

The Role of Public Consultation in Leading Practice Uranium Mining

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Based on OECD-NEA publication Managing Environmental and Health Impacts of Uranium Mining

Issues

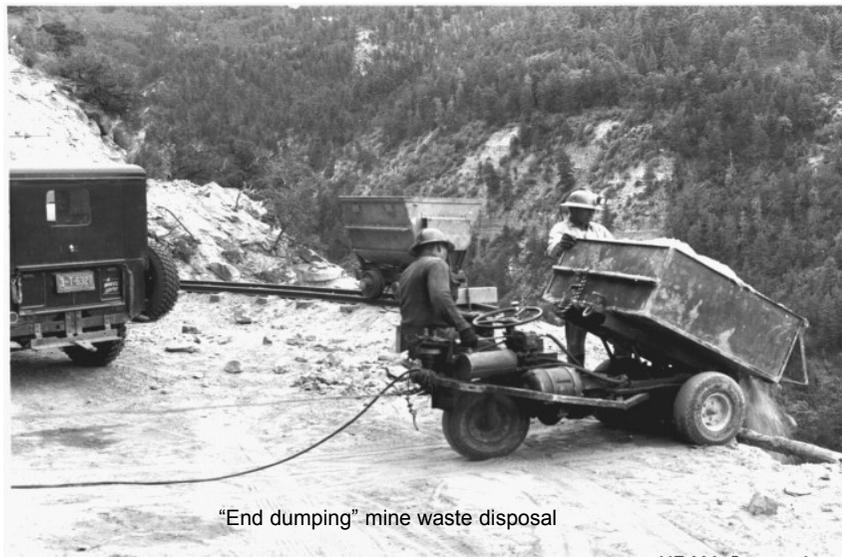
1. Public perception based on legacies from the past and lack of awareness on the evolution of mining practices

1. New mines needed as U demand projected to increase
 - Kazakhstan driving U production increases in recent years, but pace of mine development slowing

 - Mine development elsewhere hindered by public resistance

Download full report - <http://www.oecd-nea.org/ndd/pubs/2014/7062-mehium.pdf>

Out-dated historic practice and outcomes contrasted with leading practice



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Key Components - Contrast old with new

Radiation Protection (workers and the public), Conventional Worker H&S,
Water (ISL), Tailings and Waste Rock

- Introduction to concepts, risks
- Outline of early practices and impacts
- Development of current standards (societal expectations, regulations and mining practices)
- Outcomes of modern practices
- Case studies: examples from radiation protection

Wismut health impacts (Germany)

Olympic Dam continuous improvement (Australia)

