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AR FVA MFD

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AREVA Australia Holdings Pty Ltd

AREVA Resources Canada Inc

AREVA Resources

Namibia

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IMOURAREN PROJECT



The IMOURAREN site covers 500 sq. km in the southern Sahara. One of the largest uranium mines in the world.

CHARACTERISTICS OF THE **PROJECT**

Discovered by exploration teams from the French Atomic Energy Commission (CEA) in 1966, the IMOURAREN deposit lies 160 km north of Agadez and 80 km from Arlit, at the southern edge of the Sahara and from 1,200 km from Niamey.

- The ore body is between 100 and 150 meters below the surface, with an average grade of 700 grams of uranium per tonne of extracted rock.
- The IMOURAREN deposit will be exploited with an open-pit mine and the ore will be processed using acid heap leaching. It will be the first time this processing method is used for a deposit of this size.
- The feasibility study ended in December, 2007 and was deposited in April, 2008. In the beginning of January, 2009, AREVA obtained the mining permit.

Type of mine : open pit

Nominal uranium production capacity: average of 5,000 tonnes/year

Life of the mine: 35 years

Ore processing capacity: 8 million tonnes/year

Volume extracted: 4 billion tonnes of waste rock and ore during the life of the mine.

Processing method: acid heap leaching

SHAREHOLDER

The IMOURAREN Inc. exploitation company was established, held in 66.65% by AREVA NC EXPANSION (86.5% AREVA, 13.5% KEPCO / KHNP) and 33.35% by the State of Niger (10%) and SOPAMIN (23.35%).

PROJECT OVERVIEW

- In accordance with the signature of the strategic partnership agreement between the State of Niger and AREVA of Mai 26, 2014, with current uranium prices not sufficient to allow profitable operation of the IMOURAREN deposit, the State of Niger and AREVA will set up a joint strategic committee which will take a decision on the schedule for the start of mining of the deposit depending on changes in the market.
- The preparation works have been then interrupted.

■ REALIZED OPERATIONS & STUDIES

REALIZED OPERATIONS

PROTECT THE ENVIRONMENT

REALIZED OPERATIONS



Within the framework of the preparation for the future exploitation of the mine, operations have been already launched.

It is in particular about stripping operations which allows reaching the uranium deposit by extracting rocks lying above, the surface facilities (equipment maintenance shops dedicated to the mining equipment), the

construction of the leach pad and ore processing plant.

Other infrastructures have been constructed: administrative buildings, living quarters, airstrip, roads, telecoms and electrical networks...

■ REALIZED STUDIES TO OPTIMIZE MINING OPERATIONS

Mining experts at AREVA have been working since 2010 to optimize the techniques for exploiting the IMOURAREN deposit, taking into account its specific characteristics. Specialized engineering firms have also conducted numerous studies and laboratory tests to deal with the technical challenges involved.



What is heap leaching?

The ore from the mine is crushed, agglomerated, and then piled up on an impermeable leach pad using mobile grasshopper conveyors and radial stackers. Next, a sulfuric acid solution is dripped on the heaps. This reagent percolates through the ore for several months, dissolving the uranium. The uranium-bearing solution is then processed at the plant to produce yellowcake.











