

CHERNOBYL

time it creates an opportunity to make agricultural labor highly mechanized indeed, highly automated and one of the most attractive types of human labor. Secondly, I would say, what deserves very much attention is the active development of scientific production networks, whereby science is connected with production and through this receives great benefit. The third thing is the development by all means possible of family farms or as we describe them, personal holdings, their unification and their integration with collective and state farms. There is some very interesting experience in training cadres. In many areas, a network of so-called training combines has been set up, which gives one the opportunity to carry out the training of cadres and the raising of their qualification year-round without interruptions. Of course, joint work of industry with collective and state farms deserves every attention: An industrial enterprise provides certain material and technical and financial resources for a particular collective farm and in exchange receives from above plan produce, meat, milk, vegetables, and potatoes. Judging by the information we have received, this supports labor collectives very actively.

[Makritskiy] Is this what we have seen here in the "Dvina" agroindustrial firm?

[Ligachev] Quite right. This is, incidentally, an additional source for major material and financial resources for the development of agriculture. [end recording]

Belorussia Chernobyl Cleanup Program Published
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[Text of "State Program for the Cleanup in the Belorussian SSR Following the Accident at the Chernobyl AES Covering the Period 1990-1995. (Main Targets, Directions, and Ways To Implement It)"]

[Text] In accordance with instructions from the Belorussian Soviet Socialist Republic (BSSR) Supreme Soviet, during the 3 months since its 9th Session, which reviewed and adopted as its basis a draft state program for the cleanup in the BSSR following the accident at the Chernobyl Atomic Power Station [AES] covering the period 1990-1995, the Council of Ministers, State Planning Committee [Gosplan] and republic ministries and departments have done considerable work on the draft of the program. Due consideration has been given to the comments and proposals offered by the Supreme Soviet commissions and deputies, and also the organizations, labor collectives, and individual citizens in in oblast, city and rayon executive committees [ispolkoms], as reflected in the resolutions put forward at numerous meetings.

The program is based on proposals from scientists, including scientists from the BSSR Academy of Sciences, and on principles (medical, social, economic, psychological) that ensure living conditions on the territory contaminated by radionuclides that are safe for human health. These are: the unconditional requirement to exclude human radiation levels that exceed the permissible level

from all radionuclides; the provision stated at the 9th Session of the BSSR Supreme Soviet on the inadvisability of people living where, giving due consideration to the set of measures already carried out, it is impossible to obtain local products suitable for use; due consideration of the socioeconomic aspects or the organization of agricultural production.

The fundamental thing in the new edition of the program is that it has acquired specificity and that items that are mere recommendations have been eliminated.

At the same time, with the work on the program, some of the measures included in it have already been carried out; this is a question first and foremost of introducing certain privileges, and of setting targets for 1990 on the basis of the program.

If the BSSR Supreme Soviet State Program is approved it will be submitted to the USSR Supreme Soviet for confirmation so that it may also become the law for the all-union ministries and departments that are to execute it.

The most important aims of the program are to create conditions that are safe for human life activities in regions that have been subjected to radioactive contamination, including the possibility of obtaining agricultural products that are suitable for use without restriction, and of improving the quality of life for the populations of those regions.

The specific directions of the program to reach the targets that have been set are to insure human health by means of resettlement from populated points in which the criteria set for living safety are not being observed, and to implement large-scale measures to reduce by the maximum the dose of radioactive irradiation. This set of measures includes enhancing the level of medical services and improving the health of the population, particularly children, and drawing up and introducing recommendations to bring the technology for agricultural production and for the processing industry into line with the requirements dictated by the conditions of radioactive contamination, providing the population with clean food products, organizing at the required level scientific support with respect to problems connected with normal life activities in contaminated areas, education, cultural, municipal and everyday and transport services for the public, and improving the effectiveness of decontamination work, organizing reliable and steady information on the work done to eliminate the consequences of the accident and on the radiation situation in places where people live and work, and essential rules for behavior and economic activity.

The program provides for using the scientific and economic potential of the republic in the accident cleanup, along with skilled scientific personnel and the facilities of appropriate specialized all-union enterprises and organizations.

It is proposed to conduct scientific research in order to evaluate the the effect of various factors (radiation,

chemical, psychosocial, and so forth) on the health of the population living on contaminated territories, and to study water and ground ecological systems in each oblast, evaluate the physiological and biochemical and genetic consequences of radioactive contamination, and prevent and treat disease, including diseases connected with the radiation factor, and employ the instruments and equipment essential for monitoring and evaluating the radiation situation.

The program devotes a great deal of attention to resolving questions concerning the carrying on of agroindustrial production and forestry under conditions of radioactive contamination, and to working on appropriate standards and recommendations and developing the production potential in order to make up the output lost.

The program also reflects questions concerning the provision of fuel and energy for populated points located in the control zones, and it outlines measures to strengthen the production base for motor transport and communications enterprises.

During implementation of the state program financial and material resources will be clarified in step with the availability of new data and with gaining appropriate experience, and will be allocated on a priority basis to the republic by the USSR Gosplan, USSR State Committee for Material and Technical Supply [Gossnab], the USSR Ministry of Finance, the USSR Ministry of Trade, the USSR Ministry of Health, and other all-union ministries and departments.

