



Technical Meeting of the Coordination Group for Uranium Legacy Sites (CGULS)

17-21 June 2019

Issy-Kul region, Kyrgyzstan

MEETING SUMMARY

Meeting Chair: Mr Azamat Mambetov, State Secretary of the Ministry for Emergency Situations

CGULS Scientific Secretary: Ms. Michelle Roberts, Waste and Environmental Safety Section

CGULS Project Officer: Ms Maria Matsola, Waste and Environmental Safety Section

The annual meeting of the Coordination Group for Uranium Legacy Sites (CGULS) proceeded according to the agenda. A final version of the agenda and all presentations from the meeting are available through the CGULS CONNECT page¹.

The objective of this meeting was to share up-to-date information on recent activities in preparation for the remediation of the ULSs in Central Asia. The focus of this event was to discuss the lessons learned and share experience of Rosatom in the recent remediation works at the Kadji Say uranium legacy site. The event also served as a forum for discussing such topics as regional collaboration, application of new technologies in the remediation of ULSs, improvement of the stakeholder communication process, and capacity building needs in the Member States, as well as for sharing experiences, best practices and challenges in this field.

The meeting commenced on Monday, 17 June with welcome remarks from Mr. Mambetov, State Secretary of the Ministry for Emergency Situations and chair and host of the meeting, and Ms. Roberts, Scientific Secretary for the meeting. First time representatives of Portugal and United Nations Economic Commission for Europe (UNECE) were welcomed to the meeting.

Session 1: Opening

Following the opening remarks from the Meeting Chair, Mr. Mambetov, participants were given an overview of recent activities by CGULS by Ms. Roberts (IAEA).

A feature presentation was delivered by Ms Claudia Kamke on the work of the UNECE in relation to the Industrial Accidents Convention and tailings safety in Central Asia. Ms Kamke's presentation highlighted several cross-cutting themes between the work of UNECE in this area and that of CGULS, particularly in relation to transboundary issues (e.g. TRANSPOND project), training activities for Central Asia participants and engagement with local communities living near to tailings management facilities. A number of upcoming events are planned within UNECE's field of work in Central Asia. Information about these events will be posted to the CGULS CONNECT page. More information about UNECE work can be found at www.unece.org/env/teia

¹ <https://nucleus.iaea.org/sites/cguls/English>

Session 2: Project updates and recent accomplishments

Ms. Harlander (EBRD) provided an update on activities under the Environmental Remediation Account (ERA) including the status of the fund in Kyrgyzstan, Tajikistan and Uzbekistan. Discussion following the presentation centred around stakeholder engagement throughout the remediation projects. A plan for stakeholder engagement for remediation works in Kyrgyzstan will be elaborated by TMA in close collaboration with the EBRD's project management unit (PMU), OSCE, UNDP and the Aarhus Centres. A significant event recently was the first Coordination Committee meeting of EBRD and Rosatom (including also TMA, OSCE and IAEA) for coordination of activities related to the remediation works at Min Kush. The output from this meeting has been shared with meeting participants and work will progress in this regard. A comment from Mr Altfelder highlighted the importance of promoting the uniqueness of ERA as an international, multi-donor fund in awareness and fund raising efforts to raise further funds for the remediation works.

Mr. Torgoev's (WISUTEC) presentation detailed the recent activities in preparation for remediation at Min Kush and Shekaftar. Following the presentation, the process for development of the environmental impact assessments and feasibility studies was elaborated, including key decision making decision-makers and their roles and responsibilities.

Ms. Zhunussova (DSA) provided information on the history and future plans for regulatory cooperation between DSA and Central Asia. The focus of the cooperation will be re-analysis of the **regulatory** threat assessment to determine where gaps currently lie given the work already completed under the first phase of the cooperation programme. The results will be presented in Bishkek at the workshop during 27-29 August 2019 as well as a "Roadmap" for future cooperation based on the revised regulatory threat assessment.

