THE MINISTRY OF ENERGY OF THE REPUBLIC OF KAZAKHSTAN
and
THE REPUBLICAN STATE ENTERPRISE "INFORMATION AND ANALYSIS CENTER FOR ENVIRONMENTAL PROTECTION"

NATIONAL EXECUTIVE PROPOSAL ON

POLLUTANT RELEASE AND TRANSFER REGISTER

Astana,

December 2017

Contents

1. Introduction

The current state of development of society requires all countries to form a common ecological, economic, social, political and legal space.

The irrational use of natural resources, the pollution of the environment and, as a consequence, the deterioration of the quality of the environment and human health, including the accelerated industrial and innovative development of our country, at the present stage require the use of more effective levers to reduce the anthropogenic load on the environment.

Air pollution remains one of the leading environmental impact factors that have a negative impact on the health of the population. The greatest negative impact on the atmospheric air is provided by the enterprises of the heat and oil and gas sector, mining and mining processing industry, ferrous and non-ferrous metallurgy.

10% of emissions into the country's atmosphere from stationary sources and the formation of a significant proportion of toxic wastes are accounted for by enterprises engaged in the production of crude oil and associated gas.

The process of pollution, debris and depletion of surface water continues, the main cause of which is the discharge into the reservoirs of untreated or insufficiently treated sewage. Recycling of production and consumption wastes remains one of the priority ecological trends. One of the types of "historical pollution" is persistent organic pollutants (hereinafter - POPs).

In order to fulfil Kazakhstan's commitments to implement the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, the Aarhus Centers have been established whose main functions are the formation and maintenance of information databases in the field of environmental protection and provision of environmental information at the request of individuals and legal entities.

One important factor in the implementation of environmental policies is the adoption of adequate management decisions is effective monitoring and control of pollutant releases and transfers into the environment.

Therefore, the introduction of a national Pollutant Release and Transfer Register (hereinafter PRTR) system will help Kazakhstan to improve the development of emission and release control as well as identify preventive measures and policies to monitor and reduce environmental pollution.

In this regard Kazakhstan is currently considering the possibility of ratifying the Kiev Protocol on PRTRs. The PRTR protocol to the Aarhus Convention, identifies 86 substances and thresholds for reporting, one of the objective is to

empower the public with environmental information and data. Becoming a Member of the Parties to the PRTR Protocol will facilitate the implementation of a PRTR system in Kazakhstan and will simplify the collection and reporting of environmental pollution data.

In order to improve observation, collection and processing of information on the state of the environment it is necessary:

I. Maintenance of functioning of a new infrastructure of the state system of reporting on environmental pollution, on the basis of integration of departmental and regional systems into a single system. The urgent, priority tasks of this direction are:

- Inventory of the components of the infrastructure of the existing system;
- Creation and maintenance of the functioning of a unified structure of information interaction at these levels;
- Establishment of monitoring centers for these levels;
- Creation and maintenance of data banks of all directions on environmental pollutants;
- Ensuring the legal and regulatory framework for the functioning of the system;
- Establishment of mechanisms for the analysis and evaluation of observational data;
- Establishment of a mechanism for integrated assessment and prediction of the state of the environment;
- Determination of the economic mechanism for the functioning of the system.

II. Improvement of the elements of the created system and its infrastructure. To implement this direction, it is envisaged to solve tasks aimed at the future, the implementation of which will radically improve the quality of the functional activity of the reporting system for environmental pollution:

- Optimization of observing networks;
- Optimization of regulations and observation programs;
- Improvement of the instrument-technical base of observation networks;
- Improvement of the technical base and software of information exchange;
- Improvement and unification of the normative and methodological base of observations;

• Identification and optimization of targeted use of information, including for environmental indicators in accordance with international requirements

• Provision of scientific support for the functioning and improvement of the state system for monitoring environmental pollution, including special integrated research, the introduction of modern methods of prompt information retrieval.

The ability to implement PRTR reporting will lead to more effective implementation of international agreements and the solution of environmental problems.

