

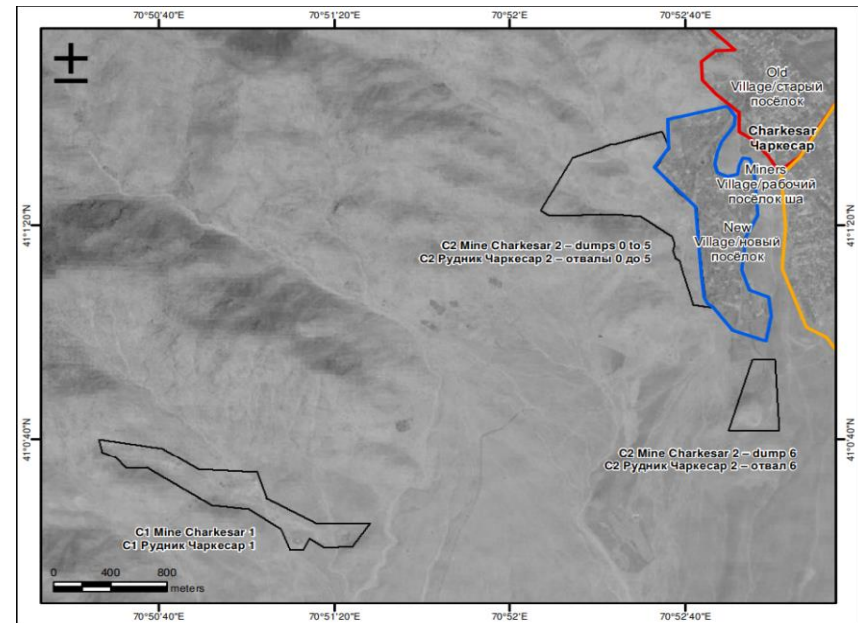
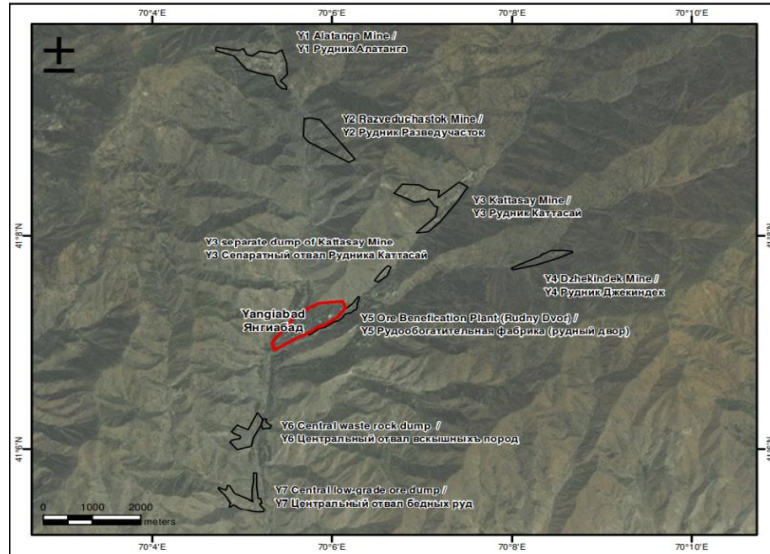


Uzbekistan Nuclear legacy sites, project implementation experience and prospects for cooperation

**INP of the Academy of Science of
the Republic of Uzbekistan
Sadikov I.
ilkham@inp.uz**

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Areography of former uranium mines (Yangiobad, Charkesar)





SNFA disposal

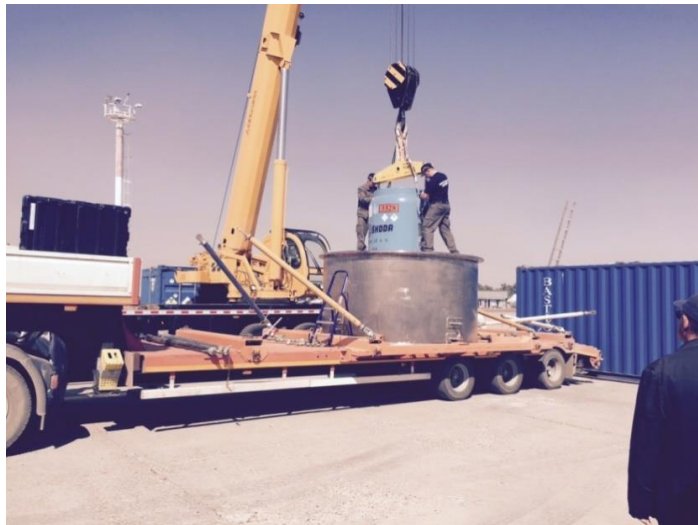
Spent nuclear fuel (only from highly enriched uranium), accumulated since the 80s of the twentieth century, was removed from the SNFA repositories to MAYAK (Russia) in 2006 and 2012 with the technical support of the IAEA, the European Union, the Argonne National Laboratory (USA).