Mr. Andersen (EC) presented information on the progress of the Mailuu Suu environmental impact assessment and feasibility study, highlighting the value of the landslide monitoring system in place. Data obtained from this monitoring system has shown that the remediation option originally proposed is not a viable solution for long term safety and stability of the remediation effort, therefore the remediation options are currently being re-evaluated. Discussion around engaging with the community on such decisions. Incorporating potential impacts from climate change into the multi-criteria evaluation of remediation options was also discussed.

Mr. Halatyan (Rosatom) presented the work of the CIS Inter-State target programme on remediation of Member State Territories affected by uranium mining industries.

Mr Prudtskikh (OSCE) described upcoming activities in their work related to stakeholder engagement, including plans to develop a museum of uranium mining history in Kyrgyzstan. Further information provided in the OSCE presentation highlighted two opportunities to improve coordination of work amongst the international organisations and other Member States when providing assistance to Central Asia.

1. Development of training course material on radiation safety. Training courses on this topic have been developed and implemented by several different organisations, including IAEA who have run such courses in 2017 in Kyrgyzstan and Tajikistan, in Russian language. Benefit could be gained by all organisations by sharing training materials to ensure higher quality materials are developed and Central Asia Member States benefit from the improved coordination of training events.
2. Scope and objectives for training courses. It was identified that there are three separate training courses planned for the second half of 2019 focussed on monitoring activities at uranium legacy sites in Kyrgyzstan. The training spreadsheet managed by the CGULS Secretariat is published on the CGULS CONNECT page is one strategy to improve sharing of

information amongst interested parties. There is a need to very carefully define the scope and objectives of each training course to ensure minimal duplication of effort. It was also suggested to look at options for national training coordinators, as is the case with UNECE cooperation in Central Asia in relation to the Framework on Disaster Risk Reduction.

Further discussion in this regard included the benefit gained by engaging national governments and national programmes in this coordinated approach to managing training and development activities. Member States should develop national strategies for capacity building activities to help streamline their needs and activities to ensure efficiency in implemented activities.

Project updates on DUB GEM and TRANSPOND were provided by Mr. Altfelder and Mr. Schmidt (on behalf of Christian Kunze), respectively. The DUB GEM project will have its kick off meeting in Almaty on 24-25 June, with all four Central Asia Member States planned to attend. The TRANSPOND project is in its second year, with significant progress being made towards achieving the project objectives. Mr Andersen indicated an interest to see the results of the TRANSPOND project with a view to look at possible future projects that build on these outcomes.

Session 3: Member State Updates

Mr. Mužák (Czechia) shared the experience of remediating former uranium in-situ leach operations in his country. Discussion about the technical aspects related to ground water remediation and monitoring, as well as the cost benefit analysis associated with remediation followed the presentation.

Mr. Baatarsogt (Mongolia) presented plans for new development activities at uranium deposits in Mongolia. Challenges for such plans have been identified and include environmental, safety and health aspects as well as planning for decommissioning, remediation and waste management. Strategies have already been identified to help address some of these challenges. The importance of identifying closure plans and funding mechanisms at mine development stage was highlighted.

Ms. Malta (Portugal) presented the work on radiological surveillance of residential areas, and parallels were drawn between this and the radon monitoring activities in the residential houses at Mailuu Suu. Mr Schmidt (Germany) then presented this suite of work, highlighting the importance of this in the overall remediation effort to the people of Mailuu Suu. The graded approach developed for the surveillance of residential areas should also be applied in other residential areas close to uranium legacy sites.

A focus of the meeting was the recent remediation works undertaken at the Kadji Say uranium legacy site, within the scope of the CIS interstate programme. Lessons learned and general information about licensing was shared as similar processes will have to be followed by the EBRD's PMU for their remediation activities at Min Kush and Shekaftar. Meeting participants have further opportunity to discuss the remediation works during the visit to Kadji Say on the final day of the meeting.

