

Environmental monitoring data review of a uranium ore processing facility in Argentina

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An uranium ore processing facility in the province of Mendoza (Argentina) that has produced uranium concentrate from 1954 to 1986 is currently undergoing the last steps of environmental restoration. The operator has been performing post-closure environmental monitoring since 1986, while the Nuclear Regulatory Authority (ARN) has been carrying out its own independent radiological environmental monitoring for verification purposes since its creation, in 1995. A detailed revision of ARN's monitoring plan for uranium mining and milling facilities has been undergoing since 2013, starting with this particular site. Results obtained from long-time sampling locations (some of them currently unused) have been analyzed and potentially new sampling points have been studied and proposed. In this paper, some statistical analysis and comparison of sampling-points' datasets are presented (specifically uranium and radium concentration in groundwater, surface water and sediments) with conclusions pertaining to their keeping or discarding as sampling points in future monitoring plans.