

Anatoliy Petrovich Aleksandrov recounted, that when the ice-breaker sailed across the Baltic Sea after the completion of its mooring tests, it was followed by patrol boats and helicopters of the NATO countries, and they took air and water samples. They found nothing because the vessel's biological protection had been designed in a reliable manner. Operational experience was accumulated on the first power-plant and certain flaws had been detected. These were corrected and an improved power-plant was designed incorporating specific changes. Modern nuclear-powered vessels are now equipped with the improved power plant.

On such power-plants, in principle, any leaks of radioactive cooling agents into the biosphere are absent, since the first circuit is airtight. The biological protection was well manufactured in contrast, let us say, to the Japanese nuclear ice-breaker "Mutsu". The Japanese, however, had an unsuccessful experience in the construction of nuclear-powered ships - as soon as they began to bring the reactor up to power, the biological protection system did not prevent radiation leakage and the ship could not operate, they had to put it in dock. Our levels of protection are such, that the level of background radiation is even several times lower than the accepted rated norms.

If a small amount is expelled into the atmosphere - then it is gas. The power-plant simply has neutron emission and in the air is argon, which is activated by neutrons. This radioactive argon-41, which has a half-life of a little more than an hour, is the only thing which is expelled into the atmosphere. But the amounts are very small and cannot in any way be compared with the emissions from AES (nuclear-power plants). The small amounts do not