Spending associated with implementation of the program will be done through the all-union budget.

Section I

Insuring Living Safety for the Population (Resettlement)

The program provides for the resettlement during the period 1990-1991 of the inhabitants of 112 populated points at which, giving due consideration to the comprehensive evaluation of the radiation situation for all radionuclides, the lifetime irradiation level may reach 35 REM, and also from populated points located on territory contaminated with radionuclides at a level of 40 Curies per square kilometer or higher where the introduction of public agricultural production is not recommended.

During 1991-1992 it is planned, with the agreement of the inhabitants, to resettle 62 populated points at which independent life support is not advisable because of resettlement of the the central farmsteads of farms.

The inhabitants of populated points living on the territory of the zone of permanent monitoring where it is impossible to obtain on private subsidiary plots basic food products that are suitable for use after the necessary agrotechnical, agricultural improvement and decontamination and others measures have been carried out, will

be given the right of free choice to resettle or to live in that locality and obtain appropriate compensation as laid down, or additional financial and social privileges.

When people of pensionable age or those unable to work are resettled they will be given the right to move as they wish to be with their own relatives, who will be given housing without waiting, giving due consideration to the fact that they will all be living together.

Further Reducing the Radiation Dose

Starting from 1991 it is planned to provide for the population a diet that is in line with the medical standards as laid down by the USSR Academy of Medical Sciences Institute of Diets, while populated points with a contamination level of 1 Curie per square kilometer and higher will be allocated appropriate funding for foodstuffs. From 1990 children may attend preschool establishments gratis and children will be provided with food gratis in schools in accordance with the standards for preventive diet in the zones of permanent and periodic monitoring. And from that same year sanitation standards will be introduced for the diets of patients being treated in permanent health facilities in the oblasts subjected to radioactive contamination.

Next year a review will be conducted of the standards and periods for the issue of special clothing and uniforms for workers of all categories in contaminated zones, and also for persons whose activities are associated with working with materials contaminated by radionuclides.

Persons drafted into the Armed Forces from populated points in the BSSR located in the zones of permanent and periodic monitoring will not be permitted to do their military service in places or at installations where radioactivity is high. Servicemen and persons engaged in cleanup operations following the Chernobyl accident are guaranteed shielded living accommodations and a transfer to further service in a region of their choice. At each populated point located on contaminated territory the complex of work will be continued to make accurate predictions for obtaining clean agricultural produce, the irradiation doses received, and the state of health of the population. In 1990-1991 it is planned to carry out ecological and radiation certification of places for their ability to support life on the territories of the zones of permanent and periodic monitoring. By 1995 the base for public health and municipal and everyday services will be brought to the normativ level in populated points where the level of contamination is up to 5 Curies per square kilometer, while in populated points in the zone of permanent monitoring this will cover the entire social sphere.

In 1990 the system for radiation dose monitoring will be expanded in areas of radioactive contamination. Engineering decontamination will continue in populated points located in areas contaminated with radionuclides. In 1990 populated points earmarked for resettlement (without the provision of amenities) will be decontaminated; in 1990-1993 populated points in the zone of

permanent monitoring in which people still live will be decontaminated and full amenities will be provided; in 1990-1995 there will be selective decontamination of particular populated points in the zone of periodic monitoring according to radiation monitoring data; and during this same time all resettled populated points, and also burial sites for decontamination waste, will be secured.

Section II

Medical Services and Improving the Health of the Population. Care for Mothers and Infants. Social Security.

This section insures that by 1995 a full set of programs will be provided, including "Zdorovye" [Health], "Stomatologiya" [Dentistry], "Nemedikamentoznyye metody profilaktiki i lecheniya" (Non-Drug Methods of Prevention and Treatment), "Skoraya pomoshch" [First Aid], and "Okhrana zdorovya zhenshchin i detey, snizheniye detskoy smertnosti v BSSR" [Health Care for Mothers and Infants and Reducing Infant Mortality in the BSSR].

In 1990 residential homes will be organized on the basis of the treatment-and-prophylactic establishments in contaminated regions to provide temporary accommodation for chronic patients and for persons requiring medical care. Day wards with at least ten beds will be set up for patients in hospitals. Anesthesiology and resuscitation departments will be opened in central rayon hospitals, planning for 30 percent of the beds for children; in contaminated areas two ultrasound studies will be made of pregnant women for the purpose of prompt diagnosis of congenital defects in the developing fetus; perinatal centers will be set up in Gomel, Mogilev, and Brest on the basis of oblast birthing facilities, with diagnostic consulting rooms; easily accessible and comprehensive medical genetics consulting facilities will be organized for all families at risk for children born with congenital and inherited pathologies; a republic center will be organized on the clinical base of the Oncology Department at the Minsk Medical Institute for the comprehensive treatment of cancer and precancerous diseases of the thyroid; ultrasound diagnostic facilities and endoscopy and oncological consulting offices will be opened in Khoyninskiy, Lelchitskiy, Braginskiy, Narovlyanskiy, Yelskiy, Vetkovskiy, Dobrushskiy, Checherskiy, Komyanskiy, and Buda-Koshelevskiy rayons in Gomel Oblast, in Kostyukovichskiy, Krasnopol'skiy, Slavgorodskiy, Klimovichskiy, Cherikovskiy, and Bykhovskiy rayons in Mogilev Oblast, and Stolinskiy and Pinskiy rayons in Brest Oblast; the number of endocrinology beds for adults and children will be increased in Gomel on the base of the oblast hospital up to 80, on the base of the city hospital up to 60, and on the base of the oblast children's hospital up to 20; in Mogilev Oblast these figures will be up to 60 beds for the oblast hospital and up to 10 beds for the children's hospital; immunology laboratories based on the oblast hospitals will be opened

in Gomel, Mogilev, and Brest; and specialized outpatient facilities each with 120 beds will be organized on the base of the permanent hospitals.

