

## «MAYAK» PRODUCTION ASSOCIATION



On Ozersk coat of arms we can see an image of a nuclear reactor and a lizard. They symbolize the taming of natural forces and elements.

In June 19, 1948 according to the decision of the Soviet government the first in the country industrial complex for plutonium production started its operation in Chelyabinsk Region. This day may be considered a birthday of the «Mayak» Production Association (MPA).

The MPA was one of the largest producers of weapon grade plutonium for the Soviet Union during the Cold War, particularly during the Soviet atomic bomb

program.

Nowadays the MPA is a modern and powerful industrial complex of nuclear industry. The plant covers an area of approximately 90 square km. and employs about 15 000 people. It consists of several enterprises:

*Reactor plant*

*Radiochemical plant*

*Radioisotope plant*

*Metallurgical and Chemical plant*

*Instrument and Engineering plant*

*Repair and Machine shop*

*Central Research Laboratory*



In different periods the directors of the MPA were such well – known people as: Bystrov P.T., Slavskiy E. P, Muzrukov B.G., Churin A.I., Dem’yanovich M.A., Semyonov N.A., Brokhovich B.V., Fetisov V. I., Sadovnikov V.I. V. I. Baranov is at the head of the MPA now.

The entire country participated in the construction of this unique industrial complex. There was a lot of enthusiasm of the first builders and scientists. But there was also lack of experience in doing complicated work of this kind and much pressure from the government authorities (one of them was L.Beria) who wanted the plant to start its work in the shortest possible time. As a result, the MPA was built and operated with great haste disregard for safety and its further activity caused intensive radioactive contamination of not only around the plant and the Northern part of Chelyabinsk, but also Sverdlovsk and Kurgan regions.

Before 1957 much of the waste was dumped into the Techa River. It severely contaminated the riverside villages such as Muslyumovo. The Techa River was the only source of drinking and washing for village residents.



In 1957 the MPA was the site of a major disaster. It contaminated 20 thousands of square miles of territory which is now known as the Eastern Ural Radioactive Trail (EUR).

Cardinal changes in political and economic situation in Russia have caused intensive development of civil productions at the former military site.

The MPA is primarily engaged in utilization of earlier accumulated waste from the nuclear submarines, icebreakers and nuclear power plants. Commercially, it produces cobalt- 60, iridium-192 and carbon-14.

For the first time of the existence of the MPA, the total activity of the stored liquid radioactive waste began to decrease. The most important tasks for MPA today are reprocessing of all the accumulated waste and rehabilitation of contaminated territory. Russian Government has adopted a wide-range Rehabilitation Programme, which is being carried out at the present moment. Everything is being done for MPA to become a waste-free clean enterprise. We should learn on old mistakes and never make them again in the future.



## Vocabulary

*coat of arms* – герб

*nuclear* – ядерный

*lizard* – ящерица

*tame* – укрощать

*Production Association* – производственное объединение

*weapon – grade* – оружейный

*haste* – спешка

*disregard for* – не считаясь с

*contamination* – загрязнение

*to dump into* – сбрасывать в

*the only source* – единственный источник

*Eastern Ural Radioactive Trail (EURT)* – восточно – уральский радиоактивный след

*to be engaged* – быть вовлеченным

*accumulated waste* – отработанные отходы

*liquid* – жидкость

*to decrease* - уменьшаться

*reprocessing* – переработка

*rehabilitation* – восстановление

*to store* – хранить

*to cause* – быть причиной, вызывать

### Tasks:

Fill in: armed forces, radioactive, coat of arms, decrease, sources.

1. Many cities and towns have their own flags and .....
2. Lake Irtyash is one of the ..... of drinking water.
3. Many icebreakers and submarines work on ..... fuel.
4. We should ..... contamination of air, land, and water.
5. Russia has got one of the strongest ..... in the world.

Complete the sentences:

1. The coat of arms symbolizes .....
2. «Mayak» was one of the largest producers of .....
3. In Chelyabinsk region «Mayak» caused .....
4. For the village residents the Techa River was .....
5. Since 1957 the contaminated territory was known as .....
6. «Mayak»'s most important tasks are .....

Answer the questions:

1. What are the main symbols of Ozyorsk?
2. When did the first industrial complex for military plutonium production start to operate?
3. Why did «Mayak» cause intensive radioactive contamination?
4. Where was much of the waste dumped into?
5. What civil productions does MPA produce?

Find some more information on Ozersk coat of arms to explain why the lizard was chosen to be on it and what the blue colour stands for.