



International Atomic Energy Agency

Appendix 1: Agenda and Closing Summary

IAEA Technical Cooperation Project INT2019
Interregional Workshop on Case Study of Conventional Uranium
Production from Exploration to Closure

14-18 October 2019
Prague and Dolni Rozinka, Czech Republic

Venue:

Aureli hotel Globus,
Gregorova 2115/10, 148 00 Praha 4 - Czech Republic,
<http://www.hotel-globus.cz/en/>

MONDAY 14 OCTOBER 2019		
09:00	Welcoming and organizational remarks	<i>Mr Brett Moldovan, IAEA Mr Jiří Mužák, DIAMO, s. e.</i>
09:30	IAEA support to uranium and radioactive mineral production cycle activities, including upcoming IAEA publications	<i>Mr Brett Moldovan, IAEA</i>
10:00	Historical review of uranium production in the Czech Republic, legal and regulatory aspects	<i>Mr Jiří Mužák, DIAMO, s. e.</i>
10:30 – 11:00	Coffee Break (not sponsored)	All
11:00	U mining at Stráž pod Ralskem deposit, decommissioning and land reclamation, DIAMO, s. e.	<i>Mr Vojtěch Vokál, DIAMO, s. e.</i>
12:30 – 14:00	Lunch (not sponsored)	12:30 – 14:00
14:00	U mining at Rožná deposit, DIAMO, s. e. (information connected to Field trips)	<i>Mr Pavel Vinkler, DIAMO, s. e., GEAM</i>
14:45	Production of the yellow cake at the chemical mill (information connected to Field trips)	<i>Mr František Toman and Mr Aleš Pelikán, DIAMO, s. e. GEAM</i>
15:30 – 16:00	Coffee Break (not sponsored)	All
16:00	Development of Ra and U in mine water at selected	<i>Mr Jiří Wlosok, DIAMO, s. e.</i>

	abandoned mines of DIAMO, s. e.	
16:30	Geochemical evolution of mine waters on the 24-years flooded uranium mine Olší (Dolní Rožínka, Czech Republic)	<i>Mr Josef Zeman, Masaryk University in Brno</i>
17:00	The new conception of waste rock piles disposal after uranium mining in Příbram	<i>Mr Ladislav Pašek, DIAMO, s. e.</i>
17:30	Group Discussion	<i>All</i>
18:00	End of Day	
19:00	<i>Cocktail reception (sponsored by IAEA)</i>	<i>All</i>
	<i>TUESDAY 15 OCTOBER 2019</i>	
09:00	Field trip organized by DIAMO, s. e. Technical visit of DIAMO, s. e., GEAM Dolní Rožínka - Alkaline milling, Water management, Mine and tailings pond water treatment facility, (transportation by bus, accommodation in Hotel Skalský Dvůr with possibility of dinner) Lunch is not provided , it is recommended that participants buy food and drink the day before.	<i>Mr Jiří Mužák, DIAMO, s. e.</i>
18:00	End of Day	
	<i>WEDNESDAY 16 OCTOBER 2019</i>	
09:00	Field trip organized by DIAMO, s. e. Technical visit of DIAMO, s. e., GEAM Dolní Rožínka - Conventional mining, Excursion to Underground laboratory for spent fuel repository in former deep U mine (transportation by bus, return to Prague Hotel Globus) Lunch is not provided , it is recommended that participants buy food and drink the day before.	<i>Mr Jiří Mužák, DIAMO, s. e.</i>
18:00	End of Day	
	<i>THURSDAY 17 OCTOBER 2019</i>	
09:00	Regulatory oversight at different project phases of a uranium mine and processing facility	<i>Mr Kevin Scissons, IAEA Invited Expert, Canada</i>
09:30	Overview of management systems and implementation for uranium mining and processing	<i>Mr David Bronkhorst, IAEA Invited Expert, Canada</i>
10:00	Overview of uranium mining project assessments and	<i>Mr Kevin Scissons, IAEA Invited</i>

