

Report

PUBLIC PARTICIPATION IN PRIMARY INVENTORY OF STOCKPILES OF OBSOLETE PESTICIDES

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The project of public participation in primary inventory of stockpiles of banned and obsolete pesticides in Chelyabinsk Oblast was the first project, implemented under the Program. The project was implemented by Eco-Accord Centre in co-operation with the Women's Network of the Urals NGO.

As its major component, the project incorporated holding of a seminar to discuss:

- results of official inventory of stockpiles of banned and obsolete pesticides in Chelyabinsk Oblast;
- public participation in identification of cases of unauthorised storage and application of banned and obsolete pesticides;
- Methodological recommendations for NGOs on primary inventory of banned and obsolete pesticides, developed by experts of the Environmental Committee of the State Duma of the Russian Federation and Eco-Accord Centre;
- selection of pilot districts of Chelyabinsk Oblast for practical implementation of the Methodological Recommendations;
- development of recommendations for further works in the sphere of public participation in primary inventory of stockpiles of banned and obsolete pesticides.

At the second day of the seminar, the roundtable discussion was dedicated to the following issues:

1. Discussion of results of the official inventory of stockpiles of obsolete, unusable and banned pesticides at the territory of Chelyabinsk Oblast

Participation of NGOs of Chelyabinsk Oblast in the official inventory of stockpiles of unusable and obsolete pesticides:

- Monitoring;
- Information dissemination;
- Provision of additional information

2. Opportunities to use public information on cases of unauthorised storages of obsolete and unusable pesticides for the official pesticide inventory works, conducted by the Plant Protection Facility

3. Practical application of the **METHODOLOGICAL RECOMMENDATIONS** for NGOs on primary inventory of banned and obsolete pesticides. The initiative of pilot districts of Chelyabinsk Oblast to conduct primary inventory of stockpiles of obsolete and unusable pesticides.

THE MOST IMPORTANT PROBLEMS DISCUSSED AT THE SEMINAR

In the course of discussions, the seminar participants emphasised that governmental agencies alone cannot assess the whole set of inter-related impacts of pesticides on human health. It is necessary to study health status of residents of areas under heavy pesticide loads. The seminar participants believe that such

research works would additionally promote search for alternatives to pesticides, development of alternative agriculture practices, improvement of farming and selection.

The pesticide-related situation gradually changes. High prices of pesticides do not allow state-run or private farms to purchase large quantities of these chemicals. Farms buy minimal amounts of pesticides to meet their needs.

According to experts, the contemporary application of pesticides in Russia is 10 times lower than in the Soviet period. Now, chemical agents of high biological activity are used. They are less toxic and do not include chemicals of 1st and 2nd hazard grades, except anti-rodent preparations.

Experts noted that, besides pesticides regulated under the Stockholm Convention on POPs, Russia has also banned the following highly toxic chemicals:

furazan (1st hazard grade);
carbamate disinfectants;
phosphorous-organic insecticides (B-58, durban, etc.);
capbophos;
pyrethrin derivatives;
fastack;
zoocides;
zinc phosphide.

At the same time, the country actually does not follow any national policy in the sphere of production and application of pesticides. In the period of the USSR, the country mainly used domestically manufactured pesticides. According to objectives of food security of the state, agricultural facilities were obliged to purchase Soviet pesticides in predetermined amounts that could not be used fully. As a result, agricultural facilities accumulated huge amounts of excessive pesticides. According to the official inventory data, the overall amount of obsolete and unusable pesticides in Russia reaches now about 25 thousand tons.

Inconsistency of the official inventory data

However, it is important to note that inventory data do differ. For example, in the case of Chelyabinsk Oblast, the official figures vary: 60 tons, 77 tons, 130 tons, 150 tons. Why?

According to experts of the Plant Protection Facility, different results of inventories of obsolete pesticides are associated with the fact, that some pesticides may be still used (after expiration of shelf life). However, it is important to note that the due Russian legislation stipulates that only plant protection facilities can issue permissions for pesticide application. If a some quantity of pesticides was withdrawn from a storage facility without a permission of experts of a plant protection facility, we should consider it as a criminal act.

