### International Conference on Radioactive Waste Management: Solutions for a Sustainable Future (CN-294)



International Conference on Radioactive Waste Management: Solutions for a Sustainable Future

Contribution ID: 299

Type: ORAL

# International Cooperation within Radwaste Management Projects at Chornobyl NPP

The 1986 accident which took place at the Chornobyl Nuclear Power Plant and the following actions taken to mitigate its consequences have been a major challenge for Ukraine and the whole international community. This particularly applies to the task of bringing the destroyed reactor to a safe state. An equally important aspect is management of the radioactive waste generated, significant quantities of which need specific treatment and disposal solutions.

Given the lack of necessary infrastructure for radioactive waste management at that time at Chornobyl NPP, except for interim waste storage facilities, the need arose to establish facilities for their treatment and processing and to develop safe management technologies both for the accidental waste contaminated with transuranium elements, and the waste resulting from decommissioning of the rest of the ChNPP power units.

Up to date, ChNPP has implemented a number of projects with the assistance of such international organizations as the IAEA, EBRD, EC etc., for the creation of the following facilities: the Liquid Radioactive Waste Treatment Plant, Industrial Complex for Solid Radioactive Waste Management, Complex for Manufacturing Steel Drums and Reinforced Concrete Containers (RAW packages), New Safe Confinement covering the Object Shelter etc. These facilities are now whether at different stages of commissioning or at the initial stage of full-scale operation and progressively increasing their operational capacity. ChNPP has also partially implemented the project of the Purification facility for radioactively contaminated waters and liquid radioactive waste from TUE and organics, which has been suspended during design phase.

The IAEA Technical Cooperation projects have significantly contributed to the development of approaches to management of problematic radioactive waste streams. Through joint efforts, strategic directions have been worked out in management of radioactively contaminated waters containing organics, irradiated graphite, and significant amounts of contaminated soils, and furthermore the level of characterization of radionuclide composition of radioactive waste has been significantly increased.

When implementing these projects and choosing the waste management technologies which have been applied, sharing experience between organizations –both national and at international level –dealing with RAW management and research in the field, is a key factor of successful implementation of the projects.

To summarize, it is worth noting that it was the international cooperation which played a key role in the development of radioactive waste management system at the Chornobyl Nuclear Power Plant.

#### Do you wish to participate as a Young Professional?

No

#### Speaker's title

Mr

#### Affiliation

Chornobyl NPP

## Do you wish to be considered for a Young Professional grant?

No

Author: Mr MIASNYKOV, Oleksii (Chornobyl NPP)

**Co-authors:** Mr SKOMAROKHOV, Oleksandr (Chornobyl NPP); Mrs ODYNYTSIA, Valentyna (Chornobyl NPP)

Presenter: Mr MIASNYKOV, Oleksii (Chornobyl NPP)

Session Classification: Multinational Cooperation in Radioactive Waste Management

Track Classification: 7. Multinational Cooperation in Radioactive Waste Management