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Legal regulation of disposal of the unusable pesticides accumulated during the Soviet era

Olena V. Hafurova*

Full Doctor in Law, Professor

National University of Life and Environmental Sciences of Ukraine
03041, 15 Heroiv Oborony Str., Kyiv, Ukraine

Olha V. Kukhar

Postgraduate Student

National University of Life and Environmental Sciences of Ukraine
03041, 15 Heroiv Oborony Str., Kyiv, Ukraine

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In the article, it was made a scientific and theoretical analysis of the USSR legislation, Ukrainian legislation. Special attention is paid to the establishment of specific features in the legal regulation of extraction, disposal, destruction and neutralization of unusable or prohibited pesticides and agrochemicals and packing containers from them. The authors come to the conclusion that today, it is worth directing more efforts at the state level to disposal of pesticides accumulated during the Soviet era, considering the need to improve the state of natural environment. First of all, it is needed to approve the state program with the determination of clear measures for its implementation and sources financing. To date, the regional state administrations have the opportunity to solve problems with obsolete pesticides and agrochemicals without interference of the Ministry of Environmental Protection

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*Corresponding author

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and Natural Resources of Ukraine, as well as to determine the most suitable places for disposal of these substances. Thus, to date, the process of reducing the obsolete pesticides has been launched. It is aimed at improving the ecological state in the country, it will help reduce the negative impact on the life and health of people, as well as allow developing the agriculture

Keywords: waste, industrial waste, pesticides, plant protection products, pesticide disposal, packing containers, agricultural sector

Introduction

Considering the EU declared goals as part of the European Green Deal, including the block related to agriculture – the “From Farm to Fork” Strategy, which provides for a neutral or positive impact on the environment, including a reduction in the use of pesticides and mineral fertilizers, it is extremely important for Ukraine to firstly solve the issue of disposal of pesticides accumulated during the Soviet era at the state level.

It should be noted that accumulation of the obsolete pesticides due to the absence of their safe disposal for a long time causes irreparable damage to the environment, and the possibility of unauthorized public access to the extemporaneous storage areas of the obsolete pesticides left over from the Soviet era leads to irreversible negative consequences for the environment and public health.

The work of leading domestic experts in the field of agrarian, land and environmental law are devoted to researching the issues of legal regulation of waste in agriculture, including the unusable pesticides and agrochemicals. These are the leading domestic experts: V.M. Ermolenko [1], V.I. Andreytsev, V.A. Zuev, K.B. Sakadji [2], O.A. Tregub.

The purpose of this article is to conduct the scientific and theoretical analysis of the legal basis for disposal of pesticides accumulated during the Soviet era in Ukraine. Special attention is paid to the historical analysis of regulation of such pesticides and the justification of the need to develop and adopt a state program with the determination of clear measures for its implementation and sources of funding.

Results and Discussion

On the world stage, Ukraine has always been considered as an agrarian state. Even during the Soviet era, Ukraine was the locomotive of agricultural sector, because it had all the necessary prerequisites for this. First of all, these are the large areas of chernozemic soil – one of the most fertile soils, as well as a favorable climate for doing agrarian business. However, even in such conditions, it is impossible to obtain high yields and protect agricultural crops from pests and diseases without the use of pesticides. According to V.M. Ermolenko [1], the yielding capacity decreases by 35-50% and the products' quality deteriorates

significantly with the technologies for growing crops without the use of pesticides.

