

CHERNOBYL

## C. SPECIAL SUPPLEMENT

### THE ENVIRONMENT

#### "SHARP REDUCTION" IN LIFE EXPECTANCY AND 100% ILLNESS IN CHUKOTKA

*Tass in Russian for abroad 0805 (and in English 1310 gmt  
16 Aug 89)*

##### *Text of report*

The overall radiation dose for the population of Chukotka is double the average for the USSR and approximately equal to the average irradiation received by the inhabitants of territories affected by the Chernobyl accident. These figures on the environment's radiological pollution in this autonomous okrug of the Soviet north-east, caused by nuclear tests carried out in the country's far north in the 1950s and 1960s and are given in the weekly 'Moscow News' by Yevdokia Gayer, USSR People's Deputy and Vladimir Lupandin, Doctor of Medical Sciences.

The actual irradiation dose for Chukcha reindeer breeders is much higher because their organisms are the end point of the chain of radionuclides' accumulation: from lichen to reindeer and then to human beings, the weekly says. According to Leningrad radiologists, the specific activity of lead-210 in the bone tissues of reindeer-breeders is 10-20 times higher than of people who do not consume venison, while the total content of caesium-137 in their organisms is 100 times higher. As a result of this, practically 100% of the indigenous population suffer from tuberculosis, 90% from chronic non-specific lung ailments.

Specialists are particularly alarmed by the sharp growth of oncological cases. Their occurrence in Chukotka is two to three times higher than the average for the USSR. The death toll from cancer of the oesophagus is the highest in the world. Liver cancer incidence is 10 times higher than the average. Cases of lung cancer have become more frequent during the past 20 years and the occurrence of leucosis and stomach tumours has increased two-fold. New forms of malignant tumours have appeared, namely in connective and bone tissues.

Gayer and Lupandin note that this sharply reduces people's life expectancy and results in an increase in child mortality among the indigenous population of Chukotka.

#### "SANCTUARY" DESIGNATED AROUND CHERNOBYL: PLANT AND ANIMAL MUTATIONS APPEARING

##### *Editorial report*

The Belorussian authorities have decided to set up a sanctuary in the three regions affected by the Chernobyl accident in order that specialists may study the effects of radiation on wildlife and plants and discover its "present and future

consequences", according to Tass (in English 1210 gmt 14 Aug 89). Almost 1,000 ha of forest within 6 to 7 km of the power station are expected to die. Radiation levels within them reached 300-450 rads: "man develops acute radiation sickness at levels of 300 rads and more". There are giant conifers on the edge of the "dead forest" - "the needles of a pine tree retain the same shape but increase their mass 10 times. . . Oak leaves are half the size of burdock and there are acacia trees with blades as large as a child's palm." High levels of radioactivity were found on the bottom of reservoirs, in fish and water insects, hedgehogs, shrews and voles and in teals, mallards and coots: rodents "developed genetic abnormalities". Some mammals also display high levels of radionuclides, but "specialists have not so far noted abnormal behaviour which could be traced to radioactivity".

Prof Dmytro Hrodzynskiy, member of a group of scientists which visited a farm in the Narodichskiy Rayon of Zhitomir Oblast where abnormalities among animals had been observed, said, in an interview broadcast by Kiev radio's service in English (1800 gmt 31 Jul 89): "... It was very terrifying to see such monstrous piglets and calves. We were told that such a phenomenon had not been observed prior to 1987. Undoubtedly, this region is, in part, greatly contaminated with Strontium-90. It is necessary to evacuate people from this region, the more so since a certain tendency is being observed in the rise of disease in this region."

At a news conference devoted to matters of ecological security, reported by Tass (in English 1317 gmt 19 May 89), Andrey Gagarinskiy, deputy director of the Kurchatov atomic energy institute, commenting on reports that mutations observed in animals in areas of the Ukraine and Byelorussia were due to the Chernobyl accident, claimed: "The data of the conducted research show that mutations were caused by excessive use of fertilisers and improper zootechnical measures". He dismissed rumours that the fourth unit reactor at Chernobyl is continuing to emit radioactivity as "ungrounded": "Systematic monitoring of the state of this reactor shows that earlier apprehensions of a chain reaction in the reactor were unfounded."

