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Heap leaching technology is moving the frontier for the treatment

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Dump Leaching was used in the past for uranium recovery from low grade uranium ores, mainly in the USA and in Canada. AREVA had in the eighties some installations in France and Niger.

The renewal of uranium market by the end of 2005 and the advances in the heap leaching technology commonly applied in Copper and Gold mining industry renewed the interest for considering heap leaching as a promising alternative for the treatment of low grade uranium ores.

Three projects have been launched by AREVA since then. One is the SOMAIR LIXI Project, operated in Niger since 2010 with a production of 800 to1000 t U/year. Another operation was built in Namibia to treat 100000 t/d of ore from the very low grade Trekkopje orebody to produce about 3000 t U/year. The start up of this operation was delayed due to the current Uranium market conditions and now is in stand-by and maintenance. Finally, the Imouraren Project in Niger, for a nominal production of 5000t U/year which is now under construction.

A description of these three heap leaching projects including a discussion of the main process development features is presented in this paper

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