It should be noted that plant protection products were used quite actively in the USSR. In the 20-30s of the twentieth century, the insecticides (arsenic compounds, DDT, etc.) were used to combat the main pests and plant diseases. In particular, in the summer of 1925, it was conducted experiments in the USSR on the use of aviation to control plant pests: it was used the locust poison (DDT), but its effect on people had not yet been studied at that time [2]. In 1956, the Ministry of Agriculture of the USSR prepared and approved the "List of chemical agents for combating pests and diseases of agricultural plants that were permitted for using in agriculture." Since that time, such lists have been published for a five-year period, but with an annual update of the list of substances and regulations for their use. At the same time, in 1961, the Intergovernmental State Commission on Chemical Methods for Controlling Pests and Plant Diseases was established under the Ministry of Agriculture of the USSR. Its main task was to organize the state researches of domestic and foreign pesticides, the registration of substances permitted by this ministry for the use in agriculture and forestry [3]. As it can be seen, a considerable attention has been paid to the use of pesticides. In particular, it was settled the issues of disposal of pesticides. Thus, in the USSR legislation, it has been fixed that pesticides, which have become unusable and prohibited for using in agriculture, are sent (as a rule, in their

original packaging) to chemical enterprises by "SILGOSPHIMIA" ("Agricultural chemistry") organizations for neutralization and disposal. The reception of pesticides coming from agricultural chemistry organizations at chemical enterprises was carried out in specially designated places allocated for the collection, accumulation and storage of toxic industrial wastes that were subject to neutralization and disposal (point 1.4. of the Procedure for accumulation, transportation, neutralization and disposal of toxic industrial waste (Sanitary rules) approved by the Chief State Sanitary Doctor of the USSR dated December 29, 1984 № 3183-84) [4]. Accordingly, at each industrial enterprise, a certain amount of industrial wastes was generated and accumulated per shift, day, in the course of technological process. Depending on the hazard class, the wastes were placed in containers – steel cylinders – especially hazardous waste of the first class of danger, in polythene bags – wastes of the second class of danger, in paper bags – wastes of the third class of danger. The wastes were weighed when filled, included into the waste register, and then delivered to the industrial site and remained in a separate place for subsequent transportation to the landfill for disposal.

However, the thousands of abandoned or dilapidated storage sites of chemicals became the results of a large-scale chemicalization of agriculture, in most cases near the water ponds. With the collapse of agricultural infrastructure, many of wastes, including the remnants of chemical

preparations left in them, turned out to be derelict. Very often, the pesticides and fertilizers were abandoned on the roadside, in forests, ravines, near water, etc. [5].

Thus, the accumulation of unusable pesticides in Ukraine began in the 70-80s of the last century, when the intensive technologies were widely used in agriculture, and the level of pesticide use was 3-4 kg per hectare of agricultural land. As a result, the prohibited and unusable pesticides were stored in large quantities in the centralized warehouses of the state association "Ukragrohim" or in the individual farms [6]. Until 1992, these were the collective farms, after that period – the collective agricultural enterprises (CAE), created on the basis of the Law of Ukraine "On Collective Agricultural Enterprise" dated November 14, 1992. As a result of the CAE reorganization, unusable pesticides were transferred to the balance of regional state administrations or district councils. This process was accompanied by the loss of documentation for plant protection products, which often left in the abandoned storage, buried in the ground or just in the open air.

According to the information contained in the Decree of the Cabinet of Ministers of Ukraine "On the Approval of the National Waste Management Strategy in Ukraine until 2030" dated November 8, 2017 № 820-r, a separate group of wastes of plant protection chemicals consists of unusable and prohibited pesticides manufactured and accumulated back in Soviet times. According to preliminary results,

the amount of accumulation of unusable chemical plant protection products in Ukraine is estimated at 8.5 thousand tons, but these figures are much higher, because there is no accurate information yet. According to the data of Food and Agricultural Organization of the United Nations (FAO), 25.000 tons of unusable pesticides are currently accumulated on the territory of Ukraine [7]. Therefore, the issue of their disposal becomes especially relevant.

