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Mitigating the Effects of the Chernobyl Disaster in the Light of the Archival Documents and Eyewitnesses' Accounts

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Summary

The aim of the article is to present selected aspects related to the mitigation of the effects of the Chernobyl nuclear disaster in 1986. Using a variety of sources such as a rich collection of archival materials, including little-known or previously unpublished documents, eyewitnesses' testimonies and source literature, an attempt was made to reconstruct the events following the process of overcoming the consequences of the explosion at the Chernobyl Nuclear Power Plant in several key areas. These included the deactivation of radioactively contaminated areas in Ukraine, Belarus and Russia, limiting the impact of the destroyed reactor on the environment and the information policy of the Soviet authorities, as well as the attitude of the representatives of the communist authorities towards the tragedy. The radiological situation in Kiev from the first days after the outbreak of the disaster is also an important issue discussed in this text.

Keywords: Chernobyl, disaster, Ukraine.

Streszczenie

Minimalizacja skutków katastrofy w Czarnobylu w świetle dokumentów archiwalnych i relacji świadków

Celem artykułu jest zaprezentowanie wybranych aspektów związanych z minimalizacją skutków katastrofy jądrowej w Czarnobylu w 1986 r. Bazując na bogatym zbiorze materiałów archiwalnych, w tym mało znanych dokumentów lub wcześniej nigdy niepublikowanych, relacji świadków oraz literatury przedmiotu, podjęto próbę rekonstrukcji przebiegu wydarzeń w kluczowych obszarach procesu przezwyciężania następstw wybuchu w Czarnobylskiej Elektrowni Jądrowej. Należały do nich dezaktywacja promieniotwórczo skażonych obszarów Ukrainy, Białorusi i Rosji, ograniczenie wpływu oddziaływania zniszczonego reaktora na środowisko zewnętrzne, polityka informacyjna władz sowieckich, a także stanowisko przedstawicieli władz komunistycznych

wobec tragedii. Istotnym zagadnieniem podejmowanym w niniejszym tekście pozostaje również sytuacja radiologiczna w Kijowie od pierwszych dni po wybuchu katastrofy.

Słowa kluczowe: Czarnobyl, katastrofa, Ukraina.

Introduction

The global consequences of the Chernobyl disaster are one of the most tragic events in the history of Ukraine and Belarus. This period was marked by the mobilisation of enormous measures and human resources in order to mitigate the radiological effects of the blast, mass evacuation and relocation of the inhabitants of the contaminated areas as well as serious medical, demographic and industrial consequences. The aim of this article is to present the key aspects of the Chernobyl disaster in 1986, connected with the elimination of the explosion effects on the Ukrainian area. The reconstruction of the events and the data verification were conducted on the basis of qualitative analysis of the source materials, which are constituted by published and unpublished archival sources, collective monographs and the accounts of witnesses – the participants of the decontamination of the polluted areas. The text also refers to the secondary literature within the discussed subject matter. The article is first and foremost the attempt to address the questions: what initiatives were launched in the closed excluded zone around the destroyed reactor in order to ensure the radiological safety of Ukraine's citizens and the natural environment? What was the situation in Kyiv after the catastrophic explosion in 1986 on the basis of available documents? What were the major criteria and motives of the governmental and political authorities while making particular decisions aimed at mitigating the disaster's effects? In the following analysis, which is also an attempt to broaden the scope of issues connected with the direct impact of the disaster on the Ukrainian society, the attention was paid to the threads, which are still the matter of researchers' dispute.

Explosion

The negative consequences of the long-term negligence in the area of Soviet nuclear plants' safety and the management of the risk in case of major breakdown were revealed immediately after the explosion in the Chernobyl Nuclear Power

Plant (ChNPP) on the 26th of April 1986. The communist propaganda solidified in the social awareness the assumption that atom used for civil purposes is entirely safe, and the danger for the well-being of people and natural environment does not actually exist. This opinion was also broadly shared by the Soviet armed forces, scientists and the employees of the nuclear industry[1].

Initially, the staff of the Chernobyl plant did not accept the possibility that two huge explosions that followed the failed experiment conducted on the 25th/26th of April 1986 had completely destroyed the core of the fourth reactor. Within the board of ChNPP, wishful thinking replaced the realistic assessment of the situation. At around 3 a.m. (an hour and a half after the blast), the head of the Civil Defence (CD) conducted the measurements of the radiation in the rooms of the plant and around it, which revealed that its intensity largely exceeded the norms regarded as safe for the human health and life (the hand of the radiometer able to measure the radiation up to 200 roentgen units jumped out of the scale). However, the head of the plant Viktor Bryukhanov ignored the information about the high level of radiation and forbade to inform the staff and other units about the danger. An indecisive stand in the assessment of the situation was also taken by the board of the plant's Civil Defence as well as the authorities of Pripyat, a town situated only four kilometres away from the plant[2].

After a little over an hour since the blast, the most prominent representatives of the local authorities arrived at the disaster site, i.a. the second secretary of the Regional Executive Committee of the Ukrainian Communist Party (Ukr. Oblasnyj komitet Komunistychnoi' partii' Ukrai'ny) in Kyiv Volodymyr Malomuzh and the head of the City Executive Committee of the Council of People's Delegates (Miskvykonkom, ukr. Vykonavchyj komitet mis'koi' Rady narodnyh deputativ) in Pripyat Volodymyr Voloshko. It was as late as before 5 a.m. that the main engineer arrived at the plant, who until then had led the disposal procedures from his home – on the phone[3].

The firemen brigades that were called to the disaster site (including the units responsible solely for the security of ChNPP) acted without the consideration

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1 P. Sekuła, *Katastrofa w Czarnobylu. Ukraińcy wobec tragedii 1986 roku*, Poznań 2022, pp. 22–23.

2 *Chornobyl's'ka katastrofa v dokumentah, faktah ta doljah ljudej,* pid red. V.V. Durdyncja, V.M. Mykoljuka, Kyi'v 2006, p. 256.

3 V.F. Skljarov, *Zavtra byl Chernobyl'*, Moskva 1993, p. 25. Also, on the first day of the disaster, in the Kyiv area, the car traffic was banned on the roads in the direction of Pripyat, Державний архів Київської області (ДАКО), П-5, оп. 118-г-г, спр. 7. арк. 32.

of the risk connected with the ionizing radiation (as if it was a "regular" fire), which caused many fatalities. According to the deputy of the head of Nuclear Safety Board of ChNPP Mykola Karpan, on the outside, especially on the roof of the turbines' room, the fire could not be classified as a "classical" one that would occupy particular fragments of the plant. What, seen from the distance, looked like fire flames occurred to be a powerful flare-up from the destroyed reactor. In many places there were scattered pieces of smouldering graphite and the remains of the energy block's construction, but many of these had been extinguished without the use of water. The most dangerous fire that could have had severe consequences took place inside the facility, in the turbines' room, where there were power cables and hundreds of tonnes of industrial grease. It was, however, managed on time by the plant's staff. At the same time, the firemen for many hours did preventive shifts at the destroyed reactor, obtaining additional doses of radiation[4].

After more than five years since the disaster, a Temporary Committee of the Supreme Council of Ukraine (Ukr. Tymchasova komisija Verhovnoi' Rady Ukrai'ny; hereinafter – Temporary Committee) was established in order to investigate the circumstances of the tragedy, which, on the basis of the analysis of declassified documents stated that the authorities of the state and the Ukrainian Soviet Socialist Republic were aware of the real radiological situation on the area of the plant as early as a few hours after the explosion.

Apart from the chemical troops and CD, the measurement of the radiation was conducted by sanitary and epidemiological stations as well as the staff of the Ukrainian Institute of Hydrometeorology (Hidromet, ukr. Ukrai'ns'kyj hidrometeorologichnyj instytut). At around 1 p.m., the first secretary of the Communist Party of Ukraine (CPU) Volodymyr Shcherbytsky and the Council of Ministers obtained the data from the measurements conducted by Hidromet. According to the representatives of the Temporary Committee, in the evening of 26th of April at the latest, it was possible to undertake the initiatives aimed at protecting the health and life of Ukrainian citizens, and first and foremost to inform the society about the danger[5]. This did not happen, however, and the

[4] N.V. Karpan, *Chernobyl'. Mest' mirnogo atoma*, Dnepropetrovsk 2006, pp. 530–531; Д. Горова, Відчуття було таке, як на війні – йшли, бо треба, http://www.umoloda.kiev.ua/number/661/234/24009/ (access: 19.09.2023).