Before 1991 mobile medical and diagnostic stomatological outpatient facilities (or laboratories) will be set up in contaminated regions for early diagnosis of oncological diseases. Endocrinology consulting offices will be set up at the rayon hospitals in those areas. Before 1995 bases for hematological outpatient facilities will be created and built in Gomel and Mogilev.

During 1990-1992 oblast consulting and diagnostic centers will be set up in Gomel and Mogilev, and interrayon diagnostic centers in Mozyr, Zhlobin, Khoyniki, Cherikov, Klimovichki, and Chechersk.

Starting from 1990 branches of the Belorussian Scientific Research Institute of Radiation Medicine will be organized in Mogilev and Gomel and the staffs of these institutes will be increased.

Before 1991 a differentiated system will be devised to provide outpatient facilities for the populations of Brest, Gomel, and Mogilev oblasts depending on the degree of contamination of territory with radionuclides, and also for persons directly involved in the cleanup following the accident at the Chernobyl AES and its consequences in resettlement zones and the zone of permanent monitoring, and methods for the provision of outpatient facilities and standards for evaluating clinical and laboratory studies will be established. The following kinds of physicians will be included on the staffs of the central rayon hospitals: oncologists, endocrinologists, laboratory technicians, dermatologists and venereologists, pediatricians, therapists.

By 1995 there will be up to 44 medical personnel per 10,000 inhabitants in Gomel and Mogilev oblasts. Each year at least 250 graduates of medical institutes and at least 1,000 graduates of medical schools will be sent to work in those oblasts. In order to reinforce personnel well-appointed housing will be built before 1991 for all medical and pharmaceuticals specialists sent there after graduation from medical training establishments. In the future housing will be allocated for medical and pharmaceutical workers on a goal-oriented basis.

Starting from 1990 the wage conditions as laid down by normativ documents will be introduced for the entire territory of Gomel and Mogilev oblasts, and also for contaminated areas in Brest and Minsk oblasts; permission will be granted to medical personnel in all categories in contaminated regions to work according to two rates of pay; military commissariats are forbidden to draft for any kind of military service or drafted work junior medical specialists sent to Gomel and Mogilev oblasts; physicians and middle-level medical personnel in Gomel, Brest, and Mogilev oblasts will be given training in radiation medicine on a stage-by-stage and priority basis; annual training will continue for students at medical institutions in the republic in the training department of Gomel University for 100 of the indigenous

inhabitants of Gomel and Mogilev oblasts; a branch of the medical institute will be opened in Gomel.

The BSSR Ministry of Health will annually be allocated 1 million convertible rubles to purchase imported instruments and reagents for endocrinology studies.

Outside the boundaries of contaminated zones it is planned to provide ongoing health maintenance for the population as follows:

—for preschool children (together with their mothers), schoolchildren, adults with chronic diseases, and pregnant women from the zones of permanent and periodic monitoring, and also for all adults from the zone of permanent monitoring: on an annual basis;—for other categories of the population from the zone of periodic monitoring: once every 2 years. The adult population not suffering from chronic diseases will be provided with health maintenance in leisure establishments (rest homes, tourist bases and so forth).

From 1990 the BSSR Ministry of Health will maintain a round-the-clock health watch in the "Boroviye" sanatorium on children who were subjected to radioactive effects, together with their parents.

Before 1995 it is planned to build two sanatorium pioneer camps, each with 500 places functioning year round, together with a 1,500-place health resort for children and their parents.

In order to provide comprehensive health maintenance measures it is planned not to permit schoolchildren and teenagers to be sent to do agricultural work on territory with a contamination level greater than 5 Curies per square kilometer; to arrange for the unfailing hospitalization of children and pregnant women from these areas in all the republic specialized departments through the central rayon hospitals; to provide before 1995 for the planning and construction in clean zones of sanatoria for children with a total of 5,100 places, and out-of-town pioneer camps with places for 60,000, and labor and leisure camps with places for 31,000; to cover all children of preschool age in zones of radioactive contamination with preschool education, and to expand the network of special groups for children who are frequently or chronically sick, and sanatoria groups in children's preschool establishments; to construction out-of-town dachas for the health maintenance of children of preschool age in clean zone sufficient to accommodate 22,000; before 1992 to adapt out-of-town permanent pioneer camps for physical culture and health maintenance work for parents and children during school vacations and on days off and holidays.

