Russian Legislation and Protection from Production and Consumption Waste Pollution

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Abstract

The article discusses legal issues involved in protecting environment from pollution by waste generated by production and consumption; it explains problems are common to most post-Soviet states. Waste from production and consumption is a global problem and requires solutions at an international level. The article builds on studies of the legal basis for managing waste in order to avert harmful effects on human health and environment, as well as to keep that waste circulating in the economy as an additional source of raw materials. The authors analyze effectiveness of administrative methods for preventing pollution and elucidate the differences in the powers of federal, regional and local authorities in these matters. They conclude that all the authorities should improve coordination of their efforts to protect environment from all types of waste. The article provides an assessment of municipal solid waste management reform, often referred to as "waste reform", that came into force in Russia on 1 January 2019. This reform attempted a radical change in the principles and methods for collecting, sorting, processing and disposing of waste. It also envisaged creating a new household culture in society and improving environmental well-being. The authors critique content of the reform and note both its positive and negative aspects. One significant drawback is the high cost of this reform, which is borne mainly by population at large, and is producing vigorous popular discontent. The negative financial consequences of the reform for citizens can be reduced by arranging an effective system of environmental payments, including payments for pollution from production and consumption waste following the principle that polluter should pay. In Russia, economic regulation for preventing environmental pollution from production and consumption waste is centered on setting fees for negative environmental impacts when disposing of waste and charging recycling and ecological fees that are paid by organizations and individuals. The authors contend that, despite its steady improvement, current system of environmental payments is ineffective in achieving environmental objectives, and they regard the system of environmental payments as primarily a tool of state fiscal policy. To promote low-waste production, fiscal mechanisms for encouraging use of waste and secondary resources should be developed. As things stand, the state is to take responsibility for handling severe environmental degradations affecting a number of regions in the Russian Federation due to pollution of the environment waste from production and consumption. Specific public authorities are empowered to arrange the regulatory framework in these matters, to organize effective control over law enforcement, and to provide administrative and financial monitoring of state environmental programs.

◯ Keywords

environment; legal protection; production and consumption waste; economic regulation; administrative mechanisms; environmental payments; environmental fees; responsibility.

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1. Introduction

The large-scale "waste reform" that the Russian Federation has begun requires a comprehensive study of the legal relations that arise in connection with the treatment of waste from production and consumption.

This area of legal regulation has been unjustifiably neglected for a long time. The lack of comprehensive and detailed legal studies on the topic led ultimately to increased conflict over the legal relations involved in managing waste from commercial processes.

Disposal of waste from production and consumption is a global problem that needs to be resolved as soon as possible. Some countries use advanced technologies for the purpose and have adopted legislative acts regulating the main issues in disposal of household, industrial and other waste, while other nations continue to address the waste problem in the traditional way by dumping waste in ravines, "forgetting" it in the forests, burying it, dumping it in remote areas, etc.

Pollution of the seas and oceans by waste is becoming an important global environmental problem, but the world community has not yet responded to it adequately. In addition, the great concern expressed about climate change and warming overlooks the fact that incinerating garbage also has a negative impact on the planet's climate.

Russia has developed a reasonable legal framework for protecting the environment from pollution by waste generated by production and consumption, and the main problems with the law come from the way it is applied rather than from any

defects in the legislation as such. Even though the lawmaking has been quite good, the application of it is undermining the effectiveness of the regulatory system.

The Russian government understands that combatting environmental pollution from waste involves a cluster of serious problems that require a systematic and urgent solution. According to official statistics for the period from 2010 to 2017, the amount of waste generated annually increased by 66.5%¹, while the "waste intensity" of Russian industry more than doubled.

The executive branch of the Russian government did intervene promptly to ensure safe handling of extremely hazardous and highly hazardous waste (hazard Class I and II) by amending federal legislation that facilitates its safe processing. The federal government not only coordinates these efforts but also monitors the implementation of environmental measures.