According to the Procedure for extraction, disposal, destruction and neutralization of unusable or prohibited pesticides and agrochemicals and their containers, approved by the Resolution of the CMU of March 27, 1996 № 354, disposal, destruction and disposal of unusable or prohibited pesticides and agrochemicals and containers from they are carried out by the enterprises, in which they have been manufactured, as well as by other enterprises that have a license of the Ministry of Environmental Protection and Natural Resources of Ukraine to carry out operations in the field of hazardous waste management, an approval of the state sanitary-epidemiological expertise, on contractual basis (point 3). However, there is not a single plant in Ukraine that could dispose this type of waste in an environmentally safe way. Mainly, due to its high cost. Thus, due to the lack of effective legal framework, constant changes in rules and potential significant financial expenses, such a plant can cost an investor up to 10 million euros [8]. The exportation of unusable pesticides for disposal outside the territory

of Ukraine has become possible due to adoption of the Resolution of the CMU dated November 21, 2018 № 1212 “On Amendments to Point 11 of Regulation on Control for Transboundary Movements of Hazardous Wastes and Their Utilization and Disposal”. It is also important that with the adoption of the above-mentioned Resolution, the regional state administrations have opportunity to solve issues with the obsolete pesticides and agrochemicals without the interference of the Ministry of Environmental Protection and Natural Resources of Ukraine, as well as to determine the most suitable places to dispose these substances. Selection of contractors with licenses for collection, storage and transportation of pesticides, the financing of these activities – the prerogative of regional state administrations [9].

In addition to disposal, the Ukrainian legislation provides for a comprehensive inventory of the accumulation of chemical plant protection products that are prohibited and unusable in agriculture; an inventory of the accumulation of chemical plant protection products that are prohibited and unusable in agriculture is carried out at enterprises, institutions, organizations of all forms of ownership that have storage facilities for the storage of chemical plant protection products (point 2, point 1 of the Procedure for conducting a comprehensive inventory of places for accumulation of chemical plant protection products that are prohibited and unusable in agriculture, approved by the joint order of the Ministry of Agrarian Policy, the Ministry

of Environment, the Ministry of Health of October 18, 2001 № 315/376/412).

Today, the local authorities are actually engaged in the implementation of inventory and disposal of pesticides left over from Soviet times. For this, according to the Law of Ukraine “On Public Procurement” dated December 25, 2015, they should hold tenders. In particular, in the Sumy region, the regional council decided to transfer a subvention to the city budget in the amount of 719,220 UAH in order to solve the problem with the disposal of pesticides. The session adopted a decision on co-financing for the disposal of these pesticides in the amount of 179 thousand 805 hryvnias. That is, the Syniv village council was able to announce a tender for almost 900 thousand hryvnias [10]. However, this is only a small part of the funds that need to be collected in order to clear the region of unusable plant protection products.

Given the catastrophic situation in this area, the National Security and Defense Council of Ukraine adopted a decision “On measures to increase the level of chemical safety on the territory of Ukraine” dated March 19, 2021. It provides that the Ministry of Environmental Protection and Natural Resources of Ukraine together with the local executive authorities in 2021 should provide funding for projects for the disposal and neutralization of non-natural hazardous substances at the expense of funds for the protection of the environment (paragraph 2, point 3, point 6). K.M. Kravtsova [11] rightly notes that the prevention of environmental pollution

by chemicals is one of the important problems of the modern intensive farming.

Conclusions

Therefore, it should be stated that today the local authorities have been given the powers to solve the problem of disposal of unusable pesticides; but at the state level, it is just beginning to discuss the adoption of

appropriate state program. Still, it is urgent to accelerate the approval of state programs with the determination of clear measures for its implementation and the sources of funding and strengthening control over the execution of the powers assigned to local authorities and responsibility in case of ignoring or negligence with the handling of obsolete pesticides.