SNF disposal

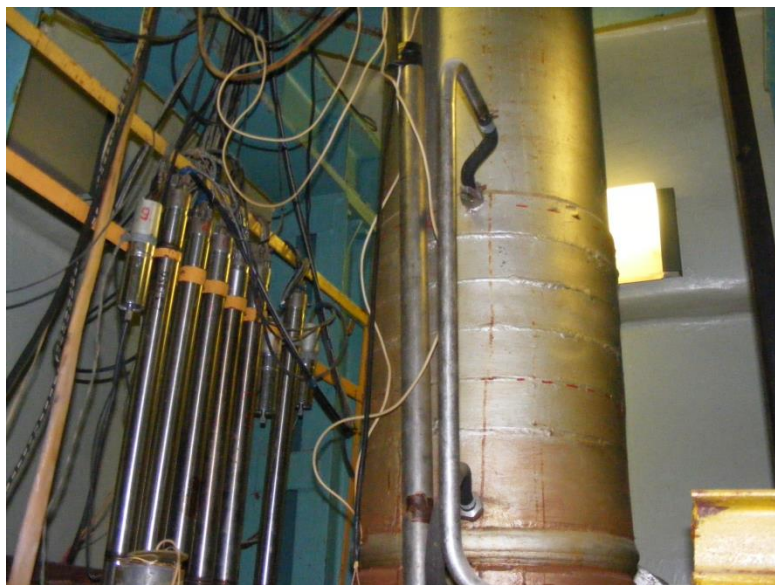


From INP AS RUz



From "PHOTON" LC

ИИИ-3 Pulsed reactor





The territory of the ИИИ-3 nuclear reactor after decommissioning (February 2019)

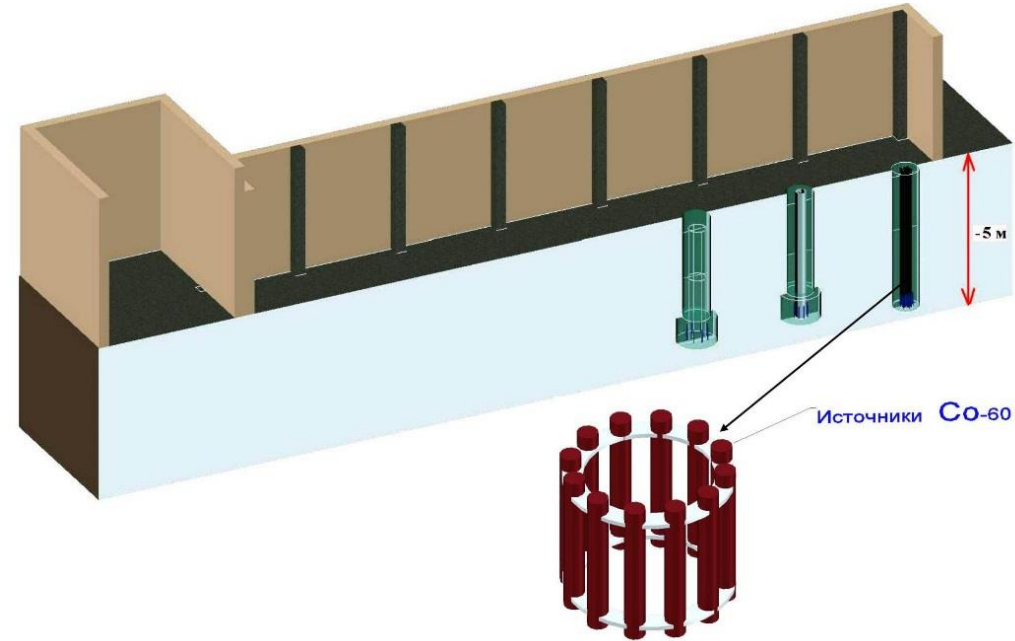




Co-60 Gamma ray unit of INP AS RUz



Pool type Gamma ray unit Co-60 was put into operation in 1962



Schematic diagram of the Gamma ray unit Co-60



Repository of low-level radioactive waste

- The repository was operated until the end of the 1980s.
- Was made of reinforced concrete: area – 60 m²; depth – 5-6 m; wall thickness – 0.2 m; has 3 compartments, each of them is closed with a concrete slab of 0.2 m; all the top is closed with a single 0.2 m slab and metal frame and tin sheets roof.
- 19 barrels (9 m³) of waste were removed from the repository from May 24 to June 30, 2016



Repository of highly active radioactive waste (block No. 34)



- Repository was built in 1969.
- Area – 252 m²;
- Concreted block, wall thickness 40 cm, cement mortar and ferruginization within, waterproofing with hot bitumen outside.
- On the 2nd floor there are:
 - 12 wells with $d=0.8$ m;
 - 6 wells with $d=0.35$ m;
 - the depth of the wells is 4.8 m.
 - nothing has been buried in the wells since the late 1970s





Prospects for cooperation

- Opportunities to participate in the rehabilitation and reclamation of the territory of the former uranium mines in Yangiabad and Charkesar;
- Cleaning of repositories of low-level and high-level waste from RW and their disposal to the RRBS;
- Removal of spent nuclear fuel from the repositories of the research reactor WWR-MC of the Institute of Nuclear Physics of the Academy of Sciences of the Republic of Uzbekistan;;
- Replacement of old Co-60 sources with new ones, increasing the power of the unit.



Thanks for your attention!