2. What does Russian legislation classify as production and consumption waste?

The Russian law "On production and consumption waste" defines the legal framework for managing production and consumption waste so that its harmful effects on human health and the environment are minimized while recycling is encouraged.

According to this law, waste from production and consumption (sometimes referred to in this article simply as waste) consists of substances or objects which are formed in the process of production, performance of work, provision of services or in the process of consumption and which are disposed of, intended for disposal or subject to disposal. The legal definition of this waste has a number of deficiencies and needs to be revised by law.

The Federal Law "On production and consumption waste" regulates in detail matters involved in consolidating, storing, and disposing of waste; managing and utilizing it; and also waste neutralization and other kinds of measures including its safe transportation (Ignateva I.A., 2018: 12–19; Kichigin N.V., Ponomarev M.V., 2006; Matiyashchuk S.V., 2012).

Because waste comes in such diverse forms, its disposal or utilization require many specific adaptations in Russia's regulations for protecting the environment from pollution by waste, and these specifics are addressed in other federal laws such as "On the sanitary and epidemiological well-being of the population" "On

¹ Government report "On the environmental protection of the Russian Federation in 2017". Available at: http://www.mnr.gov.ru (accessed: 01.06.2020)

² Federal Law dated 24.06.1998 (in the version dated 25.12.2018)

³ This law establishes sanitary and epidemiological requirements for the collection, accumulation, transportation, processing, disposal, and utilization of production and consumption waste, as

safe handling of pesticides and agrochemicals"⁴, and "On the destruction of chemical weapons"⁵.

The establishment of a regulatory framework for preventing pollution by waste from production and consumption depends on a number of factors, and two principal ones are: 1) the type of government imposing regulations (in the present case the Russian Federation is a federal state); and 2) the international obligations assumed by the Russian Federation and formulated in the respective international treaties.

The first factor derives from the dual structure of Russian legislation as either federal law, which is in force throughout entire Russian Federation, or regional law, which is framed by a constituent district of the Russian Federation and is in force only within the boundaries of a given district. However, there is a third level, the municipal one, which consists of the regulatory laws of representative bodies and municipal legal acts of executive or administrative bodies.

For example, the Law of Moscow dated 30 November 2005 "On production and consumption waste in the city of Moscow" deals with the specifics of waste management in a large city and refers to such concepts as waste from medical institutions, biological waste, construction and demolition waste, separate collection of different types of waste, waste sorting, etc.

On a nationwide basis waste anywhere in Russia is divided into five hazard classes depending on the degree of its negative impact on the environment: Class I — extremely hazardous waste; Class II — highly hazardous; Class III — moderately hazardous; Class IV — low-hazard; and Class V — almost non-hazardous.

3. How do administrative mechanisms for protecting the environment from waste work?

Administrative methods have traditionally played a significant role in implementing Russia's environmental measures. However, this has not precluded the use of economic methods for preventing pollution by waste from production and consumption.

Important powers are granted to the executive bodies of the Russian Federation and of the constituent districts of the Russian Federation, as well as to local

well as the procedure for monitoring radiation at centralized facilities for the treatment, neutralization, and disposal of waste from production and consumption.

⁴ This law regulates the procedure for neutralization, utilization, destruction and burial of faulty pesticides and (or) pesticides and agrochemicals whose use is prohibited as well as of their containers.

⁵ Wastes generated in the process destroying chemical weapons are restricted in circulation and may be transferred by the Government of the Russian Federation to the government of the constituent districts of the Russian Federation, which have a preferential right to make use of waste.

executive and administrative self-governing bodies. Authority for waste management is granted by the provisions of federal laws, laws of the constituent districts of the Russian Federation, and by regulatory laws of local governments. Both public and municipal authorities are involved in administration and supervision.

The Government of the Russian Federation has broad powers to organize environmental protection. It determines a uniform national policy for waste management and defines the competencies of the federal executive bodies authorized in that field (monitor, regulate, inspect and enforce).