#### OTHER REPORTS ON CHERNOBYL AFTERMATH

**The situation in areas around Chernobyl** Over 3,000 inhabitants of areas bordering on Belorussia are awaiting a government decision on their resettlement. Resettlement was suspended in 1986 and local and central authorities were given assurances by scientists that people could remain in areas contaminated by the Chernobyl disaster so long as the territory was decontaminated, sanitary norms observed and clean produce supplied to the area. In one village in Bryansk Oblast, however, gamma levels more than 10 times the permissible maximum have been recorded despite these precautions:

"hence a sick rate which has doubled in the region over the past three years" (*Tass in English* 1342 gmt 8 Aug 89). Vladimir Bebesheko, director of the Soviet clinical radiology institute, has said that the situation with regard to radiation in the area around Chernobyl has "markedly improved". Significant improvements in radiation readings and restrictive measures implemented have resulted in radiation doses for the majority of the population in those areas being "significantly lower than established limits", he said, with only "some residents" showing a "slight overdose": the government has decided to resettle those residents, he added (*Tass in English* 1245 gmt 4 Aug 89). A national scientific conference in Minsk has called for a ban on the cultivation of farmland affected by radiation after the Chernobyl accident and has recommended measures to ensure the production of pure crops in areas where contamination is less severe (*Moscow "World Service" in English* 1500 gmt 22 Jul 89).

**Belorussian Supreme Soviet discusses Chernobyl aftermath** The main item on the agenda of the session of the Belorussian SSR Supreme Soviet, held from 28th to 29th July, was the state programme to eliminate the consequences for Belorussia of the Chernobyl accident. V. Yevtukh, First Deputy Chairman of the Belorussian SSR Council of Ministers and chairman of the republic's commission for the elimination of the accident's consequences, delivered a report. Children's health caused great concern; in the first quarter of this year, only 13% of the amount of fresh orange juice - essential for ridding the system of radionuclides - recommended by the USSR Ministry of Health, was supplied. The cost of creating exclusion and evacuation zones has reached R 1.835bn and more than R 10bn will be needed to implement the measures in the programme. The proposed programme was not ratified by the Belorussian Supreme Soviet, which decreed that it should be adopted only as a basis, should be subjected to further work and submitted for discussion at the next session in October. A standing commission of the Belorussian Supreme Soviet on issues of eliminating the consequences of the accident at the Chernobyl AES was formed (*Izvestiya* 1 Aug 89 morning edition).

**Irradiation discovered in Khabarovsk** (*Text*) A source of radioactive irradiation has been spotted and removed in a village in the Khabarovsk territory. It was part of an instrument that is used in industry. It is believed to have been forgotten or lost through somebody's negligence. The Prosecutor's [Procurator's] Office started an inquiry. Special groups to monitor radioactivity in cities and rural areas began to be set up in this country after the tragic events in Chernobyl in April 1986. In the country's Far East the city of Khabarovsk was the first to come in for a check-up; several sources of irradiation were discovered. (*Moscow in English for Great Britain and Ireland* 1900 gmt 18 Aug 89)

## "TOXIC GIANT" PLANNED FOR MOSCOW

*'Komsomolskaya Pravda' 20 May 89*

*Text of V. Rastorguyev's article; "The Director is protecting you"*

To the north of Moscow, in the region of the town Mytishi and the village of Chelobityevo, the construction of the Severnaya thermal power station [TETs], the most powerful of its kind in Europe, has begun. Its first stage alone will release 700t of sulphur dioxide and 130t of nitric oxide into the air a day. Other harmful substances will rain down on people in somewhat smaller quantities.

The TETs is a real threat to the "Losinyy Ostrov" national park -- the city's oxygen supply source -- and to the Pestovskiy, Uchinskiy and Klyazminskiy reservoirs which provide Moscow with its drinking water.

A protest rally against the construction of the toxic giant was held in the capital's Babushinskiy Rayon on 18th May.

The TETs near Moscow with its 250-meter smoke-stacks and its dense smoke-screen are but a "modest" beginning. Using that 'smoke-screen' it is proposed to build almost 30 enterprises of various types here. They include a plant for the production of protein and vitamin concentrates which are harmful to humans, an incinerator and an asphalt and concrete plant. . . Is that where the warmth promised to Muscovites will come from?

[Note: A Soviet television report (0230 gmt 15 May 89) also dealt with the issue of the Severnaya TETs, claiming that plans for it were ratified during the "period of stagnation" and stating that television journalists had received no reply to the questions on this subject put by them two months ago to Bakatin, USSR Minister of Internal Affairs, and Saykin, Chairman of Moscow Soviet of People's Deputies. A Moscow home service broadcast (1800 gmt 4 July 89) carried the following report: ("The regular session of the Moscow City Soviet on 4th July dealt with the ecological situation in the capital. Additional and urgent efforts are needed in order to fundamentally improve the situation, the session noted. First and foremost, it is necessary to put an end to the extensive development of the production potential of the capital and to growth of its population and territory. The withdrawal from the city of ecologically harmful and unsuitable enterprises should be speeded up and the capital's scientific resources should be involved to a greater degree in solving this problem. Other measures are the technical re-equipment of industry, the accelerated development of the city's social sphere, the planting of trees and gardens all over the city and the provision of the city with amenities. Zaykov, member of the Politburo and Secretary of the CPSU Central Committee and First Secretary of Moscow City Party Committee, took part in the work of the session".]