

May 4, 1986 KGB's Report on Options of Chernobyl Nuclear Disaster Elimination

Citation:

"KGB's Report on Options of Chernobyl Nuclear Disaster Elimination", May 4, 1986, Wilson Center Digital Archive, Pripyat-city website, pripyat-city.ru https://wilson-center-digital-archive.dvincitest.com/document/121647

Summary:

Physicists at the Academy of Sciences give advice for containing the Chernobyl nuclear disaster.

Credits:

This document was made possible with support from Carnegie Corporation of New York (CCNY)

Original Language:

Russian

Contents:

Original Scan
Translation - English

Secret

Copy No. 1

Report

On May 3rd of this year, we had a discussion with the leading nuclear physicists: Director of the Institute of Nuclear Research (INR) of the Academy of Sciences of Ukrainian Soviet Socialist Republic, Dr. Sci. in Physics and Mathematics Vishnevsky I.N., and Deputy Director of this institute Linev A.F.

The scientists believe that in the 4th nuclear power plant unit of the Chernobyl NPP the spontaneous chain reaction of the fuel continues on the condition that cooling does not occur. Because of the high temperature, the graphite is burning in the reactor, which leads to periodic radioactive release into the atmosphere. This process could be stopped only if nuclear fuel elements are withdrawn. According to comrade Linev A. F., the reactor contains approximately 4 tons of Uranium-235. In these conditions, its fission could continue for tens of years, and this will damage people, agriculture, and the animal world. The scale of this grave harm can be hardly foreseen. The entry of water (including underground water) into reactor core could cause increasing of the continual radioactive release into atmosphere.

The agency has ordered the scientists of the INR of the Academy of Sciences of Ukrainian Soviet Socialist Republic to look for possible options for disaster elimination and develop recommendations related to forecasting and localization of the accident consequences.

The directions of the institute Comrades Vishnevsky I. N. and Linev A. F. will propose the following options to the authorities:

- To create a group for developing science based engineering solutions regarding the cooling of the reactor core, its encapsulation, or the withdrawal of the fuel elements. This group should include the leading physicists of INR, the Khrakov Institute of Physics and Technology (KhIPhT), and scientists from the Institute of Engineering Thermophysics of the Academy of Sciences of Ukrainian Soviet Socialist Republic
- To temporarily stop the planned research activities of INR, and on the site of this institute to create the Center for Elaboration Measures and Recommendations on Localization of Accident Consequences. This Center should involve scientists from institutes of general, physical, and inorganic chemistry, molecular biology and genetics, plant physiology, botany, oncology, and other research areas. The recommendations of this Center should include the following elements:
- A procedure for protection against food contamination and the securing of food supply for the population of Kiev-city and Kiev region;
- Organization and maintenance of protection for workers in the facilities and offices in Kiev-city against radiation contamination of the workrooms through air conditioners, water inlets, air intakes, ventilation systems, cooling circuits etc.
- Forecasting of the situation for undertaking preventive activities for the protection of the population, children, and pregnant women in Kiev-city and "flash points" in the region;
- Defining of dangerous spaces for agriculture and describing measures for monitoring radiation of food

Currently, the IRN of the Academy of Sciences of Ukrainian Soviet Socialist Republic has created two laboratories for environmental radiation monitoring of the food in Kiev-city. However, the institute faces difficulties in receiving basic information from the accident scene necessary for active participation in the development of science-based solutions for the liquidation of the Chernobyl plant.

6th Agency of KGB of Ukrainian Soviet Socialist Republic

4 May 1986 Ref. no. 30/2-3451 Signature