The purpose of the National PRTR Proposal is to provide a complete description of all technical, administrative, organizational and legal elements that will be included in the national PRTR system.

The objective of the National PRTR System is to improve public access to information on POPs and other priority chemicals, as well as to raise public awareness and participation in environmental issues by making available the reported data, giving contextual information of the substances reported, quantities and impact on human health and the environment.

The national PRTR proposal was developed as part of the joint project "Global PRTR Implementation Project as a Tool for POPs Reporting, Dissemination and Raising Awareness for Kazakhstan", financed by the Global Environment Facility (GEF) and implemented by UNITAR and UN Environment. At national level, Kazakhstan is implementing the project through the Republic State Enterprise "Information and Analytical Center for Environmental Protection", Center for "Promoting Sustainable Development".

2. Legislative implementation of the National PRTR System

The implementation of the national PRTR system consists also of organizational, administrative, technical and legal aspects.

At the first stage of PRTR system implementation in the Republic of Kazakhstan, with the support of the OSCE Programs Office in Astana, seminars and national round tables were organized.

Thus, the Ministry of Environment and Water Resources of the Republic of Kazakhstan, with the support of the OSCE Program Office in Astana and the NGO Arnika (Czech Republic), held a meeting on November 12, 2014, on the topic: "Implementation of PRTRs in the Republic of Kazakhstan" experts, members of

the Public Environmental Council of the Ministry of NGO representatives, as well as natural resource users.

The meeting discussed issues and problems of PRTR implementation in Kazakhstan, as well as positive experience of the Czech Republic in this direction. According to the results of the meeting, representatives of government agencies, international experts, members of the Public Environmental Council of the Ministry of the NGO representatives, as well as natural resource users, submitted comments and suggestions to the Rules of the State Pollutant Release and Transfer Registry and to improve the pilot State PRTR.

On July 14-15, 2016, the Ministry of Energy of the Republic of Kazakhstan (hereinafter - the Ministry), the Information and Analytical Center for Environmental Protection RSE, with the financial support of the OSCE Programs Office in Astana, organized the National Round Table on the Aarhus Convention and PRTR.

These events were attended by international expert Martin Skalsky, national experts and representatives of non-governmental organizations, natural resource users, and government agencies.

Based on the results of the National Round Tables, final resolutions were adopted for further work on the implementation of the provisions of the Aarhus Convention and the creation of the State Register of Pollutant Release and Transfer.

In order to improve the legislation on environmental protection, the Environmental Code of the Republic of Kazakhstan was adopted in 2007. The Code summarized and systematized at the legislative level the issues of environmental protection, raised the status of environmental requirements and standards to the level of a direct legislative act, implemented international standards in environmental protection practices.

The existing legislative framework in Kazakhstan has basis to include PRTR requirements, since already includes:

- establishment of standards for emissions and discharges of pollutants, waste generation;
- implementation of both state and industrial control over compliance with emission standards and the transfer of pollutants in the atmosphere, water and soil;
- Requirements for business entities whose activities result in impacts on the environment and public health;
- reporting requirements for emissions, discharges of pollutants, waste generation;

- Monitoring of emissions, discharges of pollutants, places of formation, storage and disposal of waste;
- Providing environmental information to the public.

2.1 New and existing laws and regulations within which the national PRTR system will operate

Today the legal infrastructure of the Republic of Kazakhstan in the field of chemicals management has a legislative basis for building a PRTR system.

In 2016, amendments to the Environmental Code of the Republic of Kazakhstan were made to include the section on the State Pollutant Release and Transfer Register (Law of the Republic of Kazakhstan dated April 8, 2016 No. 491-V), as well as the order of the Acting Minister of Energy of the Republic of Kazakhstan dated June 10, 2016 No. 241 "On Approval of the Rules for the Maintenance of the State Pollutant Release and Transfer Register".

PRTR was introduced at the legislative level in order to implement the obligations of the Aarhus Convention, which Kazakhstan ratified in 2000, with respect to increasing public access to information for each enterprise where it is possible to see the environmental impact of each enterprise separately, and by creating an emission database and pollutants to promote the prevention and reduction of environmental pollution.