[5] *Chorna knyga Ukrai'ny: zbirnyk dokumentiv, arhivnyh materialiv, lystiv, dopovidej, statej, doslidzhen', ese*, uporjad. F. Zubanych, Kyi'v 1998, p. 545. In December of 1991, the

authorities decided that the propaganda costs of an open information policy would be far greater than the potential casualties.

Attempts to Mitigate the Effects of the Distater

Among the most urgent tasks assigned to the committee established by the decision of the Soviet Union's prime minister Nikolai Ryzhkov on the 26th April 1986, the federal Government Committee to Examine the Causes of the Failure in ChNPP (Ukr. Urjadova komisija z rozsliduvannja prychyn avarii' na Chornobyl's'kij AES), later renamed as Government Committee for Eliminating the Effects of the Failure in ChNPP (hereinafter – Government Committee) (ukr. Urjadova komisija z likvidacii' naslidkiv avarii' na Chornobyl's'kij AES) was stopping the emission of the radioactive isotopes out of the inside of the reactor as well as ensuring the protection and permanent isolation of the remains of the fourth reactor from the natural environment. What was substantially more hazardous than the physical damages of the plant's construction was the spill of the radioactive substances to the environment caused by the fusion of the reactor's core[6].

The first pieces of information conveyed by the Operational Group of the Ministry of the Interior of the Ukrainian Soviet Socialist Republic (OG MI USSR, ukr. Operatyvna grupa Ministerstva vnutrishnih sprav Ukrai'ns'koi' Radjans'koi' Socialistychnoi' Respubliky) from Pripyat on the issue of the radiological situation pointed to the fact that it was very nonhomogeneous. In the zone near the reactor it was 200 R/h (roentgen units per hour which is 2000 millisieverts per hour mSv/h), within 3 kilometres from the reactor 30–40 R/h (300–400 mSv/h), in Pripyat from 300 mR/h (milliroentgen units; 3 mSv/h) to 2 R/h (20 mSv/h), in Chernobyl – 3–10 mR/h (0.03–0.01 mSv/h)[7].

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conclusions of the Temporary Committee were sent to the General Public Prosecutor's Office of Ukraine, which pointed to those guilty of suppressing the truth about the disaster and overusing the power: V. Shcherbytsky (posthumously), V. Shevchenko (the chair of the Supreme Soviet Presidium of USSR), A. Romanenko (health minister of USSR) and O. Liashko (prime minister of USSR). Due to the case becoming invalid by lapse of time, the offenders were not made accountable; S.I. Vasjuta, *Postchornobyl's'kyj period v Ukrai'ni: nacional'nyj dosvid v konteksti cyvilizacijnyh strategij*, Kyi'v 2001, p. 16.

6 R.V. Arutjunjan et al., *Mery po lokalizacii avarii na ChAJeS*, Moskva 2012, p. 11, http://en.ibrae.ac.ru/docs/109/3208.pdf (access: 16.04.2024).

7 *Chornobyl's'ka katastrofa v dokumentah*, pp. 256–257.

Beginning from 27th of April, for two weeks the operation was conducted of swamping the destroyed reactor from air with the sacks of sand, boron and lead[8]. High temperature above the destroyed energetic block impeded conducting the precise operation, and the level of radiation reached even several thousands of R/h (or dozens of thousands mSv/h). During short flights above the reactor, the crews of choppers obtained substantial doses of radiation, and many of them did several dozen of such manoeuvres. Altogether, more than 5 thousand tonnes of materials were dropped from the choppers and yet, the attempt to stop the emission of radionuclides to the external environment occurred to be little effective. Most drops missed the target (according to different data the accuracy oscillated from 10 to 25%); additionally, the emission of radioactive dust was enhanced. This fact was later on meticulously concealed by the Soviet propaganda, which was trying to justify the aptness of the decisions made and the legitimacy of sacrificing health and life of the pilots. What also occurred indispensable was undertaking following action in order to secure the fourth reactor – this time permanently.

The most significant work was conducted by the engineering troops in extremely unfavourable radiological conditions next to the destroyed reactor and radiation reaching up to thousands of mSv/h. The Government Committee made a decision to build a concrete cover above the remains of the reactor, which was supposed to permanently isolate its content from the natural environment. According to the Soviet data, 300 thousand m^3 of concrete and 6 thousand tonnes of metal constructions were used for this purpose[9]. A new shelter got the official name of "Covering", commonly known as "sarcophagus", and the ones taking part in preparing the project and building it included the employees of the I. Kurchatov Institute of Atomic Energy of the USSR Academy of Science, Ministry of Medium Machine-Building (Sredmash), All-Russian Scientific Research and Design Institute of Energy Technology (VNIPIET), Production Association "Kombinat" (until 1990), and then Scientific and Production Association "Pripyat" and many other institutions, ministries and departments, as well as soldiers and Civil Defence units from particular republics of USSR. Until the completion of the construction of "Covering" on the 30th of November 1986, contrary to the information of the Soviet party who claimed that the ultimate substantial emission of radionuclides from the

8 The starting point for the choppers' crews taking part in swamping the reactor was initially located in Pripyat, on the central square of the town used as a landing pad, while the point of precise guidance of aviation was organized on the roof of "Polesie" hotel, where the view on the plant was favourable.

9 Latvijas Valsts arhīvs (LVA), f. 2197, apr. 1-v, li. 122, no. 54.

reactor took place at the end of May 1986, a considerable ejection of radioactive substances was registered as late as in the mid-August of the same year[10].

Precise recognition and the analysis of the hazards caused by the radioactive fall-out was one of the fundamental initiatives that constituted the efficiency of potential lifesaving activities in the Chernobyl zone. The work what was aimed at assessing the radiological situation around the plant began since the first days after the blast. The insecurity of the measurements was enhanced by the content of radioactive substances, changes occurring in time as well as enormous areas of land and forest that got contaminated. Activities within 10 kilometres from the reactor were conducted by the forces of Defence Ministry of USSR. The most effective radiometric measurements were conducted with ground-based methods by the battalions of chemical troops. Outside the borders of 10-kilometers zone and in the town of Pripyat, the measurements were coordinated by the State Committee of Hydrometeorology and the Control of Natural Environment of USSR (Goskomgidromet, Russian: Gosudarstvennyj komitet SSSR po gidrometeorologii i kontrolju prirodnoj sredy)[11] on the basis of the method of aerial measurement of gamma radiation on the substantial areas of Ukraine and Belarus. It was conducted from the board of choppers and planes equipped with the appropriate tools to register gamma radiation. Such examination was carried out daily from 29th of April until the end of May 1986[12]. The first detailed map of the contamination of Ukrainian and Belorussian Soviet Socialist Republics drafted on the basis of the intensity of exposition dose was delivered to the headquarters of the elimination of disaster effects on the 10th of May, and then the works were initiated to state the density of radioactive fall-out contamination of both republics[13]. The analysis of the data of radiometric measurement enabled one to state that the radioactive mark reached much further than the borders tentatively established at the beginning of May as initially 10-kilometres and then 30-kilometres zone around the Chernobyl Zone of Exclusion (hereinafter: Exclusion Zone), from which the local inhabitants were evacuated.

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10 P. Sekuła, *Likwidatorzy Czarnobyla. Nieznane historie*, Warszawa 2019, p. 46.

11 In 1991 the State Committee of Hydrometeorology and Control of Natural Environment of USSR (Goskomgidromet) was transformed into the Committee of Hydrometeorology of USSR (Gosgidromet), which survived until the downfall of the Soviet Union.

12 *Radioaktivnoe zagrjaznenie prirodnyh sred,* pod red. Ju.A. Izrajelja, Leningrad 1990, pp. 43–44.