MEHIUM: Radiation Protection



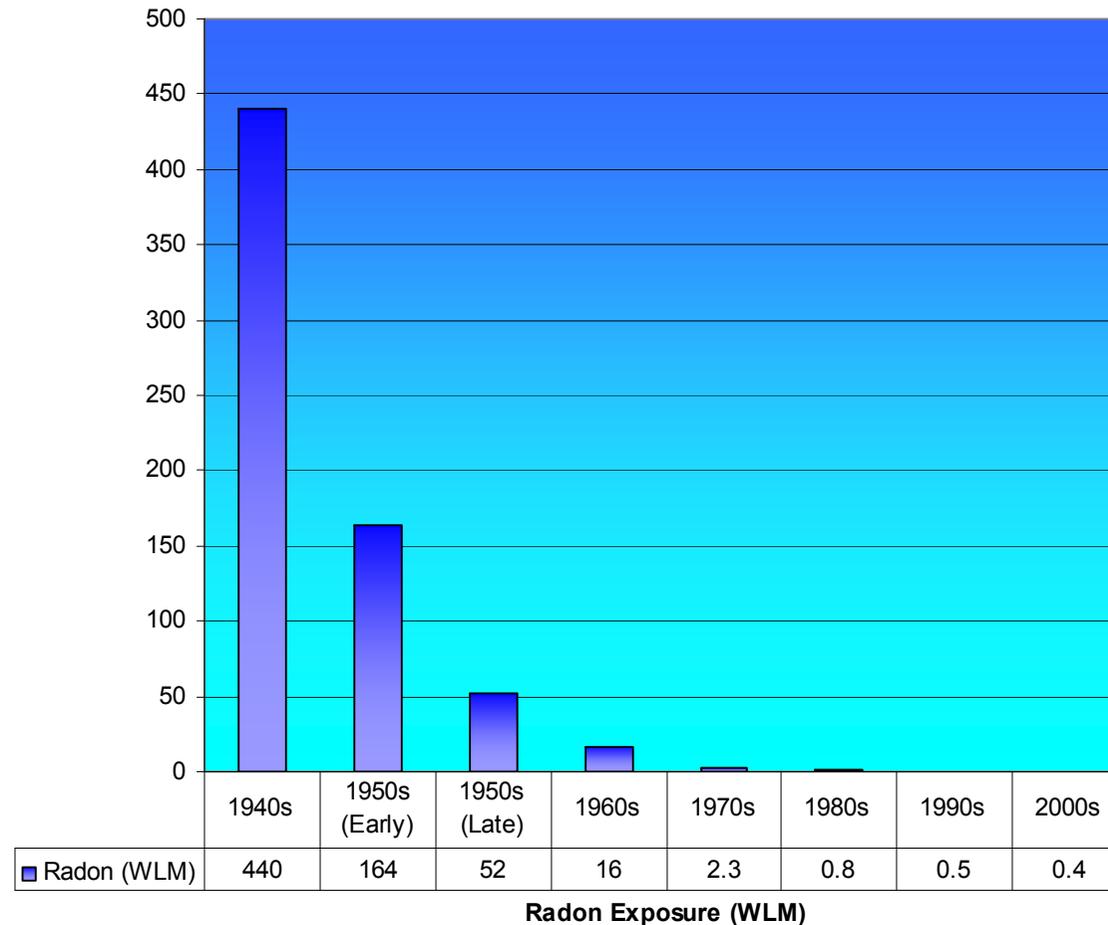
Navajo miners,
Colorado plateau,
1950s

McArthur River
underground high-
grade mine ca. 2009



MEHIUM: Radiation Protection

Dramatic reduction in radon exposure for uranium miners.

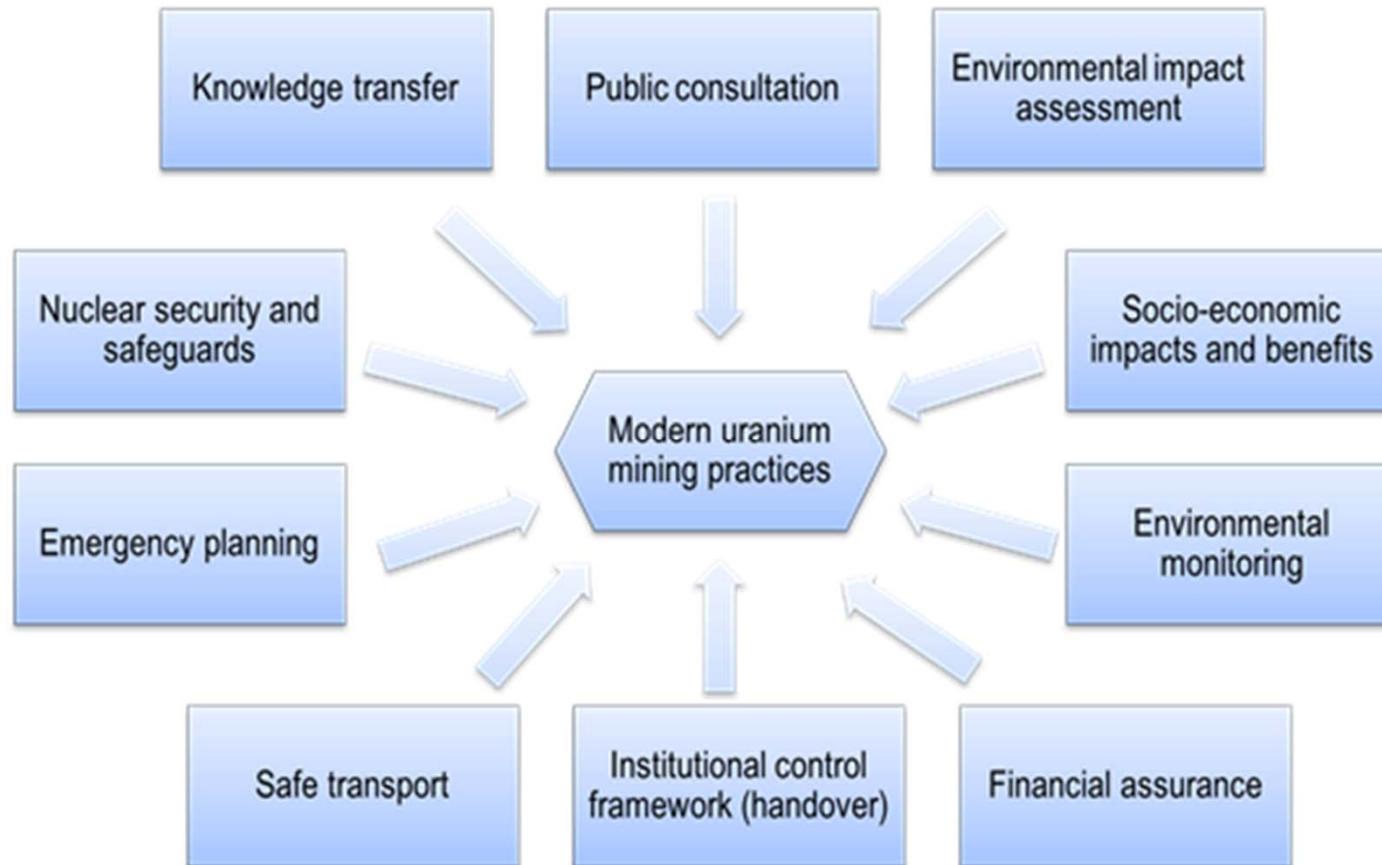


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Many important issues, but keys are