In order to prevent unauthorised application of pesticides, the Plant Protection Facility of the oblast developed a draft order of oblast agricultural directorates on strengthening control in the sphere of management of plant protection chemicals, stipulating re-packaging of pesticides into sealed metal containers.

According to information, provided to the seminar participants, there were cases of illegal selling of pesticide to local residents (sometimes with inadequate marking). Moreover, agricultural chemicals were often stolen from storage facilities, that were not duly protected.

Identification of stockpiles of obsolete and unusable pesticides as a key problem

The seminar participants believe that it is necessary to identify existing stockpiles of obsolete and unusable pesticides. It is the most important problem to be addressed by governmental entities. Methods of pesticide disposal/burial depend on their hazard grades and solubility. If we mix different pesticides or store them together, we face the risk of autoignition.

Identification of chemical preparations belongs to the sphere of responsibilities of the oblast level. Persons, who make decisions on liquidation or burial of chemical preparations, should be sure that pesticides are adequately marked.

Now, "Krasniy Bor" facility manages burial of obsolete and unusable pesticides. Several oblasts of the Russian Federation have already used the opportunity and transferred pesticides to the facility for thermal decomposition (however, "Krasniy Bor" accepts only non-inflammable solid preparations). So far, 7 oblasts of Russia have already transported their obsolete pesticides to "Krasniy Bor" for elimination. Now, Tatarstan initiates similar works.

Quality of storage facilities for obsolete pesticides

What is the quality of storage facilities for obsolete pesticides? This issue was also discussed at the seminar. Now, according to the Plant Protection Facility of Chelyabinsk Oblast, there are 142 operational storages, and 52 of them need capital repairs, because these storages were constructed in early 1960s. The representative of the Plant Protection Facility insisted that these storage facilities are almost empty now, but non-governmental organisations were not satisfied by her words (especially NGOs of Argaiash district of Chelyabinsk Oblast). According to their information, pesticides are stored in dilapidated storage facilities, almost in the open air, moreover, the pesticides cannot be identified due to damaged packaging. Svetlana Ivanova - the agronomist of the Chelyabinsk Oblast Plant Protection Facility - said that she would review the issue. These pesticides should be identified and repacked into metal containers. These works should be financed by administrations of territories where pesticide warehouses are located.

S. Ivanova stressed that rural residents are aware of pesticide-associated risks. So far, no cases of retail trade in pesticides were registered in the oblast. Southern republics of the former USSR purchase many pesticides, but they are sold only usable chemicals.

She also noted, that it is impossible to organise control over all agricultural facilities. Overall, there are 19 operational plant protection facilities in the oblast, while the number of districts is much higher, nothing to say about numerous private farms. It is difficult to organise control. High prices of pesticides serve as a deterrent - agriculture facilities simply cannot afford to buy excessive amounts. S. Ivanova especially stressed that specialists of plant protection facilities would be grateful for assistance of public representatives in the sphere of identification of cases of unauthorised storage, warehousing or application of obsolete or unusable pesticides.

Health impacts of pesticides

The seminar participants paid major attention to health impacts of pesticides. Public health specialists, who participated in the seminar, said that they do not know cases of patients with pesticide poisoning. However, they stressed that some actual poisoning cases were never attributed to pesticides, because it is often difficult or impossible to identify causal linkages. Therefore, we cannot exclude possibilities of workplace pesticide exposure or exposure to pesticide-contaminated food. Many specialists argued that in the case of Chelyabinsk Oblast we should focus on chronic pesticide exposure instead of acute poisonings.

Specialists said that due to long-term storage, many pesticides are stored now in damaged packaging. From the overall amount of obsolete and unusable pesticides, 70% belong to unidentified chemicals. If

exposed to sunlight, pesticides may decompose and release toxic substances - this means that violation of the due storage conditions makes pesticides even more dangerous to human health.

The seminar participants noted that no studies of health impacts of pesticides were made in the oblast in 30 recent years. However, some preconditions for such research studies already exist. Some NGOs of Chelyabinsk Oblast have already called for initiation of study of pesticide contents in blood, urine and breast milk samples.