13 V.O. Kashparov, *Formuvannja i dynamika radioaktyvnogo zabrudnennja navkolyshn'ogo seredovyshha pid chas avarii' na chornobyl's'kij AES ta v pisljaavarijnyj period*, in: *Chornobyl'. Zona vidchuzhennja: zbirnyk naukovyh prac'*, gol. red. V.G. Bar'jahtar, Kyi'v 2001, p. 14.

Despite the alarming data, Soviet authorities decided that at least part of the contaminated area was possible to be regained, and therefore, in some places a Zone of Strict Radiological Control was established, which was not subjected to displacement, except children and pregnant women; however, radiological monitoring was organized there and dosimetric control was introduced of people and food products. Delivery of contamination-free food and pasture for the animals was also secured. Due to the radiological state of the Exclusion Zone as well as national and private property left on its territory, in May 1986 it was begun to be enclosed with a wire with signalling, and at the main entry road Control-Passing Points were established (Russian: Kontrolno-propusknoj punkt). The order of protecting its borders was also set. Border armies, Defence Ministry of USSR and Ministry of the Interior took part in these activities. It was decided to ensure radiological, veterinary-sanitary and epizootic control over the areas neighbouring the Exclusion Zone[14].

The resolution of Central Committee of the Communist Party of the Soviet Union, Council of Ministers of USSR no. 634–188 from 29th of May 1986 included the list of the most urgent tasks within the elimination of the disaster effects. The major effort was supposed to be concentrated on the fight with dust, the control of contaminated land, air as well as the radiological condition of underground and surface waters on the area of Exclusion Zone and neighbouring territories. It was decided to undertake the initiatives aimed at preventing the transfer of radionuclides to the rivers and the Kyiv Reservoir, i.a. so-called "wall in the ground" was built of 20-kilometers length and the banks were strengthened of rivers Pripyat, Usha, Brahinka and many other ones flowing through the contaminated areas of Ukraine and Belarus[15]. To prevent the penetration of radioactive substances to the rivers, draining systems, bulk and filtering dikes were built. In the towns on the territory of the Exclusion Zone, it was recommended to replace the road surface, removing the outer layer of the soil, and to clean houses and streets[16]. What was also initiated was the logging of the contaminated forests and bushes as well as taking the steps to ensure fire safety within the zone. In order to stop the process of spreading contamination through animals and to prevent the risk of an epidemic outbreak, it was planned to shoot dogs and cats abandoned during the evacuation and running free – a total of 21,000 animals were killed. The

14 *Chornobyl'ka katastrofa v dokumentah*, p. 230.

15 Центральний державний архів громадських об'єднань України у Києві (ЦДАГО), ф. 1, оп. 25, спр. 2993, арк. 22–33.

16 Державний архів Чернігівської області (ДАЧО), ф. П-470, оп. 13, спр. 1572, арк. 7–9.

head of the Executive Committee of Kyiv Regional Council of People's Deputies (ukr. Vykonavchyj komitet Kyi'vs'koi' oblasnoi' rady narodnyh deputativ) Ivan Pliushch reported: "we swept through all the points. We do not shoot wild animals, we do not see them, they have escaped"[17]. Some domestic animals in Pripyat suffered much worse fate – locked in the households, they starved to death[18].

Due to the fact that the decontamination work also included the localisation, storage and safekeeping of the radioactive residues, the selection of the site and the subsequent design and construction of the radioactive residue repositories was a crucial task in terms of accelerating the process of eliminating the effects of the disaster and mitigating its impact on the natural environment. Sredmash, Defence Ministry of USSR and the Ukrainian Academy of Science got the order to develop the technical and chemical ways of localizing, deactivating, storing and transforming radioactive residues as well as removing the contamination on roads, grounds, means of transport, tools, etc. The enhancement of control was established at the train stations, airports and docks. The temporarily accepted norms were set of human, animal, water and agricultural products irradiation[19].

In the following months, there were attempts to measure the scale of contamination of the areas most affected by the radioactive fall-out within three republics (Ukrainian, Belorussian and Russian Soviet Socialist Republics). In June the Ministry of Health Protection of USSR accepted the temporarily allowable norms of the soil contamination according to the indicator of the density of caesium, strontium and plutonium radionuclides pollution (though the latter were not properly examined then). The areas that were contaminated above the level of 15 curies (Ci) per square kilometre (555 kBq/m^2) of caesium-137 were included in the Zone of Strict Radiological Control, where the measures were taken in order to protect the local inhabitants. What served this purpose was numerous limitations in the everyday functioning of the residents, their lifestyle and work, limitation of production (but not its complete shutdown) and the consumption of agricultural products, as well as animal products from the local farms. According to the established criterium, the evacuation of the people was supposed to be conducted on the territories with the density of caesium-137

17 *Stenograma zasidannja № 9 Operatyvnoi' grupy Politbjuro CK Kompartii' Ukrai'ny*, in: *Chornobyl'. Dokumenty Operatyvnoi' grupy CK KPU (1986–1988)*, Uporjad. O.V. Bazhan, O.G. Bazhan, G.V. Borjak, S.I. Vlasenko, Instytut istorii' Ukrai'ny NAN Ukrai'ny, Central'nyj derzhavnyj arhiv gromads'kyh ob'jednan' Ukrai'ny, Kyi'v 2017, p. 116.

18 ДАКО, ф. П-5, оп. 113, спр. 507, арк. 1–2.

19 ЦДАГО України, ф. 1, оп. 25, спр. 2993, арк. 22–33.

contamination above 40 Ci/km^2 (1.48 MBq/m^2), and strontium-90 contamination above 3 Ci/km^2 (0.111 MBq/m^2), and the complete shutdown of the agricultural production was planned in case of caesium-137 contamination exceeding 80 Ci/km^2 (2.96 MBq/m^2)[20].

Situation in Kyiv

With time, the radiological situation deteriorated not only in the area of Exclusion Zone and the neighbouring territories, but also in the towns located further from the place of disaster. In Kyiv on the 1st of May at 2 p.m. the gamma radiation level was 1100–1150 microroentgens per hour (μR/h)[21], at 2.15 p.m. – 1200 μR/h, between 4.00 and 4.30 p.m. – 2700 μR/h, between 5.00 and 8.00 – 1100 μR/h. The state of drinking water between 10.00 and 12.00 a.m. – 7·10–9 Ci/l[22]. The milk examined at 12.00 – up to 6.55·10–8 Ci/l. The highest rates of gamma radiation were registered in various and considerably remote places of the city: at M. Popudrenko street (desniańskyj district), Science Prospekt (hołosijiwskyj district) and Yaroslavska street in the Podil district[23]. Until 7th of May in Kyiv the intensity of radiation was 1000–2000 μR/h (i.e. 10–20 μSv/h, an evaluated annual dose for the residents). The analysis of air filters conducted by the hydrometeorological services showed that the activity volumetric concentration exceeded hundreds and thousands of times the peak allowable norms for iodine-131, caesium-137, tellurium-132 and other isotopes[24]. What especially concerned the researchers was the level of iodine in the waters of Dnieper and the grass, exceeding a thousand time the accepted norms[25]. Meanwhile the reserve supplies of stable iodine, which, if applied appropriately early could have blocked the absorption of radioactive iodine by the thyroid gland, was not enough for even half of the population of Pripyat. It was not delivered either to the most contaminated regions of the USSR – the areas of Kyiv, Zhytomyr and Chernihiv. The USSR health minister, Anatolii Romanenko, also threatened people with the

20 N. Omel'janec, N. Gun'ko, N. Dubovaja, *Demograficheskie poteri Ukrainy ot Chernobyl'skoj katastrofy*, Saarbrücken 2015, p. 9.

21 1 μR/h = 0.01 μSv/h.

22 1 Ci/l equals 37 kBq/l.

23 ДАКО, ф. П-5, оп. 78, спр. 310, арк. 3.

24 V. Tokarevskij, *Glasnost' s pristrastiem*, "Vestnik Chernobylja" 1991, no. 48 (266), p. 4.

25 ЦДАГО України, ф. 1, оп. 25, спр. 2995, арк. 31–33; ф. 1, оп. 25, спр. 2996, арк. 11–12.

negative consequences of taking too much iodine. The final decision to distribute stable iodine among the inhabitants of Kyiv was taken remarkably late[26].