	community engagement	<i>Expert, Canada</i>
10:30 – 11:00	<i>Coffee Break (not sponsored)</i>	<i>All</i>
11:00	Primary uranium extraction – mining method selection and relative costs	<i>Mr David Bronkhorst, IAEA Invited Expert, Canada</i>
11:30	Uranium ore processing – key considerations based on mineralogy and ore type	<i>Mr David Bronkhorst, IAEA Invited Expert, Canada</i>
12:30 – 14:00	<i>Lunch (not sponsored)</i>	
14:00	Best practises in uranium mining and processing (lessons learned)	<i>Mr Kevin Scissons, IAEA Invited Expert, Canada</i>
14:30	Underground mining safety and radiation protection – key considerations	<i>Mr David Bronkhorst, IAEA Invited Expert, Canada</i>
15:00	Sustainable development model - Implementing collaboration agreements with local communities	<i>Mr David Bronkhorst, IAEA Invited Expert, Canada</i>
15:30 – 16:00	<i>Coffee Break (not sponsored)</i>	<i>All</i>
16:00	Decommissioning of uranium mines – start with the end in mind	<i>Mr Kevin Scissons, IAEA Invited Expert, Canada</i>
16:30	Mine closure cost estimates of a uranium mine – Canadian perspective	<i>Mr David Bronkhorst, IAEA Invited Expert, Canada</i>
17:00	Case studies - examples from Canada's uranium production	<i>Mr Kevin Scissons, IAEA Invited Expert, Canada</i>
17:30	Group Discussion	<i>All</i>
18:00	End of Day	
	<i>FRIDAY 18 OCTOBER 2019</i>	
09:00	Summary of key considerations for uranium mine production from exploration to closure – Insight from experts and group discussion (see below list of Summary and Group Insights)	<i>DIAMO, s. e. Experts and IAEA Invited Experts</i>
	Local Host Closing Comments	<i>Mr Jiří Mužák, DIAMO, s. e.</i>
13:00	End of Training Workshop	

Friday 18 October 2019 – Summary, Further Group Insights, and Conclusions

1. Reviewed the website content and links of two new Canadian projects:
 - a. NexGen Energy, community engagement and information, videos, translation options, etc. See: <https://www.saskatchewanuranium.ca/>
 - b. Denison Mines, investors information, October 2019 presentation (project overview) See: <https://www.denisonmines.com/investors/presentations/>
2. **DIAMO** provided a short slide overview of the two filed visits to GEAM Dolni Rozinka: conventional mining and underground laboratory site, and Process plant and treatment facilities, tailings pond.
3. Case Studies – examples from Canada’s uranium production, K Scissons (presentation from Thursday PM that was rescheduled).
4. Short discussions on challenges of having the Government itself as the operator or proponent for a project. For example, new mine development, major infrastructure projects, or remediation of a legacy or abandoned mine sites. However, not all governments may follow the same best practices, particularly for EIA and community or interested parties engagement. Some countries have recognized the issue and the optics or perceptions of government being an operator but not meeting the same standards of a business entity or an established mining company.
5. Site Safety: Dave Bronkhurst provided a short explanation of benefits of tracking “near misses” on site, and not just work place injuries or medical aids. A data base on near misses can be used to better assess, predict and prevent future accidents or fatalities. Regulators and operators are encouraged to also track the near misses to better improve and reduce workplace injuries.
6. Presentation from Peru (Mr Julio Cesar ROMANI AGUIRRE) on their new challenge of establishing a set of regulatory standards for new potential uranium mines in Peru. Currently there are no U mines, though in general mining in Peru has occurred for 500 years. Nuclear safety standards are in place, but not specifically for uranium mining and processing. Further work on the standards will continue into 2020.
7. Presentation from Brazil (Mr Paulo Renato MARINHO). Discussed highlights of uranium mining in Brazil, which were all state owned and operated. An overview of the three uranium mining areas at different phases in Brazil was provided.
8. Presentation from Argentina (Mr Luis LOPEZ) regarding the Uranium mining and supply in Argentina. NP power plants provide ~10% of electrical needs of country, and requires about 220-250 tonnes uranium/year. There were 9 different uranium mine production areas in Argentina (1952-1997). A more detailed overview of one site was provided to discuss the operation procedures and challenges of heap leaching.
9. Video presentation from Czech Republic (Jiří Mužák) regarding decommissioning of the DHI Straz pod Ralskem mine site. Historical pictures of the underground mine operations, mill processing plant, and an effective use of time lapse photography to demonstrate the physical decommissioning and rubble removal of the surface facilities (2014-2016).

10. Closing discussions and comments were exchanged. The host DIAMO organizers expressed their appreciation for the attendees' attention and participation in the workshop presentations and the field trip to the two sites. In turn the participants all provided their sincere thanks for the IAEA and DIAMO organizers and presenters for the arrangements and workshop outcomes. All of the presentations and videos provided for the week will all be forwarded to the IAEA (Brett Moldovan), and for posting on a website link that will be forward by email to all of the participants. The objective is to have this information link provided to all of the attendees within one week (on or before 25 October).
11. The material was all posted on a link to all participants via an email from Eva Pisková (DIAMO) on Monday 21 October 2019. All actions and follow-up are now complete for the workshop.