Raising public awareness of health impacts of pesticides

The seminar participants seriously discussed the issue of awareness raising of pre-schoolers and schoolchildren on issues of health impacts of plant protection chemicals. Participants referred to the case of death of several soldiers, who used "salt" from a bag they found at a field. If we manage to teach children to be careful with plant protection chemicals from their early years, such cases could not have happened.

In the course of the roundtable discussions, representatives of non-governmental organisations said that residents of rural areas do not perceive pesticides as toxic substances. They simply wash pesticide packaging and use these containers for household purposes.

Is there a need to arrange information meetings for residents of rural areas and private gardeners to inform them on pesticide management issues? All participants of the seminar answered the question positively. They believe that such meetings would reduce incidence of pesticide poisoning cases and stealing of pesticides, enhance responsibility of pesticide users of state-run and private farms.

Public participation in primary inventory of stockpiles of obsolete pesticides

In the course of discussing potential public participation in practical identification of cases of unauthorised disposal and storage of banned and obsolete pesticides, the seminar participants stressed importance of the Methodological Recommendations for non-governmental organisations on primary inventory of banned and obsolete pesticides. It is the first document that is not limited to a mere recognition of the problem of accumulation of stockpiles of obsolete pesticides but provides specific recommendations for public representatives on active participation in identification of cases of unauthorised disposal and storage of banned and obsolete pesticides.

Strict compliance with the occupational safety rules was a major issue under discussion at the seminar. Authors of the Methodological Recommendations particularly stressed that the publication is an awareness raising document and does not seek to train public representatives how to take samples and deal with pesticides. Those individuals, who would like to engage into professional inventory of stockpiles of obsolete pesticides, should follow the RF Governmental Decree No. 340 of May 23, 2002, that approved "Regulations on Licensing of Hazardous Waste Management Activities". The Regulations establish procedures of management of hazardous waste, including pesticides. One of the necessary conditions for granting licenses for management of hazardous waste (including inventory works) is associated with the need to have professionally trained waste management personnel.

The Recommendations seek to provide the following information to representatives of the general public: potential places to search for obsolete, unusable and banned pesticides; assessment of pesticide storage sites; procedures of primary inventory of pesticides, reporting formats and entities to submit the information collected.

The seminar participants noted importance of public control of follow-up decisions of governmental bodies in response to public information on cases of unauthorised disposal and storage of obsolete and unusable pesticides. Such public control would ensure efficient results and make a substantial

contribution into addressing the problem of pesticide contamination at the territory of Chelyabinsk Oblast.

The seminar was attended by more than 50 representatives of non-governmental organisations of the oblast, experts and decision-makers of different governmental bodies, including:

- the General Directorate for Natural Resources and Environment in Chelyabinsk Oblast of RF Ministry of Natural Resources;
- the Sanitary and Epidemiological Facility of Argaiash district of Chelyabinsk Oblast;
- Argaiash City Hospital;
- Kunash Forestry Facility;
- Kunash Plant Protection Facility;
- the Environmental Committee of Krasnoarmeisk district of Chelyabinsk Oblast;
- the Chelyabinsk State Agro-engineering University;
- the Federal Territorial Plant Protection Facility of Chelyabinsk Oblast;
- the Plant Protection Facility of Stchuchamsk district of Kurgan Oblast;
- Kasli City Committee for Ecology and Environmental Protection;
- the Legislative Chamber of Chelyabinsk Oblast;
- Kasli City Sanitary and Epidemiological Supervision Facility;
- the Agriculture Directorate of Kasli district;
- the General Directorate for Natural Resources and Environment of RF Ministry of Natural Resources in Kurgan Oblast;
- Federal State Directorate - the Centre for State Sanitary and Epidemiological Supervision in Chelyabinsk Oblast;
- Argaiash subsidiary of Federal State Directorate - the State Seed Inspection in Chelyabinsk Oblast;
- the Administration of Chelyabinsk City Directorate for Ecology and Emergency Response
- the Environmental Directorate of Chebarkul district
- the Committee for Ecology of Argaiash district Administration

The following presentations were made at the seminar:

Speranskaya O.A., the Chemical Safety Program Director of Eco-Accord Centre, a member of the Steering Committee of the International POPs Elimination Network

Objectives of the seminar, prospects of NGOs activities in the sphere of primary inventory of banned and obsolete pesticides

M.Ya. Sobol, the Women's Network of the Urals

The seminar as a component of the NGO Regional Health and Environment Action Program of Chelyabinsk Oblast.