Considering the exacerbating radiological situation in the Ukrainian capital, especially on the first days of May, strict executive of Central Committee of the Communist Party of Ukraine took into account the possibility of temporary evacuation of its residents. On recommendation of the first secretary of CPU W. Shcherbytsky, the headquarters of Kyiv Civil Defence developed a hypothetic evacuation schedule, in which the people would be transported by cars and railways, or even moved on foot in specially formed columns[27].

Such a decision could not have been issued without the previous consent of the authorities in Moscow, who these days oftentimes accused Ukrainian comrades of panic and hysteria. Instead, it was decided not to reveal the real data on the radiological situation to the residents and not to implement the state of emergency. On the 1st of May, Central Committee of the Communist Party of Ukraine decided not to cancel the ceremonial parade on the occasion of Labour Day, when the intensity of radiation in the capital centre was above 1200 μR/h (i.e. 12 μSv/h with the allowable norm being 0.3 μSv/h). Shcherbytsky submitted to the pressure from the Kremlin and appeared at the celebrations with his five-year-old grandson Volodymyr.

A few days later, during the session of the Politburo of Central Committee of the Communist Party of Ukraine, in order to show the international public that the radiological situation in the city is sustained within the accepted norm, the Ukrainian authorities allowed the organization of the first stage of the 39th Peace Race (route: Kyiv—Warsaw—Berlin—Prague). The radiation intensity in Kyiv was then above 1000 μR/h (10 μSv/h). In the minutes of the Politburo's session, the stand was emphasized of particular parties concerning the race organization:

> V. Ivashko (secretary of CC CPU) – About the Peace Race. There are instances of sabotage from some teams[28]. So what! Anyway, the race should be organized.
> O. Lashko (USSR prime minister) – Are there any objections?
> A. Romanenko (USSR minister of health) – No.

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26 *Chorna knyga Ukrai'ny*, pp. 548–549; ЦДАГО України, ф. 1, оп. 25, спр. 2996, арк. 11–12. The application of stable iodine is justified only within the first 10 days since the occurrence of danger.

27 O. Gusjev, *25 rokiv vich-na-vich z «Chornobylem»*, Kyi'v 2011, p. 90.

28 The teams of Western countries apart from France withdrew from the race in Kyiv. The only satellite country in the so-called Eastern bloc that did not take part in the race was Romania.

O. Lashko – Are there any objections concerning the radiological situation?
W. Zhursky (the head of Miskwykonkom in Kyiv) – No. Within the area of Kyiv.
O. Lashko – The Peace Race will take place. We need to properly prepare the streets, clean and provide the dosimetric control along the whole route[29].

In this situation, what occurred to be a mistake from the point of view of the authorities was to very generally inform the Kyiv inhabitants on the 5th of May about the increased level of radiation. Panic broke out in the city. The people started to crowd at the railway stations, and on the 6th of May in the bureau of the Kyiv Miskkom of CPU (City Committee of CPU, ukr. Kyi'vs'kyj mis'kyj komitet KPU) the authorities wondered how to act in case of potential mass, unorganized departures of the residents from the city[30]. On the 8th of May, at the confidential session of OG of the Politburo of the CPU Central Committee, the USSR Deputy of the President of the Council of Ministers Kostiantyn Masyk reported on the queues at the railway stations: "The number of passengers doubled. If last year, daily 26 thousand people left the city, then yesterday 55,5 thousand departed from Kyiv. The use of road transport increased three times. Yesterday 19,5 thousand people left. Aerial traffic. Additional planes were supplied. The day before yesterday 9 thousand people used it"[31].

The authorities tried to counteract with the reassuring publications in press and special brochures. Kyiv Miskwykonkom published "Hygienic-sanitary recommendations," which included an extensive list of advised actions in the conditions of the increased level of radiation accompanied with the lack of any essential information on the radiological situation in the city. As such, the publication raised the sense of insecurity instead of dispelling it[32]. These days, the only residents apart from the party's nomenclature who could wish for the attention and reliability of proper services and institutions were the foreigners leaving the Soviet Union. Due to propagandist reasons, beforehand they were subjected to meticulous sanitary control and, if necessary, deactivation[33]. Nevertheless, the Chernobyl explosion meant that the international tourism in Kyiv almost completely vanished. Tamara, the employee of Inturist, pessimistically

29 ЦДАГО України, ф. 1, оп. 17, спр. 385, арк. 28–41.
30 Державний архів міста Києва (ДАК), ф. Р-1, оп. 7-с, спр.283, арк. 5–9.
31 *Stenograma zasidannja № 5 Operatyvnoi' grupy Politbjuro*, p. 71.
32 *Sanitarno-gigienicheskie rekomendacii naseleniju goroda Kieva na period likvidacii posledstvij avarii na Chernobyl'skoj AES*, Upravlenie zdravoohranenija ispolkoma kievskogo gorodskogo soveta narodnyh deputatov, Kiev 1986, pp. 1–4.
33 ЦДАГО України, ф. 1, оп. 17, спр. 385, арк. 42–45.

assessed the chances for the tourists' return in December 1986: "I am afraid that the capitalists will not want to come here anymore. It does not matter how much we assure them that everything is fine"[34].

In Kyiv the atmosphere prevailed not only of fear, but also suspicion towards everybody occupying high position in the party and state hierarchy. Every clerk or chair who left the town these days was suspected of escaping the radiation. Very soon official complaints and anonymous letters were issued on the secretaries, headmasters, and chairs of Miskkoms and rajkoms (regional committee of CPU, ukr. Rajonnyj komitet KPU)[35]. The disaster occurred to be an occasion to exact private revenge and personal affairs. The employees issued complaints on supervisors and co-workers, who were accused of cowardice or spreading of panic. The students wrote anonymous denouncing letters on their lecturers. This is a fragment of one of many letters: "The engineer of Darnycia railway station [in Kyiv – P.S.] is spreading information on the events in Chernobyl which is not compatible with the official reports. It is said that the whole Ukraine will die out within 5 years. Is that true?"[36].

Although the majority of tips was not confirmed in reality, there were instances of top-ranking party's authorities who really ran away from the city, and some others stopped coming to work[37]. These days Kyiv was left by, i.a., the governors of the headquarters of Civil Defence in particular factories and organizations. The Secretary of the Basic Party Organization of Miskwykonkom in Pripyat escaped on the very first day of the disaster[38]. Within two months from the explosion, 50 clerks from Kyiv Civil Defence were fired for avoiding work or neglecting duties[39]. Also, the chairs of regional CD headquarters as well as the heads of executive committees neglected their duties, paying not enough attention to such issues as the organization of hospitals' work, transport, deactivation of buildings, etc.[40]

The majority of radioactive substances, which in May 1986 reached Kyiv and other Ukrainian cities, had the form of aerosol, as the particles of dust absorbing

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34 C. Walker, *Ukraine Struggles to Cope with Chernobyl Radiation Risk*, "The Times" 16 December 1986, p. 16.

35 ДАКО, ф. П-5, оп. 113, спр. 387, арк. 1–12; Державний архів Житомирської області (ДАЖО), ф. Р-1150, оп. 2, спр. 3031, арк. 193.

36 ДАКО, ф. П-5, оп. 78, спр. 317, арк. 32–33.

37 *Ibidem*, арк. 93–94, 99.

38 *Protokol otchetno-vybornogo partijnogo sobranija pervichnoj partijnoj organizacii Pripjatskogo gorispolkoma ot 18 oktjabrja 1986 god*. Document in the possession of the author.

39 ДАКО, оп. 78, спр. 310, арк. 77, 83, 96–100.

