent Extraction (SX), Ion Exchange (IX), Resin-In-Pulp (RIP), uranium product precipitation, impurity control (including radioactivity) and process water treatment, including nanofiltration (NF) and Reverse Osmosis (RO).

ANSTO Minerals has carried out studies for all of Australia’s past and current operating sites, including Mary Kathleen, Naborlek, Olympic Dam, Ranger, Beverley, Honeymoon and Four Mile, and undertaken development work for Jabiluka, Koongarra, Mt Gee, Kintyre, Crocker Well, Westmoreland, Yeelirrie, Lake Way, Wiluna, Valhalla, Anderson’s Lode, Samphire, Bigryli, Mulga Rock, Bennet Well and Honeymoon.

Site work, including surveys, audits and plant trials, has been an important feature of our involvement with industry, and plant trials have continued to be a significant factor in transferring the results of our laboratory research to industry. We have carried out site work for all of Australia’s past uranium operations.

ANSTO Minerals has been involved with numerous African projects such as the Rössing and Langer Heinrich operations, as well as Trekkopje, Husab, Marenica, Mkuju River, Likuyu North, Kayelekera, Falea and Lumwana. Work has also been performed for deposits in Sweden, Spain, Mauritania and Canada.

About ANSTO Minerals

ANSTO Minerals has a 40-year track record of providing practical solutions and innovative technology to the mining and minerals processing industries. We are a team of 60+ professional scientists and technicians with expertise covering chemical engineering, metallurgy, mineralogy, chemistry, geology and radiation safety.

We provide review and consulting services, process development services as well as collaborative and contract research on uranium, rare earth and specialty metals processing, radioactivity control and management, novel flowsheet design and modelling, and scoping level engineering / cost estimates.