

Invited Presentation 5

URANIUM MILL TAILINGS REMEDIATION IN CENTRAL ASIA

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Uranium is a naturally occurring radioactive material which is often regarded as something separate to NORM due to its place at the front end of the nuclear fuel cycle. Uranium mining and processing was a significant industry in the Central Asian countries of the former Soviet Union. When the Soviet Union broke up in 1989 these countries gained their independence but the uranium mining industry now had to try and survive in a new economic environment. In Tajikistan and Kyrgyzstan this proved too great a challenge impossible, production stopped and sites were simply abandoned with little or no attention paid to remediation. Skilled personnel departed and both physical and regulatory infrastructure decayed. Consequently, the legacies of the former times remained throughout Central Asia to become an issue of considerable concern to many. The sites were generally un-controlled and the NORM residues from the mining and processing were a source of environmental contamination which also threatened public health in a number of ways.

In recent years there has been considerable activity by a number of international agencies and Governments working towards solutions for these issues. Much of the effort has been undertaken by the International Atomic Energy Agency and this paper describes the original situation, the development of remediation strategies and the various remediation-related projects, their outcomes to date, and plans for the future in both the political and scientific arenas.