This register is a compliance tool for reporting obligations within the frame of the Stockholm Convention ratified by the Republic of Kazakhstan in 7th of June 2007 and principles underlined in the Aarhus Convention and for monitoring the effectiveness of the country's emission reduction policy.

Table 1 - National legislation related to PRTRs

The name of the legislative act	**Responsible government bodies**	**Purpose**
The Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters.	Ministry of Energy of the Republic of Kazakhstan Republican State Enterprise on the Right of Economic Use "Information and Analysis Center for Environmental Protection".	The implementation of the right of the public to access to information, public participation in decision-making and access to justice in matters relating to the environment.

Ecological Code of the Republic of Kazakhstan dated January 9, 2007 No. 212.	Ministry of Energy of the Republic of Kazakhstan.	Prevention and limitation of environmental pollution and damage to it in any other forms, reducing the impact on the climate system, protecting the ozone layer.
Law "On Access to Information" dated November 16, 2015 No. 401-V	Ministry of Information and Communications of the Republic of Kazakhstan.	Regulation of public relations arising from the realization of the constitutional right of everyone to freely receive and disseminate information in any way not prohibited by law.
Rules for maintaining the State Register of Pollutant Release and Transfer (Order of the Acting Minister of Energy of the Republic of Kazakhstan dated June 10, 2016 No. 241)	Ministry of Energy of the Republic of Kazakhstan Republican State Enterprise "Information and Analysis Center for Environmental Protection".	Enhanced public access to information through the creation of a PRTR that could facilitate public participation in environmental decision-making, and contribute to the prevention and reduction of environmental pollution.

In Kazakhstan, the Aarhus Convention was ratified by the Law of the Republic of Kazakhstan No. 92-II of 23 October 2000 "On the Ratification of the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters" (hereinafter the Aarhus Convention).

According to article 1 of the Aarhus Convention, each party guarantees the right to access to information, public participation in decision-making and access to justice in environmental matters.

At the same time, all norms of the Aarhus Convention are aimed at providing the public with reliable environmental information.

Accordingly, these requirements of the Convention are detailed in the Environmental Code of the Republic of Kazakhstan dated January 9, 2007.

The Environmental Code specifies that environmental information should include information and data on the impact of the state of the environment on health, safety and living conditions of the population (art. 159). The activity of government agencies and other legal entities in the formation and dissemination of environmental information is determined by Article 160, according to which

government agencies form, maintain and disseminate electronic databases (cadasters) about planned and ongoing activities, emergency situations of natural and man-made nature. The main list of environmental information includes: EIA, pollutant release and transfer registers, lists of environmentally hazardous industries, regulatory and legal acts, research and other. At the same time, this environmental information is generally available, except for cases stipulated by the laws of the Republic of Kazakhstan (data with limited access). Access to information is provided upon requests and their dissemination in the media, through Internet resources, publications (Article 163). The rights and obligations of entities with regard to environmental information are determined by Article 164 according to which government agencies, as well as persons performing state functions and legal entities providing informational services to the public are obliged to provide open access, including individuals and legal entities. The time and procedure for the provision of environmental information by government agencies is established by legislation on administrative procedures and the procedure for considering citizens' appeals.

The Law of the Republic of Kazakhstan "On the Introduction of Amendments and Additions to Certain Legislative Acts of the Republic of Kazakhstan on Environmental Issues" dated April 8, 2016 No. 491-V, introduced a separate article 160 "The State pollutant release and transfer register" to the Environmental Code of the Republic of Kazakhstan.

In accordance with paragraph 1 of Article 160 of the Environmental Code, the State pollutant release and transfer register is a structured database on the state of emissions and pollution of the environment, placed in the public domain, which is maintained by the authorized body in the field of environmental protection in order to ensure transparency. Accordingly, the information provided by natural resource user in the framework of the Rules for maintaining the state pollutant release and transfers register approved by the Order of the Minister of Energy of the Republic of Kazakhstan dated June 10, 2016 No. 241 will be placed in the public domain.

