

Report the increase in the number of diseases among the population and the increased radiation background in the Polesky District

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Secret

Reference note on some specific features of the operational situation in the Polesky district

The Polesky district is located in the northern Kiev region and covers an area of 1,279 square kilometres (50,000 hectares of farmland and 35,000 hectares of arable land). It is administratively divided into two settlement councils and 19 village councils. 29,535 people live in 48 settlements (61 before the Chernobyl accident), including 5,422 children under 14. The district capital, Poleskoe, is home to 4,509 families. The distance from the district centre to Kiev is 130 km.

The district is home to 14 industrial enterprises (a furniture factory, a woodworking plant, a feed mill, a clothing factory, etc.), 11 collective farms, and 3 state farms. The Khmelnytsky-Korosten railway passes through the district, as do the national highways Kiev-Mozyr-Minsk and Kiev-Ovruch-Zhytomyr. It borders the Narodichi (Zhytomyr Oblast), Ivankov (Kiev Oblast), and Narovlya (Gomel Oblast, Byelorussian SSR) districts, as well as the 30-km Chernobyl Nuclear Power Plant exclusion zone.

In the urban-type settlement of Vilcha, there is an inter-district pesticide warehouse, which stores approximately 1,500 tons of herbicides, 1,000 tons of fertilisers, and 50 tons of expired and unidentified chemicals. According to warehouse manager V.T. Bobrusev, all herbicides and fertilisers, except for the 50 tons, will be sold within a year to farms in the district, after which the warehouse will cease operations. The remaining 50 tons of unusable and unidentified chemicals will be transported to a planned warehouse for substandard chemicals in the Kiev region.

Before the Chernobyl nuclear power plant accident, gross industrial output in the Polesky district was 57 million roubles, and in agriculture, 45 million roubles.

Currently, production has been reduced to 50 million and 40 million roubles, respectively. Due to radiation contamination, 17,315 hectares of agricultural land and approximately 10,000 hectares of arable land (sandy, poor soil) have been withdrawn from use. The average grain yield is 11.5 centners per hectare. 56,000 hectares of forest land have been expropriated.

During the initial period (May 1986), the evacuation of residents of Pripyat, Chernobyl, and other settlements within the 30-kilometer zone passed through the urban-type settlement of Poleskoye. The settlement housed the administration of the Chernobyl Nuclear Power Plant Construction Directorate, the Chernobyl Nuclear Power Plant Directorate, the republican and regional civil defence headquarters, and military units with equipment involved in eliminating the disaster. Personnel decontamination stations and decontamination stations, where contaminated equipment was cleaned, were located in close proximity to the settlement. Equipment and materials for the Chernobyl disaster clean-up passed through the Vilcha railway station.

Currently, within the 30-kilometer zone (Dibrova checkpoint), there is a military field vehicle extraction station where uniforms are being decontaminated using dichloroethane.

According to the district sanitary and epidemiological station, the radiation situation in the area is characterised by uneven radionuclide contamination:

- 33.3 thousand hectares contaminated with up to 555,000,000,000 Bq/km² [0.555 TBq/km²];
- 10.2 – “– from 555,000,000,000 to 1,480,000,000,000 Bq/km² [0.555-1.480 TBq/km²];
- 33.6 – “– from 1,480,000,000,000 to 2,960,000,000,000 Bq/km² [1.48-2.96 TBq/km²];
- 6.2 – “– over 2,960,000,000,000 Bq/km² [2.96 TBq/km²].

According to the Dosimetry Monitoring Department of the Combine Production Association, there are localised cesium-137 contamination levels exceeding 12,950,000,000,000 Bq/km² [12.95 TBq/km²].

The population of 13 villages in the Polesie district (more than 4,000 people) after the Chernobyl accident was evacuated to other settlements in the Kiev region (Yasen and Shevchenkovo were evacuated in 1989–1990). Between 1986 and 1989, 5,500 people, mostly young people and families with young children, left the district on their own.

Elevated background radiation (from 0.5 to 7.5 µSv/hr in the air and up to 20 µSv/hr from the soil surface), as well as contamination of soil and vegetation with radionuclides (caesium, strontium, cerium, plutonium, etc.), have a significant impact on the operational situation in the area.

The sanitary and epidemiological station has registered elevated radionuclide concentrations (according to VDU-88) in some agricultural products (meat, milk, vegetables, grain, etc.).

Dosimetry posts at the district consumer union, bakery, food processing plant, and other enterprises, as well as with the participation of the radiology department of the district sanitary and epidemiological station, are monitoring products (including incoming ones). Thus, in the summer of 1989, the district Sanitary and Epidemiological Station (SES) identified Georgian tea with elevated contamination levels, which was recalled from sale.