Before 1995 it is planned to build a 500-place sanatorium at the "Naroch" resort, one with 500 places at the "Rogachev" resort, and also the "Logoyskiy" and "Lesnyye ozera" rest homes, each with 250 places; it is intended to build the following outside the republic: a health resort for adults and children with accommodations for 1,500, and two sanatoria pioneer camps each

with 500 places functioning year round; and to allocate 1,200 places at resorts being built outside the republic for health maintenance for workers from zones of radioactive contamination; and to build within the republic tourist projects earmarked for health maintenance for workers and their families (1,200 places); and next year to change the purpose of the 500-place "Chenki" rest home for health maintenance for parents with children; starting from 1991 provision will be made in the "Dnepr" sanatorium now under construction for year-round health maintenance facilities for workers and their children from stricken regions in Mogilev oblast.

The USSR Gosplan will annually allocate at least R40 million for the special cleanup account for the Chernobyl accident for the purchase of imported equipment, diagnostic equipment, sets of reagents and so forth to equip newly constructed public health projects and for current users. Provision will be made for the allocation of R32.5 million of capital investments for the repair and reconstructions of existing hospitals and polyclinics.

Permission will be granted through shared participation by enterprises exporting their own output abroad to allocate 60 million convertible rubles for construction of the 1,500-place "1 Maya" sanatorium at the "Nebug" resort in Tuapse rayon by the Yugoslav "Smelt" company; and for enterprises with export output, and also through cooptation of their own assets to allocate 40 million convertible rubles to build the following sanatoria and residential homes: the "Rodina" 500-place sanatorium in Sochi, a residential home with 500 places in the village of Ahse, Lazarevskiy rayon, and a 250-place residential home in Anapa, to be built by the "Sovsaderm" joint Soviet-Swiss company.

A 150-place children's sanatorium will be built at the Truskavets resort through shared participation of enterprises in Gomel Oblast and funds raised from subbotniks in 1989-1990.

Section III

Material and Financial Privileges for the Population Living in Contaminated Territories

The privileges established for those working in harmful working conditions will also be extended to the population living in the zone of permanent monitoring, as follows: the retirement age is lowered to 55 for men and 50 for women, and the length of annual vacation is extended to 30 calendar days. Additional vacation time will be given to those working in harmful conditions. The total length of vacation time shall not exceed 42 calendar days.

At populated points in the zone of periodic monitoring the length of regular vacation time will be set at 24 working days.

Additional vacation time will be granted in connection with harmful working conditions, over and above the vacation time indicated.

For the population living in the zones of permanent and periodic monitoring the following are established:

- the length of pre-birthing time off for women shall be 70 calendar days;
- the length of partially paid time off for workers to care for children shall be up to 3 years, with monthly payments of up to R70;
- one-time grants for the birth of first, second, and subsequent children shall be R100 and R200 respectively;
- grants for children in low-income families shall be R24 monthly for each child aged under 14 years when the combined family income does not exceed R75 monthly;
- full pension will be paid to working pensioners regarding of the wage (income) they may be receiving;
- differential wages will be established according to higher rates at populated that are contaminated as following:

at 5 to 15 Curies per square kilometer, 30 percent;
at 16 to 25 Curies per square kilometer, 40 percent;
at 26 to 35 Curies per square kilometer, 60 percent;
at 36 to 40 Curies per square kilometer, 80 percent;
at 41 Curies per square kilometer and higher, 100 percent.

Additions to citizens' pensions and grants will be paid using the same criteria.

From 1990 a cash payment of R30 monthly will be introduced for each family member at populated points where the use of locally produced foodstuffs is restricted. As the radiation situation changes at populated points subjected to radioactive contamination, proposals will be substantiated and submitted to the republic government on introducing or repealing higher wage rates (or salaries) and the R30 monthly cash grants for family members.

In connection with the resettlement of the inhabitants of populated points in the republic subjected to radioactive contamination, the following compensation and privileges are established:

- the cost of building (houses, orchard sheds, dachas, business premises) shall be fully compensated according to the assessment as determined by insurance documentation, taking into account sums received under the terms of state obligations and voluntary insurance;
- the following cash sums will be paid for fruit and berry plantings and sowings, and also for uninsured agricultural animals: R500 for single citizens, R1,000 for families made up of two persons, and R250 for each additional family member;
- a one-time grant will be paid to the worker himself equal to the size of his monthly salary (wage) at his old work, and a sum equal to one-fourth of the grant for each family member;
- the cost of the worker and the members of his family moving will be paid (except for cases in which an

administration offers the corresponding moving expenses);

- workers will be paid wages based on their salary (wages) at the old place of work for the days spent moving to the new location and setting up in a new home (up to 6 days);
- families that resettle from contaminated areas shall be given interest-free loans for domestic fitting out up to a ceiling of R5,000 repayable over a 15-year period dating from the date that the loan was issued.

Before 1990 the question of privileges introduced in the zones of permanent and periodic monitoring for those assigned to these zones will be reviewed.

Starting from 1990 privileges will be extended to the inhabitants of all populated points within the boundaries of farms if at some populated points on those farms higher wages and grants have been introduced because of the restricted use of foodstuffs produced locally and on private subsidiary plots.