40 ДАК, ф. Р-1, оп. 7-с, спр.283, арк. 24–26.

radionuclides. They usually gathered on the tree limbs. Due to the fact that the tree deactivation was not conducted, the leaves included a remarkable number of radionuclides responsible for the high level of radiation of the city tree stand. The closed tree stand on the area of 1 hectare during May–September accumulated 120–150 kilos of various substances and, at the same time, included up to 1 ton of dust. Thus, leaves that on the one hand favoured the process of the air cleaning of radionuclides pollution, on the other locally increased the level of radiation, especially in parks, boulevards, and playgrounds[41]. The dosimetric control of baby strollers, conducted in various regions of Kyiv: these of Moscow, Minsk, Dnipro, Pechersk as well as children clinical hospital no. 7 in Kyiv showed that the contamination with the beta particles was identified in 36% of the examined strollers, and in hospital it was revealed that the radioactive substances contamination of changing tables and other furniture oscillated between 5 and 40 radioactive decays per minute/cm^2. Meanwhile, a visit to the doctor could result in contamination of the patient's clothing and trigger additional effects from the external effects of beta radiation[42]. In June 1986, the Major Sanitary Doctor of Ukraine Volodymyr Shestakov predicted that in Kyiv the gamma radiation level would be decreased to the normative levels as late as at the end of July (mainly due to natural factors)[43]. However, in the following months the level of radiation in particular city districts did not decrease, and in some places, it even increased; the party's board was not able to find the cause of such a state of affairs[44].

In order not to stay at the mercy of nature, Ukrainian authorities ordered the actions that were meant to limit the radiation level in the capital: cleaning the streets, pavements, and squares, tidying up lawns; furthermore, the shooting of homeless animals was initiated in the city and the whole region[45]. Unfortunately, the city deactivation was not sufficient: there were not enough deactivation tools, watering carts, garbage buses and hosepipes or they were of low quality. The cleaning staff was not equipped with the special uniforms[46]. Soon, the equipment used to clean the city got contaminated itself[47]. The authorities were guilty of contributory negligence, the contaminated leaves were burnt, and the biomass was stored for too long.

41 ДАКО, ф. П-5, оп. 78, спр. 310, арк. 48–50.
42 *Ibidem*, арк. 103–104.
43 *Ibidem*, арк. 89–91.
44 ДАК, ф. Р-1, оп. 7-с, спр.283, арк. 31–37.
45 *Ibidem*.
46 ДАКО, ф. П-5, оп. 78, спр. 310, арк. 33–35.
47 ДАК, ф. Р-1, оп. 7-с, спр.283, арк. 42–49.

As a result of the decomposition of nuclear fuel rods in ChNPP, radioactive plutonium isotope began to be emitted to the atmosphere. In July 1986, the Sixth Department of the Ukrainian KGB alerted that in Kyiv and Dymer (near Vyshhorod next to Kyiv) extremely dangerous for human health plutonium was discovered that was in the form of aerosol, and whose concentration exceeded the acceptable norms. As it was stated in the report, this fact "evokes concern of the health of people working not only in the 30-km zone, but also in Kyiv". In this context, it was an obvious mistake to abandon the information activity as well as the preventive initiatives in the republic's capital, such as cleaning the streets, lawns and buildings, especially considering the nigh return of the children resting at the camps[48].

Additionally, the city territory was regularly contaminated with the radioactive substances by the transport leaving from the 30-km zone and returning to the headquarters in Kyiv. For instance, the buses that took part in the evacuation of Pripyat on the 27th of April, were not subjected to dosimetric control, and some of them were not deactivated before returning to the station, conveying the radioactive dust and posing danger for the future passengers[49]. What also contributed to the increase in Kyiv contamination were intercity buses from the northern Ukrainian regions, which entered the city. It was not until the 12th of May that the party's board started considering the issue of banning the departure of means of transport from the Chernobyl zone[50]. Also, in the mid-May commands were issued to organize stopovers of the passengers to the clean buses in the suburbs of Kyiv[51]. In spite of these actions, a few months later contaminated vehicles still entered Kyiv since there were not enough control points on the northern outskirts, which made it impossible to efficiently supervise the whole of entering transport. At the Kyiv airport, there occurred serious violations of the radiological safety rules because at the beginning, there was no deactivation of the aerial transport arriving from the Exclusion Zone[52].

The commands concerning dosimetric control in the very capital of the republic were not fulfilled, mainly due to the lack of trained specialists. The

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48 *Dovidka 6-go Upravlinnja KDB URSR pro hid robit z likvidacii' naslidkiv avarii' na Chornobyl's'kij AES. 15 lypnja 1986 r.*, "Z arhiviv VUChK-GPU-NKVD-KGB. Chornobyl's'ka tragedija v dokumentah ta materialah" 2001, no. 1 (16), gol. red. Ju. Danyljuk, Kyi'v 2001, pp. 133–134.

49 О. Гусєв, *25 років*, p. 99.

50 ДАК, ф. Р-1, оп. 7-с, спр.283, арк. 31–37.

51 *Ibidem*, арк. 60–67.

52 *Ibidem*, арк. 15–18; оп. 8, спр. 3101, арк. 32.

authorities of Kyiv could not be sure that due to the selective and superficial control, the whole production of food industry stayed uncontaminated especially considering the fact that the sensitivity of a great majority of equipment was too low to examine some of the goods[53]. It was more detailed control conducted in the following months that confirmed the worries of the communist authorities. Still in spring 1987, the dosimetric measures showed that on the sales network of Kyiv, there were products contaminated with strontium-80 and caesium-137, including: bread, milk and meat. According to the data from the supervision of Kyiv bakeries, they used up to 60% of flour made from the wheat transported from the contaminated areas of Kyiv region and including an increased level of radionuclides[54]. What also concerned the communist authorities of the republic was the supply of clean, uncontaminated drinking water for Kyiv. It was as soon as in mid-May that, in the view of the disturbing predictions concerning radiological condition of Dnieper and other water intakes, drilling began of artesian wells. The variant was also considered to channel the water from Desna to the right bank of Dnieper with the special water pipe along the Moscow bridge[55].

Table 1. Schedule of the deactivation works according to the resolution of CC CPSU and the Council of Ministers of USSR from 29th May 1986, no. 634–188[56]

Deactivation works of areas and buildings with the increased level of ionizing radiation	Time of realization	Ministries—executors
Territory of the Chernobyl Nuclear Plant: Reactors 1 and 2 with the neighbouring rooms necessary to activate the reactors	July 1986	Ministry of Defence, Ministry of Energetics and Electrification, The Ministry of Medium Machine-Building
Reactor no. 3	August 1986	-//-
The workshop producing industrial concrete	June 1986	-//-
Territory around reactor no. 4	September 1986	-//-
Construction site of reactors 5 and 6	October 1986	-//-
Yaniv railway station	August 1986	Ministry of Defence

53 *Ibidem*, ф. Р-1, оп. 7-с, спр. 283, арк. 55–59; спр. 284, арк. 55–60.
54 *Ibidem*, спр. 291, арк. 19–27.
55 *Ibidem*, спр. 283, арк. 31–37.
56 ЦДАГО України, ф. 1, оп. 25, спр. 2993, арк. 33.

Facilities and territory of the town of Chernobyl	October 1986	-//-
Zone of Temporary Displacement	September 1986	-//-
Zone of Strict Radiological Control	September 1986	-//-
Houses, buildings and territory of the town of Pripyat	December 1986	-//-
Areas excluded from the industrial activity in the Exclusion Zone	December 1986	-//-

Deactivation Actions

Soviet authorities tried to use the method of "total deactivation" of the contaminated areas of Ukraine, Belarus and Russia[57], but contrary to the efforts made, the major problem remained the low efficiency of the deactivation works and the lack of precise strategy of action. The involvement of scientific institutions occurred insufficient to develop new methods of cleaning the contaminated towns. The elimination of the effects of nuclear explosion in the Exclusion Zone and the neighbouring territories turned out both inefficient and extremely expensive.

