Regulatory Supervision of Uranium Legacy Sites in Ukraine
(Legislation, Licensing)

Riazantsev Viktor - Head of Radiation Sources Department of SNRIU,
Contents

• Legislation.
• License procedure for uranium ore recovery activity.
• Draft of regulatory guides
Legislation structure in Ukraine

- Constitution of Ukraine;
- International Conventions and Law of Ukraine;
- Government decree;
- Regulatory body safety requirements in nuclear energy use: SNRIU, Ministry of health (?), Ministry of environmental protection (?);
- etc.

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Main Ukrainian nuclear laws

- About the use of nuclear energy and radiation safety (1995)
- About mining and processing of uranium ores (1997)
- About protection of humans from the influence of ionizing radiation (1998)
- About licensing in the field of nuclear energy use (2001)
About the use of nuclear energy and radiation safety (1995)

is fundamental in the nuclear legislation of Ukraine. It establishes the priority of human and environmental safety, the rights and duties of citizens in the field of nuclear energy use, regulates the activity related to operating nuclear installations and sources of ionizing radiation, also establishes legal frameworks of international obligations of Ukraine regarding the use of nuclear energy.

So many additions and changes…
About mining and processing of uranium ores (1997)

regulates the legal relations in mining and processing of uranium ores and the use of processing products as raw material for receiving nuclear material, determines the features of the activity of uranium facilities, protection of personnel, population and the environment from exposure to ionizing radiation, and also aspects of social protection of personnel of uranium facilities and population due to influence of ionizing radiation.
About protection of humans from the influence of ionizing radiation (1998)

focuses on the protection of life, health and property of people from the negative influence of ionizing radiation which results from practical activity or in case of a radiation accident, by implementation of warning and rescuing measures and compensation of damage.
About licensing in the field of nuclear energy use (2001)

determines legal and organizational principles of licensing in the field of the use of nuclear energy, and also general points of regulating public relations which arise during its realization.
Activities on processing of uranium ores include:

- Designing.
- Sitting.
- Construction.
- Commissioning.
- Operation.
- Reconstruction.
- Decommissioning by:
  - Temporal stopping (preservation).
  - Re-profiling.
  - Clouse out.

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According to Government decree # 1782 “About the licensing procedure of separate types of activity in the field of nuclear energy use”

4 The State Nuclear Regulatory Inspectorate of Ukraine (SNRIU) is the specially authorized state body on licensing in uranium ore processing.

4 The licensing procedure of activity in uranium ore processing is established.
Activity on processing of uranium ores:

must be carried out in accordance with the requirements of regulatory guide on nuclear and radiation safety “Conditions and rules of conducting activity on uranium ores processing” (2001). Now in revision…
Radiation safety requirements during decommissioning of uranium facilities

Working out on the base of new BSS and recommendation of:

- ICRP 101 “The optimisation of radiological protection: broadening the process”
- ICRP 103 “Radiological protection”
- ICRP 104 “Scope of Radiological Protection Control Measures”
- ICRP 108 “Environmental Protection: the Concept and Use of Reference Animals and Plants”
- ICRP 109 “Application of the Commission’s Recommendations for the Protection of People in Emergency Exposure Situations”
Radiation safety requirements during decommissioning of uranium facilities

Working out on the base of the IAEA regulation:

• Monitoring and surveillance of residues from the mining of uranium and thorium (Safety Report Series № 27, 2002).


• Remediation of Areas Contaminated by Past Activities and Accidents Safety Requirements (Safety Standard Series № WS-R-3, 2003).


• Safety Assessment for the Decommissioning of Facilities Using Radioactive Material (Safety Standard Series № WS-G-5.2,
Radiation safety requirements during decommissioning of uranium facilities

Take into consideration:

- new requirements to regulation (ICRP 104);
- new classification of exposure situations and requirement to their limitation/constraint (ICRP 103);
- radiation safety optimization principle for planning exposure situation (ICRP 101);
- compliance with the present IAEA regulatory base.
Radiation safety requirements during decommissioning of uranium facilities

Draft of regulatory guide include:

• general requirements (commission staff, final status of site – to determine of the basic criteria for optimization procedures and volume of radiation control and radiation monitoring);

• radiation safety requirements to uranium site decommission project (including, requirements to contents of site primary documentations);

• requirement to radiation protection of personnel, population and environment;

• radiation safety requirements to carrying out of works on the stage of planning and carrying out of works.
Radiation safety requirements during decommissioning of uranium facilities

Contents:

• requirements to planning of the basic works during decommissioning of uranium site (procedures of optimization - the basic requirements to the project, basic criteria for implementation of optimization procedures - referent levels and etc.);

• requirements to the chapter of radiation protection of population and environment during carrying out of the basic works;

• criteria of estimation of protective measures during carrying out of the basic works on the site.
Radiation safety requirements during decommissioning of uranium facilities

Some attachments are planned to develop:

- requirements to decommissioning plan;
- requirements to passport of uranium object;
- requirements to radiation protection program (incl. radiation control and individual dose control);
- requirements to radiation monitoring program;
- requirements to emergency plan; and so on...

Chapter “terminology” will be prepared after publication of new BSS
Thank you for your attention!

If you have any questions or you need additional information, please contact:
Tel/fax: + (380 44) 254 3451, fax: + (380 44) 254 3311
e-mail: riazantsev@hq.snrc.gov.ua

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