Along with this, according to point 2 of article 160 of the Ecological Code, only natural resource user who have objects of category I provide information, whereas statistical information includes objects of all categories.

In implementation of Article 160 of the Environmental Code, the Order of the Minister of Energy of the Republic of Kazakhstan "On Approval of the Rules for Maintaining the State pollutant release and transfer register" dated June 10, 2016 No. 241 was adopted.

According to Article 9 of the above-mentioned Rules, the State pollutant release and transfer register (SPRTR) assumes the provision of information placement of natural resource user with Category I facilities in open access on the Internet resource of the Ministry of Energy of the Republic of Kazakhstan.

Thus, the above-mentioned legislation ensures the maintenance of a free and publicly accessible National pollutant release and transfer register.

2.2 Development plan of necessary Draft Legislations

In order to further improve the PRTR system it is necessary to amend the Environmental Code of the Republic of Kazakhstan and the Rules of Conducting the SPRTR, applying the best experience of foreign countries, where this process has a high-quality and safe data processing system provided by natural resource user.

In order to build a PRTR system in Kazakhstan during 2018-2019, the following work is needed to be carried out:

- Development of the Draft Legislation on ratification of the Protocol on PRTRs to the Aarhus Convention. The Ministry of Energy of the Republic of Kazakhstan has sent a proposal to include ratification of the Protocol on PRTRs in the Plan of Concluding International Treaties for 2018. At the moment, a draft law on ratification has been developed and is being negotiated.

- Development of the Draft Legislation "On Amendments and Additions to Some Legislative Acts of the Republic of Kazakhstan on Pollutant Release and Transfer Register". Development of the Draft Legislation is tentatively planned in 2019-2020 after the ratification of the Protocol on PRTRs.

The first Draft Legislation will allow Kazakhstan to legally join the Protocol, and the second Draft Legislation will allow to bring the legislative base of the Republic of Kazakhstan in line with international experience and requirements.

2.3 Existing requirements for environmental reporting that need to be replaced, modified or included in the PRTR reporting framework

Users of natural resource are required to submit annually, in accordance with the current legislation of the Republic of Kazakhstan, periodic reports to the relevant Statistical Accounting and Taxation Authorities.

In the Republic of Kazakhstan enterprises provide information under the Law on State Statistics dated March 19, 2010 No. 257-IV.

The law regulates social relations arising in the process of state statistical activity and is aimed at meeting the needs of society, the state and the international community in official statistical information.

The main principles of state statistics are:

1) consistency and comparability of state statistics with generally accepted international standards, classifications and methods;

2) professional independence and independence in the implementation of statistical activities;

3) ensuring equal access of users to official statistical information;

4) confidentiality and use of primary statistical data solely for statistical purposes;

5) use of all types of information sources, taking into account the quality, timeliness, costs and burden on respondents;

6) reliability, scientific validity, timeliness of provision and public availability of official statistical information;

7) ensuring the safety and security of statistical information, primary statistical and administrative data.

2.4 International cooperation in the field of state statistics

Cooperation in the field of state statistics between the Republic of Kazakhstan and other states or international organizations is carried out in accordance with the laws of the Republic of Kazakhstan and international treaties which the Republic of Kazakhstan is party to.

Table 2 - List of International Conventions in the field of environmental protection, ratified, signed by the Republic of Kazakhstan

№	Name of convention, agreement	The document of the Republic of Kazakhstan on accession / ratification
1	Convention of the World Meteorological Organization, October 11, 1947	Resolution of the Supreme Council of the RK on accession from 18.12.1992. №1791-XII
2	Convention on Biological Diversity. Rio de Janeiro, June 1992	Resolution of the Cabinet of Ministers of the Republic of Kazakhstan on approval of 19.08.1994. №918
3	International Convention on Civil Liability for Oil Pollution Damage. Brussels, November 29, 1969	Resolution of the Cabinet of Ministers of the Republic of Kazakhstan on accession from 4.05.1994. N 244