The Government of the Russian Federation provides economic, social and legal incentives for maximizing waste recycling and also for reducing the amount of waste produced; it identifies the federal executive authorities that are to be involved in waste management and specifies their functions and powers; carries out international cooperation by the Russian Federation in waste management; and exercises other powers with respect to waste management as provided for in the legislation of the Russian Federation.

The Federal Government is also building out the legal framework in these matters by adopting a number of decrees within the assigned competencies. The Government has settled such issues as: municipal solid waste management; management of waste from production and consumption brought about by lighting devices and electric lamps, whose inadequate collection, accumulation, use, neutralization, transportation and placement may harm the life and health of citizens and animals, plants and the environment; setting prices for solid waste management at the municipal level; competitive selection of regional operators for solid municipal waste management; and other matters⁶.

Similar authorities are vested in the governments of the constituent districts. At the regional level, they develop, approve and implement regional programs in waste management, including municipal solid waste; participate in the development and implementation of federal programs concerning waste management; and carry out governmental supervision of waste management at commercial and (or) other facilities subject to environmental oversight by regional governments. They are also authorized to establish various kinds of restrictions on waste management by setting limits and standards applicable to collection of municipal solid waste.

The authorities of local governments in municipal solid waste management include, first and foremost, arranging and maintaining the sites for accumulation of municipal solid waste; establishing criteria for selecting the sites where municipal solid waste will accumulate and maintaining a register of those sites; organizing environmental education and promoting a culture of concern for the environment in disposing of solid municipal waste.

⁶ The total number of Decrees of the Government of the Russian Federation on such topics, including various environmental programs approved by the government, comes to several hundred.

At the federal level the authority to implement integrated measures for protecting the environment from waste due to production and consumption is vested in two specially authorized executive bodies: Ministry of Natural Resources and the Environment (Minprirody) and Federal Service for Supervision of Natural Resources (Rosprirodnadzor).

Minprirody develops and implements state policy and legal regulation for environmental protection, including issues arising in waste management, in municipal solid waste management (except for regulation of tariffs), protection of the atmosphere, state environmental supervision, specially protected nature reserves, and state environmental impact assessment. Rosprirodnadzor is the federal executive body responsible for controlling and supervising environmental management, environmental protection within its competency, which includes reducing negative anthropogenic impact, as well as waste management (except for radioactive waste) and state environmental impact assessments.

4. The Russian Environmental Operator and Russian waste reform

Russia launched its reform of municipal solid waste management, usually called "waste reform", on 1 January 2019, and most of the country's regions have switched to the new system of municipal solid waste management established by waste reform. Sixteen regions of the Russian Federation had previously switched to this system. For the cities of Moscow, St. Petersburg and Sevastopol introduction of the new waste collection system has been deferred until 1 January 2022.

What exactly is Russia's waste reform? It involves creating a new comprehensive system for municipal solid waste management through fundamental changes in the principles and methods for collecting, sorting, processing and disposing of waste, promotion of a new household culture, and environmental improvement.

In addition, a public law company called the Russian Environmental Operator is being created and will become the country's sole waste management firm.

As provided in current legislation, regional operators for municipal solid waste management were to begin operating on or before 1 January 2019 in all regions of the Russian Federation. They are prohibited from burying waste within the boundaries of inhabited regions. In fact, Russia is creating a new sector of the economy and modern infrastructure, which requires building new up-to-date waste processing facilities and landfills that comply with all the international environmental standards.

Russia's population generates about 70 million tons of new waste each year, although only 4-5% of it is recycled or incinerated. Landfills take up 500,000 thousand more hectares each year to bury the rest. The new system is designed to be

more advanced and efficient by incorporating a complete cycle of waste management, starting with transfer of waste from the sites that generate it and extending to recycling, and burial or disposal. In addition, the plan is to construct more than 130 large waste treatment facilities and eliminate unauthorized landfills as part of the National Ecology Project⁷.

