

## Implementation of a new milling process at Caetité-Brazil uranium site

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The Caetité-Brazil uranium facility produces about 400 tonnes/year of U<sub>3</sub>O<sub>8</sub> from an ore averaging 0.29 U<sub>3</sub>O<sub>8</sub> %. The steps of the process consist in: ore crushing, heap leaching with sulfuric acid, U separation and purification by solvent extraction with a tertiary amine followed by stripping with a sodium chloride solution and precipitation as ammonium uranate and then dried. A change in the milling process is in course in order to increase the production as well as uranium recovery. Heap leaching will be replaced by conventional tank agitated leaching of the <0.59 mm ground ore slurry in a sulfuric acid medium. Uranium stripping will be carried out with strong sulfuric acid solution in order to increase the efficiency of the operation. After pre-neutralization of the pregnant stripping solution U will be precipitated with hydrogen peroxide to have a product of better quality and environmentally friendly.

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