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## Closing the nuclear fuel cycle at FNO FSUE “MCC”

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At present the Mining and Chemical Combine is creating an industrial infrastructure of the closed nuclear fuel cycle that is capable of repeated and environmentally safe involvement of reprocessed fuel components in the nuclear fuel cycle.

The spent nuclear fuel (SNF) management infrastructure created presently at the enterprise involves the facilities as follows.

- ☒ A water-cooled (wet) storage facility for VVER-1000 spent nuclear fuel;
- ☒ An air-cooled (dry) storage facility for RBMK-1000 and VVER-1000 spent nuclear fuel. The dry storage facility is a unique object, being one-of-a kind in the world and using a passive cooling system;
- ☒ A start-up facility of the Pilot Demonstration Center for reprocessing spent nuclear fuel with a throughput of 5 spent nuclear fuel tons a year, which was developed on the basis of the best world process engineering solutions for SNF reprocessing;
- ☒ A MOX fuel fabrication facility, which is to fabricate fuel to be used in fast reactors and which allows recovered plutonium to be involved in the nuclear fuel cycle.

In addition, for the purpose of SNF transportation, the Combine has a necessary infrastructure and railway rolling stock, which are shipping casks and rail carriages.

### Do you wish to enter the YGE SFM19 Challenge?

#### Country or International Organization

Russian Federation

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