Section IV

Agroindustrial Production and Forestry Under Conditions of Radioactive Contamination

From 1990 the introduction of plant growing and livestock farming will be halted on land with a level of contamination greater than 40 Curies per square kilometer and reforestation of that land will be started. On land with lower levels of contamination it is possible to organize experimental bases belonging to scientific research institutes in order to obtain "clean" seeds for agricultural crops.

On the basis of scientific research and practical experience of work gained in 1990 in the aftermath of the accident, the necessary changes will be introduced in the conduct of agricultural production on arable land where the level of contamination is less than 40 Curies per square kilometer, with concretization of the specific features of production by zones according to the level of contamination.

In 1990 a start will be made on shifting the specialization of agricultural land with a level of contamination of 15 to 40 Curies per square kilometer and a set of measures will be implemented (tilling the soil on ploughed land and land used for fodders, using fertilizers, lime and other materials) to exclude the production of output contaminated above permissible levels. Legumes, buckwheat and flax will be removed from crop rotations and larger areas will be sown to corn for grain, silage and green fodders, eared grain crops and perennial grasses for seed (without using post-harvest residues for fodder for dairy stock). Radical improvement or regrassing of meadows will be done on all territories contaminated with radiocesium at levels greater than 1 Curie per square kilometer. Each year areas will be set aside for grazing cattle being privately used by citizens on grass grown on ploughed arable land or on hay, and on pasture on which

livestock produce with minimum levels of contamination is being obtained not exceeding the temporary permissible level. It is proposed to continue the application of high doses of mineral fertilizers.

Milk production will be halted in places where it is impossible to obtain "clean" output after the necessary agrotechnical, land improvement and decontamination and other measures have been carried out. Farms in these zones will be switched to rearing and fattening hogs and poultry. Top priority will be given to improving unfavorable farms in terms of tuberculosis in cattle by means of totally replacement with healthy stock.

In 1990 regional standards will be drawn up for the content of nitrates and residual amounts of pesticides in agricultural output for regions subjected to radioactive contamination, and at particular farms technology will be introduced for obtaining fruit and vegetables using biological plant protection agents and restricting the amount of nitrates in this output to a minimum.

Before the end of 1990 it is planned to provide enterprises and organizations and kolkhozes and sovkhoses with agricultural equipment and tractors with sealed cabins, and with bulldozers and mobile cranes and adequate numbers of buses to transport people, and motor transport with sealed bodies to carry produce and other equipment.

Because as a result of resettlement of inhabitants from territories contaminated with radionuclides and the withdrawal of arable land, additional demand for meat to feed the population stricken by the accident will amount to 101,000 tons, and 688,000 tons of milk, it has been proposed that the USSR Gosplan significantly reduce deliveries from the BSSR to the all-union stocks of meat products during the 13th Five-Year Plan.

Provision has been made for the republic to receive an annual budget allocation of R357 million to pay for the additional expenses that will be carried by kolkhozes and sovkhoses in order to obtain clean output on territories with a level of contamination of from 1 to 40 Curies per square kilometer.

Section V

The Organization of Trade and Public Catering, Strengthening the Material-Technical Base for the Consumer Cooperative System and State Trade, and Personal Services for the Public

Before 1994 trade areas will be made available for stores and reception points in the public catering network at populated points in the monitored zone up to established norms. Stores will be opened in all populated points that do not have a permanent trade network with a population of more than 50 persons.

In the purchase of consumer goods at wholesale fairs, and also in the distribution of market stocks at them, priority will be given to satisfying demand from the population living in stricken areas.

Interruptions will not be permitted in supplies of everyday goods and essential goods to the public. Trade and public catering in populated points in the monitored zones will be organized using only clean products.

Deliveries of foodstuffs into the trade network located in the monitored zone will be done primarily in weighed and packaged form.

In order to insure unconditional observance of the standards for rational diets for children as recommended by the USSR Ministry of Health, in orders from the trade organizations priority will be given to fresh vegetables and fruit, citrus fruit, and fruit and vegetables for children's diets in preschool establishments, general education schools, and vocational and technical schools.

The opening of dining halls in all sovkhoses and kolkhozes located in monitored zones will be completed before 1991.

The network providing personal services at populated points in monitored zones and at resettlement sites will be brought up to a level that insures the provision of personal services in accordance with the rational use standards.

The comprehensive planning, construction and commissioning of capacities for dry cleaning and laundry, and of domestic facilities and service units will be insured.

Comprehensive enterprises will be equipped to handle clothing and linen, and there will be clothing decontamination stations and dosimetric control facilities.

Section VI

Provision of Fuel and Energy at Populated Points Located in the Zone of Strict Monitoring, the Development of Transport, Highways and Communications The following will be built and commissioned:

—a mainline gas pipeline from Smolensk to Uzhgorod, passing through the territory of rayons in Gomel and Mogilev oblasts contaminated with radionuclides, and gas pipelines to cities and populated points before 1995.

Before 1995 gas networks, electricity power transmission lines and transformer substations, and production projects earmarked for contaminated zones will be built and commissioned; the Gomel No 2 Heat and Electric Power Station will be expanded and the new state regional electric power station will be built in the Belorussian SSR;

—a scheme will be devised to provide heat to cities and populated points in contaminated areas by the end of 1990.