Speranskaya O.A., the Chemical Safety Program Director of Eco-Accord Centre, a member of the Steering Committee of the International POPs Elimination Network

METHODOLOGICAL RECOMMENDATIONS

for non-governmental organisations on primary inventory of banned and obsolete pesticides

- **General**
- **Organising arrangements and procedures of primary inventory.**

Tsitser O.Yu., The Ministry of Natural Resources of the Russian Federation, the Environmental Security Department, the Committee for Ecology of the State Duma of the Russian Federation

Use of reference information of the Methodological Recommendations for primary inventory of stockpiles of banned and obsolete pesticides

Lott D.A., The National Institute of Mechanisation of Agro-chemical Technical Support of Agriculture

TECHNICAL MANUAL FOR INVENTORY, IDENTIFICATION, COLLECTION AND STORAGE OF BANNED AND OBSOLETE PESTICIDES

- Organising pesticide inventory works
- Procedures and methods of identification of unmarked pesticides
- Requirements for repackaging and collection of pesticides
- Procedures of pesticide warehousing and storage
- Main requirements for transportation of pesticides
- Environmental protection
- Safety measures of pesticide management

Motovilov N.L., the Natural Resources Directorate of Chelyabinsk Oblast;

Obsolete, unusable and banned pesticides at the territory of Chelyabinsk Oblast: the inventory results.

Ivanova S.V., the Chief Agronomist of the Plant Protection Facility of Chelyabinsk Oblast

Application of pesticides in agriculture in Chelyabinsk Oblast (situation, problems, labour conditions, etc.)

Zhukovskaya E.V., Chelyabinsk Regional Movement "Haematologists of the World for Children"

Health impacts of pesticides: health monitoring of residents of the most vulnerable areas of the oblast

Basarygina E.V., the Chelyabinsk State Agro-engineering University, the Association of Young Scientists

Safety of agricultural products: practical application of new technologies

Khairulin E.M., the Chief of the Plant Protection Facility of Stchuchansk district of Kurgan Oblast

Problems of pesticides' application in Stchuchansk district of Kurgan Oblast: analysis of the problem and options for improvement

Malafeeva A.I., Ecolin NGO

NGO activities to reduce application of pesticides

BACKGROUND

In Spring 2003, non-governmental organisations of Chelyabinsk Oblast endorsed the Regional Health and Environment Action Program of NGOs.

The idea to develop such a program emerged fairly long ago. Chelyabinsk Oblast belongs to Russian regions with serious environmental problems. Acute environmental problems of the region are still associated with high concentration of heavily polluting industries. Overall, there are more than 15000

industrial facilities-polluters in the oblast. Now, the most serious air pollution problems are observed in Chelyabinsk, Magnitogorsk and Karabash (these cities are incorporated into the priority list of cities with high levels of air pollution).

Chelyabinsk Oblast belongs to the leading regions of the Russian Federation in terms of generation and accumulation of toxic industrial waste (including waste, containing persistent organic pollutants). The oblast accumulated huge amounts of banned and obsolete pesticides. The Plant Protection Facility estimates their stockpiles as 131.4 tons. In the period from 1994 to 1996, 12 thousand tons of banned and obsolete pesticides were illegally disposed off at the territory of the oblast.

Accounting for intrinsic complexity of problems associated with toxic pollution in the region and intentions of authorities and NGOs to make a real difference, more than 40 representatives of NGOs actively participated in development of the Regional Environment and Health Action Program. In the course of the Program development they managed to focus their efforts on addressing priority issues and involve residents of remote areas, minor towns and restricted access zones to the Program development.

One of main sections of the Program is dedicated to chemical safety issues. The section focuses on public/community participation in primary inventory of stockpiles of banned and obsolete pesticides with further submission of these data to local authorities and oblast State Administration for relevant response actions. These actions should be incorporated into the regional plan for implementation of the Stockholm Convention, while the data should be incorporated into official inventory reports on stockpiles of banned and obsolete pesticides in the oblast.