Russia intends to launch about 40 waste sorting plants by 2024; 50–60 billion rubles will be allocated from the federal budget for that purpose.

Plans for this national project envisaged effective management of waste from production and consumption by: removing all unauthorized landfills within certain cities by 1 January 2018; reducing air pollution in large industrial centers along with at least a 20% reduction in the total emissions of air-borne pollutants in the most polluted cities; improving the quality of drinking water, including in communities that lack modern centralized water supply; ecological rehabilitation of water resources, involving the Volga River, and preservation of unique water systems such as Lake Baikal and Teletskoye; and preservation of biological diversity with the creation of at least 24 new specially protected nature reserves. The Federal Budget is to provide financial support for the project.

5. Preventing environmental pollution by waste from production and consumption: How do economic incentives work?

Russian legislation currently divides all waste into five groups according to the class of hazard it presents. Russia has a complex system of environmental payments that are levied for polluting the environment, including payments for pollution with waste from production and consumption. The most significant payment is incurred by a negative impact on the environment and the final amount assessed depends on the hazard class of waste from production and consumption.

An analysis of the legislative and other regulatory acts pertaining to environmental protection and waste management finds the following two components that together determine the payment incurred by a negative environmental impact:

payments for emissions of pollutants into the atmosphere from stationary sources, for pollutants in the waste water discharged into bodies of water, and for storage and disposal of waste from production and consumption (waste disposal) (Federal Law "On environmental protection");

recycling fees and environmental fees (Federal Law "On production and consumption waste").

Economic regulation of waste management can have unintended consequences that defeat its purpose. We find, for example, that the law "On production and

 $^{^{7}\,}$ The Project is supervised by the Government of the Russian Federation.

consumption waste" imposes a fee for negative environmental impact when disposing of waste in general and a different fee when disposing of municipal solid waste. However, the law also imposes a surcharge for municipal solid waste disposal in setting the tariffs that are to apply to the firms that handle municipal solid waste. In effect this is double taxation on municipal solid waste management and may be a disincentive that makes to may make it less attractive to private enterprise.

The main objectives in economic regulation of waste management are to encourage a reduction in the amount of waste, to promote its recycling through the economy, to establish the principle that waste disposal is a service with a cost attached, and to provide economic incentives favoring certain activities in waste management.

The law "On environmental protection" prescribes compensation for damage caused to the health and property of citizens as a result of violating environmental legislation. There are two main principles that apply to such compensation. First, the damage to health and property caused by the environmental impact from commercial and other activities of legal entities and individuals is subject to compensation in full. Second, assessment of the extent and amount of compensation for harm caused by violating environmental protection legislation is to be carried out in accordance with the standards stipulated by current Russian legislation. We find that there are three aspects to compensation for harm: the form or type of payment for a negative impact on the environment; the extent of civil liability; and the compensation to be paid for civil liability.

Recycling fees and environmental fees were introduced in Russia relatively recently in 2012 and 2014, respectively.

Recycling and environmental fees share a similar legal nature and objectives and are paid by persons who are potential polluters of the environment. A recycling fee is paid for each vehicle produced or manufactured in the Russian Federation or imported into it. The recycling fee is payable by persons who import vehicles into the Russian Federation, produce vehicles in Russia, and also by those who acquire vehicles in the Russia from persons who have not paid the recycling fee or from persons who have not paid the utilization fee (see below for an explanation of this fee) in violation of the established procedure. Recycling fees are intended to improve environmental impact, in this case by protecting human health and the environment from some of the harmful effects of owning vehicles; the fee is adjusted according to certain technical characteristics of vehicles and their state of repair. The year of manufacture of the vehicle (chassis), its mass and other physical characteristics which affect the cost of waste management when it is no longer in service are factors that determine the amount of the recycling fee,

The legislature has defined environmental fees as non-tax revenue of the federal budget without specifying its status as a fee in the system of mandatory public payments. However, this fee is formally a kind of payment for a negative environ-

mental impact, and it is included in the system of environmental payments that act as incentives for reducing negative environmental impact.