According to the data of 9 May 1986, the following measurements in μR/h were recorded on the surface of the ground in particular cities of the Ukrainian SSR: Chernobyl – 3500–10000 (35–100 μSv/h), Ivankiv – 240 (2.4 μSv/h), Poliske – 270 (2.7 μSv/h), Narodychi – 3000–10000 (30–100 μSv/h), Ovruch – 1110 (11.1 μSv/h), Korosten – 1600 (16 μSv/h), Czernihiv – 2100 (21 μSv/h), Vyshhorod – 1150 (11.5 μSv/h), Kyiv – 520 (5.2 μSv/h), Obukhiv – 600 (6 μSv/h), Kaniv – 3000 (30 μSv/h), Kozelets – 1140 (11.4 μSv/h), Kaharlyk – 1000 (10 μSv/h), Korsun-Shevchenkivskyi – 560 (5.6 μSv/h). Relatively low radiation rate in the towns near the Exclusion Zone of ChNPP (Poliske, Ivankiv) resulted from immediately conducted deactivation, though they did not guarantee a permanent improvement. A difficult radiological situation was also sustained in the following months. In the middle of June in Chernobyl, the radiation was 4–6 mR/h (40–60 μSv/h), in Pripyat, on the route of police patrols 50–200 mR/h (500–2000 μSv/h), in the village of Dytiatky 30 kilometers away from the reactor 0.5 mR/h (5 μSv/h)[58].

[57] *Jekologicheskie, mediko-biologicheskie i social'no-jekonomicheskie posledstvija katastrofy na ChAJeS v Belarusi*, pod. red. E.F. Konopli, I.V. Rolevicha, Minsk 1996, p. 215.

[58] *Chornobyl's'ka katastrofa v dokumentah*, pp. 256–257.

In Pripyat and Chernobyl, 2,428 buildings were deactivated, 161 kilometres of roads and streets and 528,000 m^2 of surfaces were cleaned, and 169,000 cubes of contaminated soil were disposed of. In addition, 37.3 kilometres of hard shoulders and emergency lanes were paved. Nine Points of Special Deactivation were built (so-called PUSO, Russian: Punkt special'noj obrabotki)[59]. In order to reduce the intensity of radiation around the buildings in Pripyat, 4.6 hectares of soil were removed to a depth of 45 cm. The area was poured over with the special solution of anti-dust properties[60]. What occurred to be the most efficient method of lowering the radiation was removing the outer layer of the ground and storing it in the specially made places called "mogilniks" (radioactive waste repositories). On the other hand, pressurized water pouring was only efficient on the smooth and leak-tight surfaces. Subsidiary roads were cleaned even several times a day, depending on the weather conditions.

The towns and villages that were deactivated for several times included Dovhyi Lis (in May 1986 the contamination with caesium-137 and strontium-90 exceeded pre-failure levels respectively 740 and 555 times), Vorovychi, Nove Sharno, Ivanivka, Novosilky (Kyiv region), Nove Opachychi, Cherevash, Zhurba, Zalisia and others. Deactivation works decreased the radiation level three or four times (in Chernobyl the rate registered was 0.2 mR/h [2 μSv/h], in Poliske 0.08–0.1 mR/h [0.08–1 μSv/h])[61]. Despite temporary successes, previously cleaned places soon got contaminated again, and the radiation rate exceeded the pre-failure level, even hundreds of times.

By the end of 1986, only in the areas where the evacuees had been living, 106 sanitation centres for evacuees and workers had been built, as well as 83 laundries, where a total of 613,000 people and 280,000 tonnes of clothes had been washed. In Dytiatky, Stari Sokoly and Dibrova three complex facilities of people and transport deactivation were built, so called PSD – Points of Special Deactivation (what got popularized was also the common version of the Russian abbreviation: PUSO)[62], which had already functioned in the Exclusion Zone before. On the 20th of May in the same places, in order to manage a huge number of means of transport passing through the control points and to lower the cases

[59] ЦДАГО України, ф. 1, оп. 25, спр. 3166, арк. 2–7.
[60] *Ibidem*, спр. 499, арк. 238.
[61] *Ibidem*, *спр*. 3166, арк. 2–7.
[62] Also translated as the Point of Special Processing, Russian: Пункт специальной обработки. Analogously: the Point of Special Transport Processing, Russian: Пункт специальной обработки транспорта.

of contaminated cars passing, places of goods transloading were created[63]. Taking into account the weak radiometric control, it did not entirely stop the spreading of radionuclides out of the closed zone[64].

Apart from the environmental factors, what had a remarkable impact on the radiological state of the Exclusion Zone and the neighbouring terrains was ignoring safety rules. Both regular workers and the highest civil and military authorities committed gross violations of the safety regulations[65]. One of the gravest instances of negligence was not obeying the rules of isolating the contaminated equipment and ground, what, according to the Soviet specialists, could have led to an extensive distribution of radionuclides and their permeation into the ground water[66].

After a month and a half after the explosion in ChNPP, the head of Civil Defence of Narodychi district (Zhytomyr oblast) I. Makarenko informed the Minister of Defence of USSR S. Sokolow that in fact, none of the problems connected with the elimination of the disaster effects were solved in the region. All the plant products and animals were contaminated, the issue was not decided whether to pay the workers operating in the unfavourable radiological conditions, and the lack of clear water forced one to use the local wells, the majority of which was severely tainted with radionuclides. There were not enough hard roads in the region, and the ground subsidiaries produced such a huge amount of dust that conducting deactivation did not make sense – "you could deactivate like this endlessly" – assessed the head of Narodychi Civil Defence. Military troops were poorly equipped with the tools both to deactivate the trees (which were the cause of re-contamination) and to work at height in the first place. Not all the thatched roofs in the regional villages were replaced with tile although they were a strong source of radiation. There were not enough bathhouses and showers for the liquidators of Chernobyl disasterand workers, and the organization of washing

63 *Chornobyl's'ka katastrofa v dokumentah*, p. 231.

64 P. Sekuła, *Zona. Opowieść o radioaktywnym świecie*, Będzin 2020, pp. 228–229.

65 General Ilmārs Bruņenieks remembered the controls at the departures from the zone: "During the dosimetric control of the car I always heard: Comrade general! Do as you wish, but it is my duty to warn you! Then, after the whole day of driving this car, in the evening one could feel as if little needles were sticking into the legs' muscles"; I. Bruņenieks, *Ģenerālmajora Ilmāra Bruņenieka atmiņas par Latvijas Republikas Civilās aizsardzības štāba operatīvās grupas darbību Černobiļas AES avārijas zonā (no 1986. Gada 25. Novembra līdz 28. decembrim)*, in: *Černobiļa arvien mūsu atmiņā*, E. Begens et al., Rīga 2011, pp. 22–35.

66 ЦДАГО України, ф. 1, оп. 25, спр. 3166, арк. 166–168.

became very problematic. What is more, there were not enough watering carts as well as machines to clean up the rubbish[67].

Intense cleaning of villages and town districts within the Exclusion Zone was continuously conducted until the end of August 1986. Nevertheless, the results of the deactivation initiatives were marked by the effort and health of liquidators, as well as huge financial costs, and in most cases, they occurred to be very short-lived. Due to the natural processes and anthropological factors, most towns and villages got re-contaminated really soon. In the second half of 1986, the secretary of Kyiv Obkom (Regional Committee) of CPU H. Revenko informed Shcherbytsky about "inexpedience of the re-evacuation of the 30-kilometres zone"[68]. Lack of expected effects caused far-reaching changes as far as the setting of priorities is concerned of the conducted policy aimed at mitigating the disaster's effects, i.a. more efforts were concentrated in the places located outside the borders of the Exclusion Zone. Even the future of the Zone of Temporary Displacement, with which the greatest hopes were cherished, was determined as the zone of open-end evacuation. In November 1986, with reference to the change of conception of activities undertaken on the contaminated terrains of Ukraine, the Council of Ministers of USSR decided to form district committees to eliminate the disaster effects (parallel committees were created in Belorussian SSR)[69]. It did not bring a remarkable improvement of the situation. However, the plans were not completely abandoned to (contrary to the opinion of the secretary of Kyiv Obkom) re-evacuate at least some of the places within the area of the Exclusion Zone[70].