In addition, SES specialists conduct targeted monitoring of local food products and drinking water in populated areas of the district. Based on the results, an information bulletin is compiled and distributed to the public.

However, according to the head of the SES, the existing radiation monitoring system is insufficiently effective. It suffers from fragmentation and the absence of a single coordinating centre in the district that would address both radiation monitoring of the contaminated area and ensure monitoring of imported and produced food products.

Furthermore, the district sanitary and epidemiological station has only four food-grade radiometers (AI-1099, KRK-1, DP-100, and Beta), which is insufficient under current conditions. District sanitary and epidemiological station specialists are unable to promptly monitor ongoing decontamination work (replacing contaminated soil, roofs, etc.) or the reliability of temporary radioactive waste disposal sites. Currently, the district already has nine

such sites (Vilcha, Poleskoye, Vladimirovka, Novaya Markovka, Denisovichi, etc.), which are essentially abandoned. The former policy of removing waste within a 30-kilometer zone has no material implementation.

The current situation and the absence of a specific organisation in the area responsible for monitoring the disposal and maintaining the disposal sites in compliance with regulations could lead to a radioactive leak and further contamination of the area.

After appropriate testing and the issuance of a certificate recording radiation monitoring data, the butter produced at the Krasiaty Dairy Plant in the area is sent to Kiev Cold Storage Plant No. 4, where a repeat random inspection is conducted, including by specialists from the City Sanitary and Epidemiological Service. The butter is then sold in the city's retail network.

Meat for the Kiev Meat Processing Plant comes from the southern districts of the Kiev Region. Cows and bulls, fattened in the Polesie district, undergo a two-month fattening cycle in the southern districts of the Kiev Oblast before slaughter according to the State Agro-Industrial Committee of the Ukrainian SSR method to remove cesium-137. They are then delivered to the Zhytomyr Meat Processing Plant. According to specialists from the City Sanitary and Epidemiological Station, the required incoming radioactivity testing of beef for the city of Kiev is maintained below the maximum permissible levels (temporarily permissible contamination levels of VDU-88–2,960 Bq/kg).

In accordance with the Resolution of the Council of Ministers of the USSR and the Ukrainian SSR, 27 settlements have been designated in the contaminated areas of the Polesie District where workers and employees are paid 30 roubles and a 25% supplement to their monthly salaries, while 7 villages are paid only 25%. More than 24,000 people live in these settlements, including more than 4,000 children under 14. The district's population continues to be concerned about many unclear issues related to radiation contamination, restrictions on the consumption of local foods, and deteriorating health.

According to operational and official data, an increase in the incidence of diseases among the population has been noted (cases per 10,000 residents):

– ischemic heart disease, over 9 months

1985	1986	1987	1988	1989
7.6	6.5	8.4	14.9	5.0

– hypertension, over 6 months

1985	1986	1987	1988	1989
623	624	732	918	406

– bronchial asthma, over 9 months

1985	1986	1987	1988	1989
24.1	30.5	26.2	39.1	28.7

Cases of strokes and haemorrhages have increased. During examinations, young people were identified with cardiac arrhythmia and high blood pressure.

According to local specialists, the emerging increase in illnesses is linked to increased psychophysiological stress caused by uncertainty about one's future, fear for the health of family members, etc.

Examinations in 1989 established that the incidence of hyperplasia (enlargement of the thyroid gland) was 40% (3,200 out of 8,000) of the children examined.

In a conversation with V.I. Sulenko, Deputy Chief Physician of the Central Hospital of the Poleskoye Urban Settlement, it was revealed that the number of children (319) observed in groups "G" and "D" of the dispensary register (observation is carried out in accordance with Order No. 640DSP-87 of the USSR Ministry of Health for groups "A", "B", "C", "G", and "D", formed according to the increasing content of radioactive iodine in the thyroid gland) is not objective, since not all children living in the area and who received a radioactive "blow" to the thyroid gland with iodine-131 were promptly examined in April - early May 1986.

This is due to the fact that one half of the children were taken to pioneer camps and holiday homes, where their examination began after the half-life of iodine-131 had passed (8 days). The other half were taken by their parents to live with relatives or friends and were not examined. According to V.I. Sulenko, the actual number of children in dispensary registration groups "G" and "D" should be approximately 3,000.

The quality of care is affected by the shortage of qualified medical personnel. There is a need for 7 general practitioners, 6 dentists, 6 paediatricians, and 10 laboratory technicians, especially for work in rural medical districts.