The environmental fee is paid by producers and importers of goods that will be disposed of when no longer in service, and they are to pay it for each particular group of goods by April 15th of the year following the reporting year. The environmental fee for packaged goods that are not ready-to-use items is paid solely for the packaging. Utilization standards are set for each group of goods that will ultimately be disposed of; these standards are arrived at as a percentage of the total number of goods produced or imported for domestic consumption over the past calendar year and depending on the mass or number of units of finished goods or the mass of packaging used in manufacturing those goods.

The utilization fee may be categorized as a special type of mandatory payment introduced in the Russian Federation in order to protect the environment, and it may be classified either as a customs duty or as a tax. This means that there are some nuances associated with administering the utilization fee because it is charged by both customs and tax authorities depending on the circumstances.

Environmental fees are earmarked for a special purpose. Rosprirodnadzor charges them and maintains control over the calculation, completeness and timeliness of their payment. The same federal executive authority enforces penalties in the event that the fees are not paid. The funds contributed to the federal budget by environmental fees are spent on Russian Federation programs that provide subsidies to the constituent districts for co-financing regional waste management programs. These federal budget subsidies are granted through decrees approved by the Government of the Russian Federation.

Priority in granting the subsidies is given to programs ensuring that standards are met in disposal of waste from using goods whose producers or importers have paid the environmental fees that are to cover recycling, as well as to engineering surveys, project documentation, and to construction, reconstruction and technical refitting of waste processing facilities.

However, these targeted subsidies can be provided to the constituent districts only if there is an approved regional program for waste management and a regional waste management scheme.

It should be noted that the main purpose of all types of payments for negative environmental impact, as well as of the future environmental tax, is to encourage environmental protection activities. The incentive function should increase the economic motivation of taxpayers to reduce negative environmental impact and to avoid excessive use of natural resources. We find that the current trends that are taking shape both globally and in Russia portend more ecologically friendly legislation not only by charging for negative environment impact (environmental taxes) but also by reorienting the entire range of tax legislation toward environmental protection. The economic regulation of environmental protection

provided by current legislation should not remain limited to a fee for negative environmental impact or an environmental tax, nor to administrative fines for violating the requirements of environmental protection and compensation for environmental damage caused by violations of environmental legislation. It is also necessary to apply other legal instruments of sound tax policy more widely by including environmental objectives and programs established for users of natural resources along with others aimed at reducing emissions and discharges of pollutants into the atmosphere and bodies of water.

Although the Russian system of environmental payments is steadily improving, it is not very effective in general. In the pursuit of low-waste production, it is necessary to develop fiscal mechanisms that encourage reuse of waste.

6. Waste management: Problems in using economic incentives

Russia is adopting laws that provide economic incentives in waste management. These economic tools are being implemented in everyday practice.

Economic incentives for effective waste management are provided in different forms. First, payments for the negative environmental impact caused by individual entrepreneurs and legal entities that generate waste can be reduced provided that technologies for reducing the amount of waste are introduced.

Second, accelerated depreciation of capital investment in capacity for waste management is allowed, an incentive which will reduce the amount of certain taxes to be paid by an entrepreneur.

Another example of successful use of economic incentives are those for producers of a total of 108 biodegradable materials, including bed linen and other products made of cotton and linen fabric, paper products, and other items approved by the Government of the Russian Federation.

Producers of these biodegradable materials enjoy the following economic incentives:

Reduced taxes and fees prescribed by the legislation of the Russian Federation; Lenient treatment of payments incurred by negative environmental impact when disposing of waste and of environmental fees;

Access to funds from the federal budget and from the budgets of the constituent districts of the Russian Federation as stipulated by the budget legislation of the Russian Federation.