- **Assess** adequacy of all life cycle steps in a transparent manner through public consultation with stakeholders **before issuing a licence to mine**
 - Design
 - Construction
 - Production
 - Rehabilitation
 - Handover
- **Review** life-cycle plans and demand **financial guarantees** before issuing a licence to mine; monitor and review regularly
- Collect **baseline environmental data** before mine development begins; collect monitoring data and review regularly in an open and transparent manner

More recently added life cycle practices



Public consultation – a foundation of leading practice uranium mining

All parties working closely together helps better manage and mitigate potential negative impacts of mining

Involves a dialogue with the public and other interested parties to take into account questions, views, concerns and opinions - not just an information programme



Public knowledge and support will facilitate the timely review and licensing of new mines - public fear and resistance will do just the opposite

Public consultation – a foundation of leading practice uranium mining

In early stages of any new mine project, target audience must be identified, contacted and be given the opportunity to participate in one or more of the following activities:

- proponent-led public consultation sessions in the project area;
- regulator-led public consultation sessions;
- public licence hearing sessions

Program must continue through all licensing steps; operational stage when monitoring data is made available crucial - companies and regulators should be prepared to discuss results openly with stakeholders

Talvivaara (Finland) experience

Public consultation implemented with proposed licensing change to extract uranium from nickel product

24 000 copies of a short version of the EIA mailed to households in the region

16 local meetings, 3 interest group panels (webcast), several press conferences



Biggest challenges – finding common language and effectively communicating

Many could not understand that uranium is a natural part of the ore being mined and removing it during processing would not increase the level of radiation

Open House days improved situation considerably

Talvivaara recommendations

Know your interest groups; engage representatives from the local population to help identify repercussions and fears (frequently asked questions / answers web page or other accessible form)

Adequate human resources - dedicated team to oversee publicity and organise; involve local community and businesses early

Organise follow-up groups and/or open information meetings – approval from respected community members crucial

Do not expect people to know the facts about uranium or radiation

Follow articles resulting from press releases and have background material available for reporters



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Talvivaara recommendations

Use of neutral third-party experts, regulators for credibility

There will always be vocal opponents against uranium mining. As long as the company can keep the conversation on facts, dealing with them is straightforward. But when the talk gets to fears and feelings, it becomes much harder to take part in the conversation.



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Athabasca Working Group, Canada

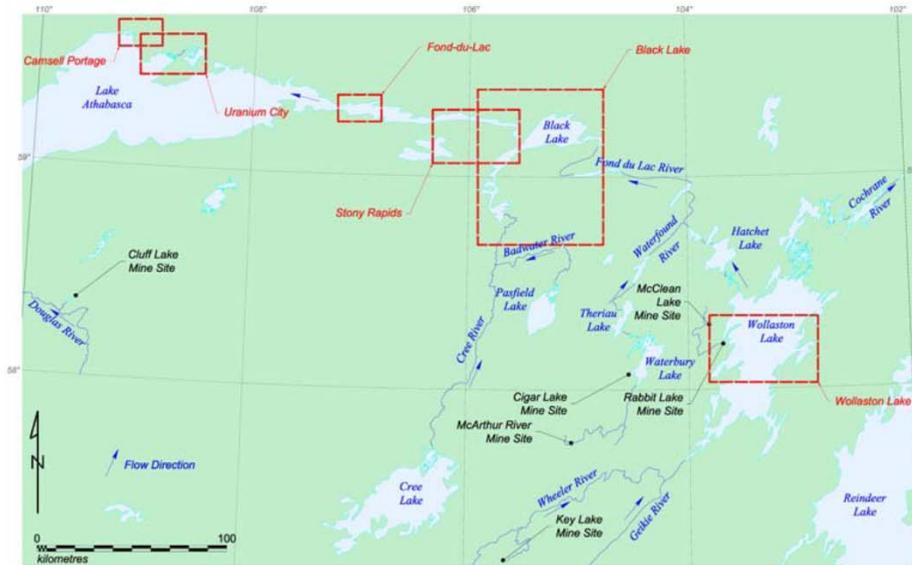
A community-based environmental monitoring programme to provide assurance to local residents that the operations are not impacting the regional environment

Local residents to assist in the determination of sampling points, the collection of samples and the interpretation of the monitoring data

Provincial government has established and continues to support Environmental Quality Committees staffed by local residents to improve communication between the industry, government and local residents

Increase understanding of uranium mining activities to establish trust in local residents that the environmental impacts of uranium mining do not pose a health or environmental risk, a key to maintaining a social licence to mine.

Athabasca Working Group, Canada



Conclusions

Consult early and often

Two-way engagement

Promote active participation

Openness and transparency



Uranium City, Saskatchewan