In order to reduce the population's radiation exposure (the total dose for a person over 70 years should not exceed 350 mSv), decontamination work has been carried out since 1986 by military personnel assigned to the 25th brigade of the chemical protection troops of the Kiev Military District and workers of the Oblremstroy trust; however, this work has not been largely effective.

Data from specialists at the Dosimetry Monitoring Department of the Production Association "Combine," conducting surveys in four settlements in the district (the urban-type settlement of Poleskoye, the villages of Rudnya Grezlyanskaya, Zhovtnevo, and Novaya Markovka) under an agreement with the Kiev Regional Executive Committee, shows uncertainty in assessing the degree of risk for people exposed to "acute" radiation in the first days after the accident, taking into account the risk due to "chronic" radiation exposure in subsequent years.

Moreover, there is no complete certainty that large-scale decontamination work (and the resulting multi-million rouble expenditures) will ensure relative radiation safety. Experts' findings, as is known to the public, indicate the need to relocate residents of the Poleskoye settlement to a clean zone, with mandatory measures to reduce the radiation hazard in the most contaminated areas and dosimetric monitoring of the living and working conditions of the settlement's residents.

These and other circumstances are creating a certain level of social tension among residents of the district and the urban-type settlement of Poleskoye, which is reflected in numerous

complaints filed with central and local authorities. A key issue, actively discussed among district residents, is resettlement to a clean zone (specific timing and location of resettlement, compensation for property, provision of equivalent housing and employment, etc.). In some cases, unlawful demands are being made.

In particular, re-settlers should be provided with the same pay at their new locations (i.e., 25% of their salary plus 30 roubles), and provided with separate stores with an appropriate selection of food and manufactured goods, etc.

A questionnaire survey conducted by the Polesie District Executive Committee in September–October of this year to determine resettlement preferences revealed that over 75% of residents of Polesie and Vilcha intend to leave their previous place of residence (including 90% of teachers and doctors in Polesie). In populated areas of the district, this figure is approximately 30%.

Furthermore, tensions in the area are constantly fuelled by established ties between residents of the urban-type settlement of Poleskoye and those of the urban-type settlement of Narodichi (Zhytomyr Oblast).

Despite ongoing outreach efforts, residents of the urban-type settlement of Poleskoye have not developed a clear and concrete understanding of the provisions of USSR Council of Ministers Resolution No. 886 of October 20, 1989, "On additional measures to strengthen health protection and improve the material situation of the population living in areas contaminated by radioactive contamination as a result of the Chernobyl nuclear power plant accident."

Promises and assurances about the safety of living in the contaminated area, issued by various commissions from ministries and agencies that visited the urban settlement of Poleskoye over the three and a half years following the accident, against the backdrop of reality, significantly undermined the population's trust in the local leadership and did not contribute to normalizing the situation.

In the current situation, negative developments have sharply intensified, with a growing trend toward organising unauthorised rallies, mass demonstrations, and other events where issues related to resettlement and financial compensation are actively discussed. Citizens' initiative groups have formed to visit residents' homes and apartments, campaigning for immediate resettlement.

Through the use of state security services, economic facilities where the social situation is tense have been identified:

- Motor Transport Enterprise No. 13248, a garment factory, a feed mill, an asphalt plant, a woodworking plant, a public utilities complex, etc.

The most radical individuals include:

- Olga Nikolaevna Yanchuk, born in 1952, a native of the village of Nevgoda, Ovruchsky District, who works as a teacher at Secondary School No. 2 in the urban-type settlement of Poleskoye;

- Natalya Aleksandrovna Butkovskaya, born in 1957, a native of the village of Budovarovich, Poleskoye District, a state insurance agent in the urban-type settlement of Poleskoye;
- Mikhail Denisovich Potiy, born in 1923, a native of the urban-type settlement of Poleskoye, who resides in the urban-type settlement of Poleskoye, a pensioner.

An analysis of the available and obtained data allows us to draw the following conclusions:

1. Increased public attention, as well as environmental movements, to the problems of people living in contaminated areas, and a lack of adequate information among the region's population about specific deadlines and procedures for relocation, housing and employment opportunities, and property compensation significantly contribute to increased social tension and the increased activity of various "initiative" groups.
2. The severity of the problems existing among the population may become the basis for the emergence of various kinds of negative manifestations on the part of certain radically minded individuals, while the possibility of uncontrolled developments cannot be ruled out.
3. In order to relieve tensions among the district's population, it is advisable for the relevant authorities to conduct organisational work in accordance with Resolution of the USSR Council of Ministers No. 886 of October 20, 1989, to prepare for the first stage of resettlement in 1990, while widely publicizing these events in local media and at workers' meetings.

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