Before 1995 work will be done to build general-purpose highways and roads for kolkhozes and sovkhoses on contaminated territories (including the provision of proper amenities for rural populated points and the

construction of city bypass systems); television and radio projects, automatic telephone lines, communications cables, and regional communications centers and communications departments will be built, expanded, and reconstructed; river ports will be built to insure deliveries of non-ore construction materials for construction organizations in Gomel and Brest oblasts; a system will be set up to exercise effective control over emissions of nitrogen oxides and soot from diesel engine exhausts into the environment.

Section VII

Scientific Support for Problems Concerning the Normal Life Activities of the Population in Regions Subjected to Radioactive Contamination

Before 1992 a comprehensive evaluation will be made of the radiation, chemical, social and other environmental factors and their proportional contribution to people's state of health, taking into account Soviet and world experience. On this basis a proposal will be submitted to the republic government on the most rational use of resources in order to create as favorable an environment as possible and improve people's health prolong their life expectancy. The radiation situation will be clarified annually on the territory of the BSSR, including populated points in the zones of permanent and periodic monitoring, to determine the content of cesium 135, strontium 90, plutonium 239 and plutonium 240, and a map will be produced showing the radiation situation, records, predictions, and recommendations; the dynamics of radioactive contamination of the soil; and the presence of and patterns in migration of radioactive isotopes in typical natural and anthropogenic landscapes in contaminated territory in the Belorussian SSR.

A determination will be made of the distribution, content, composition, physical and chemical properties and migration of "hot" particles in various types of soil and in the atmosphere and water systems on contaminated territory. A map of the distribution of "hot" particles will be compiled before 1995.

A determination will be made of the dynamics of changes in the radiation condition of underground water in the BSSR and recommendations will be drawn up for preventing their contamination.

The dynamics of the accumulation of radionuclides by plants will be clarified. Plant-discriminators of radionuclides will be matched in order to develop grass mixes. A study will be made of the behavior of radionuclides in the "soil-plant" system and methods devised for lowering the entry of radionuclides into plants, and recommendations will be made on the rational use of plant resources.

Scientific baselines will be established for the conduct of forestry under conditions of radioactive contamination. A study will be made of the distribution of radionuclides according to the elements in the forest biogeocenosis and an evaluation made of the dynamics of contamination of

forestry products. A determination will be made of the effect of radioactive contamination on seed reproduction for the main forest-forming stock. Methods will be devised to deal with insect pests in forests contaminated with radionuclides.

Systematic observation of the status of radioactive contamination will be organized for animals and water and ground ecological systems, and of possible ecological effects.

Before 1995 an evaluation will be made of the ecological consequences of radioactive contamination and concomitant factors. Over the 5-year period a system will be devised and introduced to evaluate the state of health of the population on territory contaminated with radionuclides, and to determine safe living and working conditions, and to develop methods to diagnose, prevent, and treat diseases and clarify the effect of low radiation doses and their combined effect on the body.

Long-term predictions will be made of the irradiation of the population.

The formation of radiation doses will be permanently monitored.

A set of sanitation-and-hygiene regulations will be drawn up to insure radiation safety for the population and substantiate the possibility of long-term residence of the population on contaminated territories.

An evaluation will be made of the chronic, combined effect of doses of radiation and of chemical and other factors on the incidence of disease among the population in monitored areas of the BSSR. Methods will be devised for evaluating the degree of radiation and chemical effects on the human body and human tissue, and preventive and rehabilitation methods will be applied.

The functional status of the nervous, cardiovascular, and digestive systems of the body will be clarified, along with the processes of adaptation in persons living on contaminated territories of the BSSR. Models will be developed for outpatient care, along with methods for the diagnosis, correction and prevention of disorders found.

A study will be made of the epidemiology of cardiac asthenic disease, arterial hypertension and heart rhythm disorders, especially for secondary prevention in persons subjected to the effects of radiation.

A determination will be made of the immune status of children living in the monitored zone and in the zone of strict monitoring in Gomel and Mogilev oblasts.

The status of the immune system will be permanently monitored.

Studies will be conducted of complication in pregnancy and birth, and of prenatal infant mortality among women subjected to the effects of radiation.

A study will be made of the cytogenetic and genetic-biochemical aspects in children and the status of the genetic apparatus in persons subjected to the effects of radiation.

A comprehensive epidemiological evaluation will be made of the incidence of malignant neoplasms, and ways will be determined to prevent oncological disease among the population.

A determination will be made of the course of diseases of the upper respiratory tract and of skin diseases among the population living in zones of the BSSR contaminated with radionuclides. Methods will be devised to treat and prevent the disorders found.

A system will be developed to monitor disabilities and the reasons for them, giving due consideration to the ecological status of regions of the BSSR, and recommendations will be drawn to prevent disabilities among the population living under conditions of a higher background radiation.

Hygiene requirements will be established for organizing the regime for the day, studies, and work and leisure for children and juveniles in children's preschool establishments, schools, and vocational and technical schools in monitored regions of the BSSR.

An evaluation will be made of the immediate and long-term consequences of the acute and chronic effect of low doses of radiation on the most important bodily systems with the aim of devising methods of post-radiation recovery.

A study will be made of "hot particles" in human and animal respiratory organs, and studies of their radiobiological effects will be conducted.