4	Convention for the Protection of the World Cultural and Natural Heritage.Paris, November 16, 1972	Accession on 29.04.1994.
5	International Convention for the Prevention of Pollution of Ships	Resolution of the Cabinet of Ministers of the RK on accession No. 244 of 4 May 1994
6	The Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques	Decree of the Supreme Council on accession of 20.02.1995 from N 301-XIII
7	The Energy Charter Treaty. Lisbon, December 17, 1994	Decree of the President of the Republic of Kazakhstan on ratification of October 18, 1995 No. 2537
8	United Nations Framework Convention on Climate Change (UNFCCC). Rio de Janeiro, 11 June 1992	Decree of the President of the Republic of Kazakhstan on ratification of 04.05.1995. № 2260
9	United Nations Convention to Combat Desertification.	Law of the Republic of Kazakhstan on ratification of 07.07.1997. No. 149-1
10	Montreal Protocol on Substances that Deplete the Ozone Layer. Montreal, September 16, 1987 Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, London, 27-29 June 1990 Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, adopted in Copenhagen from 23 to 25 November 1992, and Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, adopted in Montreal from 15 to 17 September 1997 Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, adopted in Beijing on 3 December 1999	Law of RK on accession of 30.10.1997. №176 Law of RK on accession of 07.05.2001. №191-II Law of the Republic of Kazakhstan dated April 6, 2011 No. 426-IV The Law of the Republic of Kazakhstan of April 23, 2014 No. 198-V
11	Vienna Convention for the Protection of the Ozone Layer. Vienna, March 22, 1985	Law of RK on accession of 30.10.1997. №177-I

12	Convention on International Trade in Endangered Species of Wild Fauna and Flora, which are in danger of extinction. Washington, March 3, 1973	Law of the RK on accession No. 372-1 of April 6, 1999
13	Convention on Environmental Impact Assessment in a Transboundary Context. Espoo (Finland), February 25, 1991.	Law of the RK on accession of 21.10.2000. No. 86-II
14	Convention on Long-range Transboundary Air Pollution. Geneva, November 10, 1979	Law of the Republic of Kazakhstan on accession of 23.10.2000. No. 89-II
15	Convention on the Transboundary Effects of Industrial Accidents	Law of the RK on accession of 23.10.2000. No. 91-II
16	The Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters	Law of the Republic of Kazakhstan on ratification of 23.10.2000. No. 92-II
17	Convention on the Protection and Use of Transboundary Watercourses and international lakes. Helsinki, March 17, 1992.	Law of the RK on accession No. 94-II of October 23, 2000
18	Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal. Basel, March 20-22, 1989	Law of RK on accession of 10.02.2003. № 389-II
19	Convention on Wetlands of International Importance, especially as a Waterfowl Habitat (as amended by the Paris Protocol of 3 December 1982 and amended in Regine on 28 May 1987)	Law of the RK on accession of 13.12.2005. No. 94-III.
20	Framework Convention for the Protection of the Marine Environment of the Caspian Sea (Tehran, November 4, 2003)	The Law of the Republic of Kazakhstan on ratification of December 13, 2005 No. 97-III.
21	Stockholm Convention on Persistent Organic Pollutants. Stockholm, May 22, 2001	Law of the Republic of Kazakhstan of June 7, 2007 No. 259
22	Rotterdam Convention on the Application of the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade	Ratified from the 2007 SAM

23	Convention on the Conservation of Migratory Species of Wild Animals. Bonn, June 23, 1979	Law of the Republic of Kazakhstan on accession No. 96 of December 13, 2005
24	Cartagena Protocol on Biosafety to the Convention on Biological Diversity	Law of the Republic of Kazakhstan of June 17, 2008 No. 43-IV
25	Kyoto Protocol to the United Nations Framework Convention on Climate Change. Kyoto, December 11, 1997 Amendment to Annex B to the Kyoto Protocol to the United Nations Framework Convention on Climate Change	Law of the Republic of Kazakhstan dated March 26, 2009 No. 144-IV Decree of the President of the Republic of Kazakhstan of August 25, 2011 No. 145
26	The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity	The Decree of the President of the Republic of Kazakhstan on Accession No. 1025 of March 17, 2015
27	Protocol on Regional Preparedness, Response and Cooperation in the Case of Oil Pollution Incidents to the Framework Convention for the Protection of the Marine Environment of the Caspian Sea (Aktau Protocol).	It was signed on August 12, 2011 in Aktau.
28	Paris Agreement, Paris, December 12, 2015	Ratified by the SAM of November 4, 2016 No. 20-VI

Within the framework of international treaties of the Republic of Kazakhstan, Committee on Statistics of the Republic of Kazakhstan have the right to disseminate statistical information and exchange experience on the statistical methodology used. In the table below are listed the responsible ministries and departments which are accountable for collecting and managing statistical data.