7. Conclusions

The environmental agenda has not easily gained traction in Russian politics and legislation. After beginning with purely declarative standards, the legislature

has moved on to developing administrative and economic schemes that support "green" initiatives for disposing of waste from production and consumption. However, legal regulation requires not only a clear definition of the rights and obligations of the participants in legal relations, but also the establishment of liability for violations of environmental legislation.

The responsibility of the state in preventing pollution by waste from production and consumption has a complex nature. Through its main institutions, the state is responsible for the regulatory framework, for the organization of effective control by law enforcement, and for administrative and financial monitoring of the implementation of state policies.

The Russian government is now aware of its responsibility to address the critical problem of waste disposal situation in the country and is attempting to plan and carry out a set of environmental, legal, and economic measures known as "waste reform".

Mass protests against landfills and unauthorized dumps have jolted the state out of any lethargy in solving the acute problem of waste problem and made it impossible to ignore.

The potential for social unrest surrounding this issue has prompted the state to embark on its waste reform program, but the final implementation of reform after being postponed for decades has led to ambiguity and contradictory decisions.

It has become clear that waste reform is far from being supported by all sectors of society. Rallies against the reform have been held throughout the country since the beginning of 2019. That the authorities were simply ignoring their obligation to solve the waste problem, which in some cases constituted a real threat to people's lives and health, caused popular discontent in 2017 and 2018; but now, the economic aspects waste reform and primarily the high cost of removing municipal solid waste are the objects of criticism⁸.

The experiences of Western countries, which began grappling with the acute social and environmental problem of waste reform long ago, seems more relevant than ever, particularly when it comes to using economic incentives to solve the problem of waste. Some Western economists believe that the reuse of certain types of waste can hinder the production of certain goods. According to their estimates, urban recycling programs also cost about twice as much as placing waste in landfills, and the cost of recycling waste increases in proportion to the amount of recy-

⁸ According to analysts of *Finexpertiza*, an international audit and consulting network, the most expensive waste collection is in the Moscow region at a cost of 3,062 rubles per resident per year. The Leningrad region is in second place with a waste disposal cost of 2,845 rubles. Kamchatka Krai comes in third at 2,645 rubles per person. The least expensive waste collection services are in the Amur region, estimated as 45,12 rubles per person per year. Residents of Primorsky Krai will have to pay 227,35 rubles a year, and in Dagestan 390 rubles. Available at: https://news.mail.ru/economics/36404457 (accessed: 01.06.2020).

cling. Specialists who deal with this problem in the West are often inclined to conclude that it is more cost-efficient to place waste in landfills. Nevertheless, there is one "but", and it concerns the *organization* of dumps and landfills. With proper organization of landfills, disposing of household waste may not be harmful to the environment or to people, and it does have to be extremely expensive. Attention must be paid to how waste utilization is organized and not only to its physical removal which ends by leaving hellish stinking mountains of garbage accumulated for years. In the United States and other Western countries, when landfills were closed, they were turned into recreation areas, and the methane emitted when waste is burned is used to generate electricity (Simon J., 2012).

At this stage, Russia plans to build more than 130 large waste treatment facilities and to eliminate unauthorized landfills. The plan is to build about 40 waste sorting plants every year through 2024 at a cost of 50–60 billion rubles to be allocated from the federal budget.

The experience of the United States can serve as an example of this kind of expansion in waste processing. By the 1990s recycling plants in America were in a state of crisis because of a lack of garbage. Once US companies realized that large modern landfills can become truly profitable, they began to create landfills equipped with the latest technology. And garbage has actually become scarce.

It is obvious that Russia too should apply economic incentives that influence waste management in everyday practice, and then perhaps the time will come when the garbage will become a deficit commodity.

Finally, prospects for the development of Russian environmental legislation and legislation on waste from production and consumption must necessarily be linked to the plans for corresponding legislation in all the EAEU States. Harmonization of legislation within the EAEU will create legal guarantees for the formation of a single economic space in compliance with modern environmental standards.

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