Research will be done on the biological effects of the combined action of ionizing radiation and other harmful factors on the body for the purpose of predicting immediate and long-term consequences.

A study will be made of sociopsychological and legal features of populations living on contaminated territories.

Special technologies and methods will be developed for carrying on agriculture in zones of radioactive contamination, and a system of farming for zones of radioactive contamination, and a system for treating and decontaminating soils so as to insure a lower accumulation of radioactive substances in the harvest.

A manual will be compiled for truck gardening and horticulture, and methods treating the soil for radical improvement of hayland and pastureland, along with technological methods for harvesting and processing the main kinds of agricultural crops.

Agricultural equipment will be developed and manufactured for work under conditions of radioactive contamination.

A special system will be devised for carrying on livestock farming in zones of radioactive contamination.

Methods will be devised to decontaminate and treat raw materials contaminated with radionuclides and to recover buried radioactive waste.

Technology and equipment will be developed and introduced under industrial conditions for removing radionuclides from meat and milk.

The BSSR Ministry of Housing and Municipal Services together with Belorussian State Committee for Hydrometeorology and oblistpolkoms will from next year a special service to maintain and service radioactive waste burial installations.

Section VIII

Organization of National Education and Cultural Services for the Population in Contaminated Zones

Universal education in matters of radiation safety will be introduced for the republic population through special programs. Provision will be made in schools, vocational and technical schools, secondary specialized schools and VUZes, and in faculties and higher institutes for a course in radiological protection.

Before 1995 training halls, general physical training halls, and physical culture and health maintenance complexes will be set up in every school, vocational and technical school and preschool establishment and provided with appropriate equipment.

Priority will be given to providing medical personnel, teachers, and personnel to work in the sphere of culture and other institutions and organizations of social importance, giving due consideration to the needs of the rayons located in the zone of radioactive contamination.

Provision will be made in vocational and technical training establishments and in production for training for work personnel in the mass occupations for enterprises, establishments, and organizations located in the zone of radioactive contamination, giving due consideration to all their requirements.

In order to reduce personnel turnover and improve the establishment of graduates from higher, secondary specialized and vocational and technical schools in regions located in the zone of radioactive contamination, the necessary living and everyday conditions and material conditions for their residence will be created.

Noncompetitive enrollment in higher and secondary specialized training establishments and in the training departments of VUZ's will be extended for graduates for schools located in contaminated areas.

Sanatoria with places for 200, and five sanatoria-rest homes with 570 places will be planned and built for the

Gomel and Mogilev teacher advanced training institutes, the Gomel Polytechnical Institute and the Mogilev Technology Institute.

Sanatorium forest schools with preschool departments for 1,130 places for year-round health maintenance for children, and permanent pioneer camps of the sanatorium type for summer health maintenance for children and teenagers living in zones of radiation contamination will be designed and built.

Theater and concerts centers will be opened on the base of the rayon houses of culture in stricken areas, and will be equipped with the necessary musical instruments, and plans will be made to give concerts, out-of-town shows, and performances by amateur drama collectives.

Section IX

Development of the Construction Industry and the Construction Materials Industry. Material-Technical Support.

Provision will be made for the commissioning of capacities to produce 400,000 tons of cement, 1,285 million bricks, walling mats, 5,000 cubic meters of crushed rock, 826,000 cubic meters of prefabricated reinforced concrete and other materials and articles, making maximum use of advanced Soviet and foreign experience in technical decisions, including resource-saving and energy-saving technologies.

Together with the all-union organs, appropriate ministries and departments will fully satisfy demand for material-technical resources and machines and equipment for carrying out work to build projects in the social sphere and the material-technical base for kolkhozes and sovkhoses and enterprises and other projects, and also what is needed to carry out the entire set of work associated with the cleanup following the accident at the Chernobyl AES.

Section X

Organization of Monitoring of the Radiation Situation, the Status of the Environment, and the Level of Contamination in Agricultural Output

The radiation situation will be clarified each year on the territory of the BSSR, including populated points in the zones of permanent and periodic monitoring, with respect to contamination with cesium 137, strontium 90, plutonium 239 and plutonium 240, and maps of the radiation situation will be compiled along with reports, predictions and recommendations.

Plans for long-term comprehensive sanitation and hygiene, socioeconomic, and agricultural measures for the planned improvement of the radiation situation will be drawn up for each populated point in zones of contamination.

There will be permanent monitoring of the level of irradiation in the population in zones of contamination,

paying special attention to children and to person employed in agricultural production.

By early 1990 a special sanitation regulation will have been drawn up for carrying out work on withdrawn and resettled territories (including the Poleskiy radiation-ecological reserve), and for additional measures to intensify monitoring of maintenance for water and sewage facilities and the planned sanitation purity of populated points.

Starting from 1990 the use of toxic chemicals will be banned in agriculture. The use of aircraft in the treatment of agricultural land and forestry plantations will be banned. The collection, removal and utilization of solid domestic waste will be organized at populated points in accordance with sanitation rules, and radiation monitoring services will be developed and their effective work insured in forestry facilities, and they will be provided with appropriate apparatus and equipment. Additional studies will be organized in forest areas in order to clarify zones of radiation contamination in forests. Permanent radiometric monitoring of timber and food and fodder products marketed to consumers will be organized in all oblasts of the republic.