Ms. Abasova (Kyrgyzstan) presented the activities of TMA in relation to monitoring at the uranium legacy sites. Discussion about ownership of the Kara Balta site centred around responsibility for planning for safe closure and remediation of the site, and that they site may become the responsibility of TMA as there is no funding mechanism from the current site owner for remediation. Mr. Kalykov (Kyrgyzstan) presented the radiation safety regulatory framework for Kyrgyzstan on behalf of the regulatory authority.

Ms. Azmaganbetova (Kazakhstan) gave an overview on activities in Kazakhstan related to addressing the issues associated with the uranium legacy sites remediated under the state programme that concluded in 2010. Works to address the issues identified during the IAEA missions in 2014 and 2015 in the southern part of the country (Turkestan region) have started. Issues at the uranium legacy sites in the northern part of Kazakhstan are yet to be addressed as the responsibility for the sites has been

passed to the local authority to undertake the urgent works needed. Questions and discussion focussed on interaction with ground water aquifers and it was noted that results of the permanent monitoring wells have not observed any increasing levels of uranium in the groundwater. Ownership of the legacy sites post-remediation, including availability of financial resources to manage the sites, was a key discussion point after this presentation. Sustainability of the remediation can not be assured if the organisation responsible for the sites is not adequately resourced (financially and with personnel) to undertake necessary monitoring and surveillance works.

Mr Voitsekhovych presented information on the new draft law related to management of nuclear legacy sites in Ukraine, as well as an overview of the situation at the Pridneprovsky Chemical Plant. Also from Ukraine, My Zhukov presented an overview of the plans for remediation of the Smolinka mine. Social impacts of the closure and remediation of the site are a significant issue that need to be addressed as the decommissioning and remediation plans are developed.

Mr Halilov (Uzbekistan) presented information on the way forward to achieve safe sustainable remediation of the uranium legacy sites in Uzbekistan. A way forward for cooperation with EBRD and the Environmental Remediation Account was discussed, and it was clarified that the regulatory body has been delegated a higher level of authority to regulate nuclear installations and radioactive waste.

Ms Matsola provided an update on the CGULS CONNECT page and Ms Roberts presented information on upcoming CGULS and IAEA events related to uranium legacy site remediation.

Closing remarks were provided by Mr Mambetov and Ms Roberts. The IAEA expresses its gratitude to the Ministry for Emergency Situations, Tailings Management Agency for organising the annual CGULS meeting at Issy Kul.

Kadji Say site visit

Meeting participants travelled to Kadji Say to meet with representatives of RosRao and local authorities to discuss the remediation works that have been completed at the site. Mr Asankulov (Kyrgyzstan) welcomed the meeting participants to the site and gave a brief overview of RosRao's responsibilities for remediating the site. The administrative buildings were visited and information about the radiation protection system for workers was explained.

Meeting participants walked to the main covered tailings management facility where RosRao presented information from a series of prepared posters. These posters, also used for public engagement, displayed information including the project partners and an overview of the proposed works and radiological survey results, before and after the works.

The erosion protection system on the tailings area was described as a radon protection layer (clay), pebbles / small rocks and a final clay top layer. The drainage system to divert water away from the cover will be enhanced. The monitoring system for the tailings management area will be developed once the final works at the site are complete. In the event of observed degradation of the tailings cover from erosion or other causes, emergency measures can be implemented under a bilateral agreement between Ministry for Emergency Situations and Rosatom.

The Kadji Say local government representative informed the meeting participants about the community engagement events that were held as part of the remediation works. According to the discussion held, there are no longer negative perceptions in the community about the remediation works at the site. The posters that were present at the site during this visit will be placed in the local administration building so the community can continue to access the information. The community members have inquired as to why the old processing buildings still remain at the site, however there are private ownership issues that need be resolved before remediation works can be undertaken. The site visit concluded with an inspection of the diversion channel that has been created to divert possible

mud flows and significant rain events away from the tailings area. All meeting documentation and presentations will be available on the CGULS CONNECT website. Assistance on registering for access to the CONNECT website can be obtained by contacting the CGULS Scientific Secretary or CGULS.Contact-Point@iaea.org.