In 1988, on the contaminated areas there were 1617 towns and villages, 637 kolkhozes and sovkhozes of 3.6 mln hectares. In the light of this, on the 13th of May 1988, the deactivation was initiated again. On the whole, 85 localities were deactivated, out of which 38 underwent this process twice. The enclosing of the Exclusion Zone got completed, too, and its territory was controlled by four thousand defence officials of the Ministry of the Interior[71]. As it turned out, it would have taken at least ten years to complete all the deactivation work outside the exclusion zone, involving huge costs and the hiring of 300,000 additional liquidators, and would have exposed the civilian population to significant doses of

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67 Центральний державний архів вищих органів влади і управління України у Києві (ЦДАВО), ф. 2, оп. 15, спр. 499, арк. 102–105; ДАКО, ф. П-5, оп. 113, спр. 388, арк. 3–5.

68 ЦДАГО України, ф. 1, оп. 25, спр. 3166, арк. 166–168.

69 ДАЧО, ф. П-470, оп. 13, спр. 1461, арк. 49–51.

70 P. Sekuła, *Katastrofa w Czarnobylu*, pp. 26–28.

71 ЦДАГО України, ф. 1, оп. 32, спр. 2337, арк. 23.

radiation in a short period of time. Thus, in January 1990 the deactivation works were stopped that had been conducted around the 30-kilometres zone. According to the official data, between 1986–1989, 944 populated places were deactivated, out of which 500 were located outside the Chernobyl zone, additionally more than a half of them were cleaned for three or four times[72].

Still another reason for the lack of the efficiency of the decontamination works and the protection of people against the radiation was the discrepancies between the actions of republican and Soviet authorities, and even those of district and regional character. What was not precisely stated was the administrative-territorial status of the 30-kilometres zone, which could have been managed by one executive. The lack of coordination was visible during the conduction of scientific research on the methods and ways of eliminating the consequences of the nuclear blast. Civil Defence did not fulfil its responsibilities. What should be included in the list of the most significant instances of negligence and faults are:

1. Civil Defence headquarters occurred to be "blind" to the radiation, and did not possess the proper equipment for the radiometric recognition[73].
2. In medical facilities, there were not enough diagnostic machines to establish the rate of human, food and water radiation.
3. So-called safety regions were not appointed beforehand, and the evacuation from the dangerous zones was not planned.
4. There was no car stock to quickly evacuate people and animals in particular regions.
5. There were not enough food supplies for the residents of particular regions[74].

Since the very beginning of the disaster, the Exclusion Zone turned into the area of bribery and theft. Soon after the evacuation of the residents from the contaminated terrains, stolen material properties started to be smuggled from the abandoned houses and flats[75]. Spare parts of the contaminated vehicles ended

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72 V.M. Zhurbenko, V.I. Kudrjashov, *Uchastie vooruzhennyh sil SSSR v likvidacii posledstvij vzryva na chernobyl'skoj atomnoj jelektrostancii*, "Voenno-istoricheskij zhurnal" 2004, no. 4, pp. 29–34; *Chernobyl'skaja katastrofa: Prichiny i posledstvija. Neposredstvennye prichiny avarii na chernobyl'skoj AJeS. Dozimetricheskij kontrol'. Mery zashhity i ih jeffektivnost'*, red. V.B. Nesterenko, D.S. Firsova, Minsk 1993, т. 1, pp. 169, 206.

73 For example, in the Narodychi region out of 107 necessary DP-5 radiometers, there were only 7 and with no power supply; ЦДАВО України, ф. 2, оп. 15, спр. 499, арк. 102–105.

74 *Ibidem*.

75 P. Sekuła, *Chernobyl Liquidators. The Unknown Story. With the Testimony of the President of Latvia*, Berlin 2020, p. 61.

up in private property, workshops, kolkhozes, etc. It did not help to implement round-the-clock militia patrols on the streets of the abandoned towns and villages as well as modern signalization systems. The head of the Ukrainian National Committee for Nuclear and Radiation Safety (Derżatomnahliad, ukr. Derzhavnyj komitet Ukrai'ny z jadernoi' ta radiacijnoi' bezpeky Mykola Shteinberh assessed the situation in the following words: "The Exclusion Zone remained practically without any control for many years. It is hard to even imagine how many contaminated household appliances, pieces of clothes, spare parts for cars, tv sets, fridges and furniture "left" the borders of the zone"[76].

Due to their high rate of radioactive contamination, the vehicles and means of transport, which had been used in the Chernobyl zone since the first day of the disaster, were stored in separate places called cemeteries of technique. Altogether in the first months after the explosion, around 2500 entities of different machines were stored there (ambulances, fire engines, engineering vehicles, passenger cars, lorries as well as choppers). Due to the fact that the protection of the stored vehicles was not organized until December 1986, only bodies remained of most of them. Useful parts were dismantled and transported out of the zone or fitted to the vehicles that were still working on the elimination of the disaster effects[77]. Also, lawmen were involved in various crimes on the area of the closed zone. For instance, the inspection conducted by the KGB employees revealed that Control and Admission Point (Russian: Kontrol'no-propusknij punkt – KPP) militia responsible for the protection of the 30-km zone from the side of Pripyat river's mouth allowed into the zone fishermen's cutters that organized illegal catch there. Part of the catch was given to the militia as a form of bribery[78].

The results of the financial inspection in the work establishment "Kombinat"[79], conducted by the Ministry of Nuclear Energetics and the Kyiv Obkom of CPU

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76 N. Shtejnberg, D. Kijanskij, *Zastavim atom byt' mirnym?*, "Vestnik Chernobylja" 1992, no. 67 (405), p. 3.

77 I. Bruņenieks, *Ģenerālmajora Ilmāra Bruņenieka*, pp. 22–35.

78 *Dovidka 6-go Upravlinnja KDB URSR*, pp. 172–175.

79 In 1986, in order to coordinate the work of every enterprise and work in the Chernobyl NP Exclusion Zone that dealt with the elimination of the disaster effects, Production Association called "Kombinat" was established, which functioned until 1990 as the Scientific-Production Union "Pripyat". In 1989, out of the constituents of "Kombinat" association, "Chernobyl Nuclear Power" was separated as an independent enterprise holding the function of the ordering party to, i.a., build and utilize the town of Slavutych; *Materialy. Vtoroj jetap likvidacii*, http://chnpp.gov.ua/ru/component/content/article?id=103 (accessed: 26.04.2023).

in 1988 showed that the lack of supervision led to complete impunity, including missing the deadlines as well as stealing huge financial and material resources that were meant to be used for the elimination of the disaster effects. Still in 1980s a remarkable amount of money devoted to the decontamination process was embezzled for the actions that were not connected with the disaster in any way. The Board of the ChNPP Building (ukr. Upravlinnja budivnyctvom ChAES) used these funds to build the facilities that little contributed to the overcoming of the multidimensional Chernobyl consequences, e.g. a market or a manufacturing base in Vyshhorod. What is more, deadlines of building new radioactive residues repositories were missed. In other cases, the pay rates for the realization of particular projects were overstated. Warehouses with the equipment remained unsupervised, there was no registry or stocktaking, which set out favourable conditions for theft. In 1987–1988 millions of rouble was defrauded in this way. In the very ChNPP numerous offences took place as well – the declared sums of revenue and expenditure were absurd. The 3rd-phase reactors of ChNPP (no. 5 and 6) were not maintained, and the basins next to reactors no. 1 and 2 were not cleaned. Disobedience of work regulations and the negligence of the plant's employees led to the outages of energetic blocks' work and the loss of 1.4 billion of kilowatt hours of electrical power[80]. Many instances were also revealed of drinking and theft literally on every level of the hierarchy. Nepotism proliferated tremendously – executive positions were occupied by people who were incompetent, without the proper education, and even formerly convicted[81]. In spite of the inspections that revealed numerous violations, those guilty of them were rarely made accountable, apart from reprimands and warnings.

Conclusion

The attitude of the highest authorities of the Soviet Union, clerks and the local representatives of the authorities in the epochal challenge in the history of USSR which was the fight with the Chernobyl disaster effects clearly proved that the major conclusions were not drawn from this tragedy. In 1986–1991 the process

[80] ДАКО, ф. П-5, оп. 118-г, спр. 93, арк. 1–10, 66–82.