Table 3 – Statistical reporting of the Republic of Kazakhstan

Forms of reporting	Responsible ministries / departments	Purpose
2-ТП (air) - statistical form of the state statistical observation "Report on the protection of atmospheric air".	Ministry of National Economy of the Republic of Kazakhstan (Committee on Statistics)	Data records on stationary sources of pollution characterizing the amount of discharged, trapped and disposed pollutant
4-ОС- statistical form of the state statistical observation "Report on the costs of environmental protection."	Ministry of National Economy of the Republic of Kazakhstan (Committee on Statistics)	Accounting for environmental payments and fees for the use of natural resources aimed at protecting the environment by types of environmental protection activities
2-ТП (water) - statistical form of departmental statistical observation "Report on the abstraction, use and discharge of water"	Ministry of National Economy of the Republic of Kazakhstan (Committee on Statistics); Ministry of Agriculture of the Republic of Kazakhstan (Committee on water resources)	Accounting for pollutants contained in water bodies of the Republic of Kazakhstan

2.4.1 Statistical form of 2-ТП (air)

By the order of the Chairman of the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan dated November 30, 2016, No. 290, the statistical form of the national statistical observation of the 2-ТП (air) "Report on the protection of atmospheric air" was approved. The report is submitted annually to the territorial statistical body by legal entities and (or) their structural and separate units having stationary sources of air pollution.

Data of the statistical form 2-ТП (air) allow to determine the amount of emissions of pollutants and greenhouse gases into the atmosphere.

This report reflects information on emissions of 115 specific pollutants and greenhouse gases from point sources of pollution, 35 of which are covered by PRTR reporting.

The form of departmental statistical observation 2-ТП (water)

According to the order of the Chairman of the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan dated December 25,

2014 No. 94, the form of departmental statistical observation of 2-ТП (water) "Report on the abstraction, use and discharge of water" was approved.

The responsible state body for the formation of data on the abstraction, use and discharge of water is the Committee on Water Resources of the Ministry of Agriculture of the Republic of Kazakhstan. The report is annually submitted by water users using water for agriculture, for production, domestic needs and hydropower.

Data of the statistical form 2-ТП (water) allow to determine the amount of water taken from water sources, as well as assess the impact on the environment in connection with wastewater drainage and discharge.

In addition, the report reflects information on the content of 56 pollutants in wastewater, of which 18 PRTRs are covered by the PRTR (unit of measure is milligram /litre).

By the order of the Chairman of the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan dated November 30, 2016, No. 290, the statistical form of the state statistical observation "Environmental Costs Report" 4-OS was approved.

This statistical form of the 4-OC annually accounts for environmental payments and fees for the use of natural resources aimed at protecting the environment by nature protection activities. Nature protection activity is a process of conservation, restoration and reproduction of the natural resource potential, which should be an important component of economic activity in general.

The report allows you to keep a record of the costs of protecting and restoring atmospheric air, protecting water sources from pollution by sewage, managing waste, protecting and restoring soils, combating noise and vibration, protecting biodiversity and landscapes, protecting radioactive scientific research,, as well as keep records of fees for regulatory emissions, including discharges.

Responsible for accounting of environmental charges and fees is the Ministry of National Economy.

Also, in accordance with Chapter 14 of the Environmental Code of the Republic of Kazakhstan, natural and legal persons carrying out special nature management are obliged to carry out industrial environmental control.