References

- [1] Yermolenko, V.M. (2010). *Agrarian Law of Ukraine*. Kyiv: Yurinkom Inter.
- [2] Sakadzhi, K.B. (2010). Historical and legal aspects of the use of plant protection products. *First Steps in Science*, 110, 241-248.
- [3] Yevtushenko, M.D., & Maryutina, F.M. (2001). *Pesticides and technical means of their use*. Kharkiv: Kharkiv State Agrarian University.
- [4] The procedure for accumulation, transportation, disposal and burial of toxic industrial waste (Sanitary rules): No. 3183-84. (1984, December). Retrieved from <https://zakon.rada.gov.ua/laws/show/v3183400-84#Text>.
- [5] Methodical recommendations to non-governmental organizations for carrying out the first inventory of outdated and prohibited pesticides and agrochemicals. (2021). Retrieved from <http://www.ecoaccord.org/pop/mr/contents.htm>.
- [6] Cornet, V.A. & Podlisnyuk, V.V. (2021). *The problem of unsuitable and protected pesticides in Ukraine and their impact on public health. Ecological safety*. Retrieved from [http://www.kdu.edu.ua/EKB_jurnal/2010_2\(10\)/pdf/43.pdf](http://www.kdu.edu.ua/EKB_jurnal/2010_2(10)/pdf/43.pdf).
- [7] Official site of FAO. (2021). Retrieved from <http://www.fao.org/ag/AGP/AGPP/Pesticide/Disposal/>.
- [8] About working out: Why Ukraine cannot dispose of the remainder of pesticides. Business (2020). Retrieved from <https://business.ua/uk/protruennya-chomu-ukrajina-ne-mozhe-utilizuvati-zalishki-pestitsidiv>.
- [9] Regional state administrations were given the opportunity to solve the problem of outdated pesticides and abandoned chemical storage facilities without the intervention of the Ministry of Natural Resources. *ECOBUSINESS journal*. (2019). Retrieved from <https://ecolog-ua.com/news/oblasni-derzhavni-administraciyi-otrymaly-mozhlyvist-bez-vtruchannya-minpryrody-vyrishuvaty>.
- [10] Skrypnyak, A. (2021). *Sumy Region announced a tender for disposal of 12 tons of toxic chemicals*. Retrieved from <https://suspilne.media/116935-sumioblenergo-proti-slahrembudu-oblenergo-zvinuvacue-kp-u-kradizci-elektriki/>.
- [11] Kravtsova, K.M. (2015). Circulation of pesticides in the agriculture of Ukraine as an object of administrative and legal regulation. *Scientific Bulletin of the Uzhhorod National University*, 31(2), 143-146.

Правове регулювання утилізації непридатних до використання пестицидів, що накопичені за часів СРСР

Олена Вікторівна Гафурова

Доктор юридичних наук, професор
Національний університет біоресурсів і природокористування України
03041, вул. Героїв Оборони, 15, м. Київ, Україна

Ольга Віталіївна Кухар

Аспірантка
Національний університет біоресурсів і природокористування України
03041, вул. Героїв Оборони, 15, м. Київ, Україна

Анотація

У статті здійснено науково-теоретичний аналіз законодавства СРСР, українського законодавства. Особливу увагу приділяється встановленню особливостей у правовому регулюванні вилучення, утилізації, знищення та знешкодження непридатних або заборонених до використання пестицидів і агрохімікатів та тари від них. Автори доходять висновку, що нині, урахувуючи необхідність покращення стану навколишнього природного середовища, варто більше зусиль на рівні держави направити на утилізацію пестицидів, що накопичені за часів СРСР, в першу чергу затвердити державну програму із визначенням чітких заходів для її реалізації і джерел фінансування. Сьогодні обласні державні адміністрації мають можливість без втручання Міністерства захисту довкілля та природних ресурсів України вирішувати проблеми із застарілими пестицидами та агрохімікатами, а також визначити, де найбільш вигідно здійснювати утилізацію цих речовин. Таким чином, на сьогоднішній день процес зменшення непридатних пестицидів запущено. Він спрямований на покращення екологічного стану в країні, сприятиме зменшенню негативного впливу на життя та здоров'я людей та дозволить розвиватися сільському господарству.

Ключові слова: відходи, промислові відходи, пестициди, засоби захисту рослин, утилізація пестицидів, тара, сільське господарств