[81] *Postchornobyl's'kyj socium: 20 rokiv po avarii': Chornobyl' i socium*, vyp. 11, red. O.I. Vyshnjak ta in., Kyi'v 2005, pp. 76–77.

of eliminating the disaster effects was conducted with the use of tremendous state resources, with the simultaneous ignoring of the needs and safety of the local residents as well as the malaise of local representatives of the national authorities. Soon it led to the emergence of new social and environmental problems, especially in the northern regions of Ukraine. The Soviet man's mentality and behaviour did not change either, although, as some journalists and writers tried to prove – he was supposedly forced by the disaster to consider the increase of the work safety and culture. The latter did not change predominantly in the domains that let some of the researchers formulate an apt thesis on the "systematic failure," not excluding industry and social life in general. The Chernobyl disaster, equal to consciousness disaster of the society only transformed the homo sovieticus into the new post-Chernobyl epoch, but sustaining the old habits and the former way of thinking. One of the gravest pathologies of the power system in USSR – bribery, clientelism, as well as ignoration of human safety and life rules in the name of the dogmas of the Soviet ideology and the prestige of the state – proceeded to the next phase, this time in the rhythm of perestroika, being implemented by Mikhail Gorbachev and initiated still before the nuclear disaster.

Bibliography

Archival materials

Central State Archive of the Social Ogranisations of Ukraine; Центральний державний архів громадських об'єднань України у Києві, ф. 1, оп. 17, спр. 385; ф. 1, оп. 25, спр. 2993, 2995, 2996, 3166; ф. 1, оп. 32, спр. 2337.

Central State Archive of the Higher Authorities and Offices of Ukraine; Центральний державний архів вищих органів влади і управління України у Києві, ф. 2, оп. 15, спр. 499.

State Archive of Zhytomyr Oblast; Державний архів Житомирської області, ф. Р-1150, оп. 2, спр. 3031.

State Archive of Kyiv Oblast; Державний архів Київської області, ф. П-5, оп. 78, спр. 310, 317; ф. П-5, оп. 113, спр. 387, 388, 507; ф. П-5, оп. 118, спр. 93.

State Archive of Chernihiv Oblast; Державний архів Чернігівської області, ф. П-470, оп. 13, спр. 1461, 1572.

State Archive of the City of Kyiv; Державний архів міста Києва, ф. Р-1, оп. 7-с, спр. 283.

Latvian State Archive in Riga; Latvijas Valsts arhīvs, f. 2197, apr. 1-v, li. 122.

Author's own archive

Protokol otchetno-vybornogo partijnogo sobranija pervichnoj partijnoj organizacii Pripjatskogo gorispolkoma ot 18 oktjabrja 1986 goda (original version).

Published sources and secondary literature

Arutjunjan R.V. et al., *Mery po lokalizacii avarii na ChAJeS*, Moskva 2012.

Bruņenieks I., *Ģenerālmajora Ilmāra Bruņenieka atmiņas par Latvijas Republikas Civilāsaizsardzības štāba operatīvās grupas darbību Černobiļas AES avārijas zonā (no 1986. Gada 25. Novembra līdz 28. decembrim)*, in: *Černobiļa arvien mūsu atmiņā*, E. Begens et al., Rīga 2011, pp. 22–35.

Chorna knyga Ukrai'ny: zbirnyk dokumentiv, arhivnyh materialiv, lystiv, dopovidej, statej, doslidzhen', ese, uporjad. F. Zubanych, Kyi'v 1998.

Chornobyl's'ka katastrofa v dokumentah, faktah ta doljah ljudej, pid red. V.V. Durdyncja, V.M. Mykoljuka, Kyi'v 2006.

Chernobyl'skaja katastrofa: Prichiny i posledstvija. Neposredstvennye prichiny avarii na chernobyl'skoj AJeS. Dozimetricheskij kontrol'. Mery zashhity i ih jeffektivnost', red. V.B. Nesterenko, D.S. Firsova, Minsk 1993.

Dovidka 6-go Upravlinnja KDB URSR pro hid robit z likvidacii' naslidkiv avarii' na Chornobyl's'kij AES 15 lypnja 1986 r., "Z arhiviv VUChK-GPU-NKVD-KGB. Chornobyl's'ka tragedija v dokumentah ta materialah" 2001, no. 1 (16), gol. red. Ju. Danyljuk, Kyi'v 2001, pp. 132–134, 172–175.

Jekologicheskie, mediko-biologicheskie i social'no-jekonomicheskie posledstvija katastrofy na ChAJeS v Belarusi, pod. red. E.F. Konopli, I.V. Rolevicha, Minsk 1996.

Gorova D., *Vidchuttja bulo take, jak na vijni – jshly, bo treba*, http://www.umoloda.kiev.ua.

Gusjev O., *25 rokiv vich-na-vich z «Chornobylem»,* Kyi'v 2011.

Karpan N.V., *Chernobyl'. Mest' mirnogo atoma*, Dnepropetrovsk 2006.

Kashparov V.O., *Formuvannja i dynamika radioaktyvnogo zabrudnennja navkolyshn'ogo seredovyshha pid chas avarii' na chornobyl's'kij AES ta v pisljaavarijnyj period*, in: *Chornobyl'. Zona vidchuzhennja: zbirnyk naukovyh prac'*, gol. red. V.G. Bar'jahtar, Kyi'v 2001, p. 14.

Materialy. Vtoroj jetap likvidacii, http://chnpp.gov.ua.

Omel'janec N., Gun'ko N., Dubovaja N., *Demograficheskie poteri Ukrainy ot Chernobyl'skoj katastrofy*, Saarbrücken 2015.

Radioaktivnoe zagrjaznenie prirodnyh sred, pod red. Ju.A. Izrajelja, Leningrad 1990.

Postchornobyl's'kyj socium: 20 rokiv po avarii': Chornobyl' i socium, vyp. 11, red. O.I. Vyshnjak ta in., *Kyi'v* 2005.

Sanitarno-gigienicheskie rekomendacii naseleniju goroda Kieva na period likvidacii posledstvij avarii na Chernobyl'skoj AES, Upravlenie zdravoohranenija ispolkoma kievskogo gorodskogo soveta narodnyh deputatov, Kiev 1986.

Sekuła P., *Chernobyl Liquidators. The Unknown Story. With the Testimony of the President of Latvia*, Berlin 2020.

Sekuła P., *Katastrofa w Czarnobylu. Ukraińcy wobec tragedii 1986 roku*, Poznań 2022.

Sekuła P., *Likwidatorzy Czarnobyla. Nieznane historie*, Warszawa 2019.

Sekuła P., *Zona. Opowieść o radioaktywnym świecie*, Będzin 2020.

Shtejnberg N., Kijanskij D., *Zastavim atom byt' mirnym?*, "Vestnik Chernobylja" 1992, no. 67 (405), p. 3.

Skljarov V.F., *Zavtra byl Chernobyl'*, Moskva 1993.

Stenograma zasidannja № 9 Operatyvnoi' grupy Politbjuro CK Kompartii' Ukrai'ny, in: *Chornobyl'. Dokumenty Operatyvnoi' grupy CK KPU (1986–1988)*, Uporjad. O.V. Bazhan, O.G. Bazhan, G.V. Borjak, S.I. Vlasenko, Instytut istorii' Ukrai'ny NAN Ukrai'ny, Central'nyj derzhavnyj arhiv gromads'kyh ob'jednan' Ukrai'ny, Kyi'v 2017.

Tokarevskij V., *Glasnost' s pristrastiem*, "Vestnik Chernobylja" 1991, no. 48 (266), p. 4.

Vasjuta S.I., *Postchornobyl's'kyj period v Ukrai'ni: nacional'nyj dosvid v konteksti cyvilizacijnyh strategij*, Kyi'v 2001.

Walker C., *Ukraine Struggles to Cope with Chernobyl Radiation Risk*, "The Times" 16 December 1986, p. 16.

Zhurbenko V.M., Kudrjashov V.I., *Uchastie vooruzhennyh sil SSSR v likvidacii posledstvij vzryva na chernobyl'skoj atomnoj jelektrostancii*, "Voenno-istoricheskij zhurnal" 2004, no. 4, pp. 29–34.

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