Section XI

An Information System for Enterprises, Organizations, and Establishments and for the Republic's Population on the Ecological Situation and on Matters Concerning the Cleanup Following the Accident at the Chernobyl AES

An automated data bank will be set up, containing current information on the ecological situation in the republic and on measures devised for the cleanup following the accident at the Chernobyl AES.

An information press center will be set up under the Belorussian Scientific Research Institute of Radiation Medicine jointly with the Belorussian SSR Academy of Sciences Institute of Radiobiology for the purpose of providing the public with information about the radiation situation in the republic.

Booklets, brochures and posters will be published for the public on matters pertaining to the ecology and to medicine under conditions made complicated as a result of the accident at the Chernobyl AES.

Explanatory work will be activated on matters pertaining to radiation medicine and measures to insure maximum health maintenance in the population living in observed regions, using the periodical press and radio and television for this.

The periodic publication of maps showing radionuclides contamination in particular oblasts and rayons and specific farms will be organized.

The number of broadcasting hours for Gomel and Mogilev television will be extended.

Figures will be published regularly on radiation levels on republic territory, the levels of contamination on arable land and in agricultural produce, the course of and results from completion of work to decontaminate populated points, and of land improvement work and agrochemical work, and figures on population doses, the results of outpatient work, and the incidence of disease among the republic's population.

Information stands will be organized in oblast and rayon centers and at all populated points located on contaminated territories to provide information on the radiation situation, and the results of radiometric measurements of agricultural produce produced on kolkhozes and sovkhozes and on citizens' private subsidiary plots, and the state of health among the population.

The program also contains sections on insuring the maintenance of public order, fire and highway safety in monitored areas, and monitoring implementation of the program.

Latvian Party Bureau Fears Split Over Aims

LD3011172489 Moscow TASS International Service in Russian 1440 GMT 30 Nov 89

[Text] Riga, 30 Nov (TASS)—TASS correspondent Valeriy Zaytsev reports:

The Central Committee Bureau of the Communist Party of Latvia has adopted a decision on the need to hold a discussion about the status of the Communist Party of this Baltic republic. It has also been decided to organize working groups for the creation of a draft charter and program of the Communist Party of Latvia (up until now the communist parties of the union republics have been guided by common fundamental documents of the union republics of the CPSU and at the beginning of January 1990 to convene a Central Committee plenum at which the composition of the Central Committee will be renewed and changes will be made in the Central Committee apparatus. It was self-critically acknowledged that the Central Committee Bureau is losing the initiative and is not lending practical assistance to primary organizations.

A subject of trenchant discussion at the sitting, which finished late on Wednesday evening, was the appeal of 39 communists, including of 8 members of the Republican Central Committee, in which they come out in favor of renouncing the "utopian aims of building a communist society, and the dogmatic treatment of Marxism-Leninism". The document says that the Communist Party of Latvia should become a politically, organizationally, and economically independent party and be a component part of the political system of a parliamentary Latvian state, while rejecting the constitutionally guaranteed monopoly of power.

Such a view of the renewal of the party evoked trenchant criticism on the part of many of the first secretaries of the rayon and oblast party committees who took part in

the bureau meeting. Many party organizations of the republic regard the appeal of the 39 communists as a call for a split in the Communist Party of Latvia.

Time will tell if their fears are confirmed.

Chernobyl Veterans Group Formed in Latvia

LD2711133689 Vilnius in English to North America 2300 GMT 25 Nov 89

[Excerpt] [Passage omitted] An organization of Chernobyl veterans has started work in Latvia. Those from Latvia who participated in the after effects of Chernobyl catastrophe have founded a society of their own here in Riga. This is one of the first out of many now springing up in different parts of the Soviet Union. There are around 5,000 people in Latvia who had either volunteered or been called up to work in the catastrophe zone.

They have come together, not because of sheer nostalgia, but to help themselves. Around (?1,500) of them are now suffering from effects of radiation—there have been lethal cases as well—so the organization will have to lobby their case with the authorities. The government health and social protection organizations are not doing enough of what they should, consider Chernobyl veterans.

Procession Pays Homage to Nazi Genocide Victims

LD2611172589 Moscow TASS in English 1616 GMT 26 Nov 89

[Excerpt] Riga November 26 TASS—A memorial procession was held in the capital of Latvia, a Soviet Baltic republic, today in homage to the memory of tens of thousands Jews executed by Nazis in Riga in 1941-1944.

The procession in which people of different nationalities took part went through the streets of the former ghetto and then by the "Road of the doomed" to a forest near Riga, the place of executions.

Flowers were placed at common graves, and a meeting was held.

The meeting was opened by Andris Barkans, the deputy mayor of Riga.

"Treasuring the memory of women, children, old people, whose lives were taken, we condemn any forms of racism and discrimination on the basis of nationality," he said. [passage omitted]

Medvedev To Continue 'Dialogue' in Vilnius

LD3011181389 Vilnius in English to North America 2300 GMT 29 Nov 89

[Excerpts] Today Vadim Medvedev, a Politburo member and secretary for ideology of the CPSU Central Committee, arrived in Vilnius. At the airport he was met by the Politburo members of the Lithuanian Communist Party.