The program of industrial environmental control is developed as part of the draft Emission Standards and on the basis of the Order of the Minister of Environmental Protection of the Republic of Kazakhstan dated February 14, 2013

No. 16-Ө "On Approval of Reporting Requirements on the Results of Industrial Environmental Control".

Also, in accordance with Article 133 of the Environmental Code of the Republic of Kazakhstan, the users of natural resources maintain internal records, forms and submits periodic reports on the results of industrial environmental control in accordance with the requirements established by the Ministry of Energy.

Thus, Kazakhstan has different reporting requirements. For example: the Ministry of Energy of the Republic of Kazakhstan is carrying out the basic system of reporting on production monitoring, the Statistics Committee has other forms for the collection of pollutants (2-ТП (air))

3. Reporting requirements and methodology for estimating data for point sources

3.1 Definition of technical terms

The national legislation provides for similar terms for the definitions used in the Protocol on PRTRs, such as: "pollutant", "emission", "off-site transfer", "diffuse sources", "waste", "other waste", "recovery".

Table 4 - Comparative table of definitions used in the PRTR Protocol and national legislation

№	Protocol on PRTR	National legislation of the Republic of Kazakhstan
1.	"Emission" means any introduction of pollutants into the environment as a result of any anthropogenic activity, whether it is intentional or emergency, planned or unplanned, including spillage, emission, release, injection, disposal or discharge into dumping or through sewage systems without final treatment of wastewater.	1) Emissions to the environment - emissions, discharges of pollutants, the location of production and consumption wastes in the environment, the placement and storage of sulphur in the environment in an open form (paragraph 43, Article 1 of the Environmental Code of the Republic of Kazakhstan); 2) Emissions - harmful (polluting) substances, in the form of waste and crankcase gases of internal combustion engines and the evaporation of fuel of motor vehicles (subitem 1, item 4, art.1 of the RoK GD dated December 29, 2007 N 1372 "On approval of the Technical Regulation on the requirements for the emission of harmful (polluting) substances of motor vehicles issued in circulation on the territory of the Republic of Kazakhstan")
2.	"Diffuse sources" means a variety of small or scattered sources from which pollutants can be released into land, air or water, the combined effect of which on these components of the environment can be significant and for which it is practically impractical to collect reporting for each individual source.	1) The unorganized source of harmful emissions is the source of emissions from which harmful substances, without passing devices that additionally set the speed and location of the release, flow directly into the atmosphere if the source is out of the room or through window or doorways in a room not equipped with a ventilation system (such sources can be as the actual technological processes, operations, equipment, places of storage of bulk and liquid substances, and breach of the tightness of equipment equipped with a system gas outlet and a gas outlet disorders themselves (to claim 8, article 2. Techniques for determining the gross pollutant emissions major process equipment engineering plants. Attachment №4 to the order of the Minister of Environment and water resources of the Republic of Kazakhstan dated 12 June 2014, №221-Ө)
3.	"Pollutant" means a substance or group of substances that may be harmful to the environment or human health by virtue of their properties and as a result of their introduction into	1) Hazardous chemicals - substances with properties that can have immediate or potential harmful effects on human health and the environment (Clause 36, Article 1 of the Environmental Code of the Republic of Kazakhstan); 2) Substances that pollute the atmospheric air (Clause 1, Article 1 of the Order of the Minister of Energy of the Republic of Kazakhstan of January 21, 2015 No. 26 "On Approval of the List of Pollutants and Waste Types for

	the environment	Which Emission Standards Are Set"); 3) Substances that pollute the water (item 2, article 1 of the Order of the Minister of Energy of the Republic of Kazakhstan dated January 21, 2015 No. 26 "On approval of the List of pollutants and waste types for which emission standards are established")
4.	"Off-site transfer" means the movement of contaminants or wastes intended for disposal or recovery outside the facility and pollutants contained in waste water intended for cleaning.	1) Transportation of waste - transportation of waste from the places of their formation or storage to places or objects of processing, utilization or burial (paragraphs 18, 2, 1 of the Sanitary Regulations "Sanitary and epidemiological requirements for the collection, use, use, transportation, storage and disposal of production and consumption wastes "). Also, the term "waste transportation" is mentioned in the conceptual apparatus of the Environmental Code of the Republic of Kazakhstan (paragraphs 21-1, 31, 59-1, 59-2, 59-3 of article 1 of the Environmental Code of the Republic of Kazakhstan). In addition, the above term is used in articles 114, 255, 271, 273, 280, 288 of the Environmental Code of the Republic of Kazakhstan. 2) "Transboundary impact" means any significant adverse effects arising from changes in the status of transboundary waters caused by human activities whose physical source is located wholly or partly in an area under the jurisdiction of a Party for the environment in the area under jurisdiction of the other Party. Such environmental consequences include the effects on human health and safety, flora, fauna, soil, air, water, climate, terrain and historical monuments and other tangible objects, or the interaction of these factors; they also include the consequences for the cultural heritage or socio-economic conditions arising from the changes in these factors (Article 2, Article 1 of the Law of the Republic of Kazakhstan of October 23, 2000 No. 94-II "On Accession of the Republic of Kazakhstan to the Convention on Protection and use of transboundary watercourses and international lakes "); 3) "Transboundary impact" - harmful effects on the territory of the State of one Party arising from the deterioration of the quality of the waters of transboundary rivers due to human activities, the source of pollution is wholly or partly located in the territory of the State of the other Party (Article 2, Article 2 of the RoK PP from September 30, 2011 No. 1114 "On approval of the Agreement between the Government of

		the Republic of Kazakhstan and the Government of the People's Republic of China on the protection of the quality of waters of transboundary rivers"; 4) "Transboundary movement of wastes" means any movement of hazardous or other wastes from an area under the national jurisdiction of one State to or through an area under the national jurisdiction of another State, either to or through an area not under national jurisdiction of any or the state, provided that such transportation affects at least two states (clauses 5, 2, art.1 of the Rules of Import, Export and Transit of waste., RK of July 11, 2007 No. 594); 5) "Transboundary movement" means any movement of hazardous or other wastes from an area under the national jurisdiction of one State to or through an area under the national jurisdiction of another State, either to or through an area not under the national jurisdiction of any State, at least two states (Section 3, Article 2 of the Law of RK of 10 February 2003 No. 389 "On Accession of the Republic of Kazakhstan to the Basel Convention on the Control of Transit border transportation of hazardous wastes and their disposal "); 6) "Long-range transboundary air pollution" means air pollution, the physical source of which is wholly or partly within the territory under the national jurisdiction of one State and whose negative effect is manifested in the territory under the jurisdiction of another State, that it is generally impossible to determine the share of individual sources or groups of emission sources (Article 1 of the Law of the Republic of Kazakhstan of October 23, 2000 No. 89-II "On the accession of the Republic of Kazakhstan to long distance") CONVENTION Transboundary Air Pollution.
5.	“Waste” means substances or objects that are: a) removed or recovered; b) intended for disposal or recovery; (c) subject to be removed or recovered in accordance with national legislation.	1) "Wastes" are substances or objects that are removed, intended for disposal or are subject to disposal in accordance with the provisions of national legislation (Clause 1, Article 2 of the Law of RK of 10 February 2003 No. 389 "On the accession of the Republic of Kazakhstan to Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal "); 2) Production wastes - the remnants of raw materials, materials, other products and products formed during the production process and completely or partially lost their original consumer properties (Section 60, Article 1 of the

		Environmental Code of the Republic of Kazakhstan); 3) Consumption waste - the remains of products, articles and other substances formed during their consumption or exploitation, as well as goods (products) that have lost all or part of the original consumer properties (Article 79, Article 1 of the Ecological Code of the Republic of Kazakhstan).
6.	Hazardous waste means waste that is introduced in accordance with national legislation	Hazardous waste is a waste that contains harmful substances with one or more hazardous characteristics (toxicity, explosiveness, radioactivity, fire hazard, high reactivity) and may present a direct or potential hazard to the environment and human health on their own or by coming into contact with other substances (Article 34, Clause 1 of the Environmental Code of the Republic of Kazakhstan)
7.	"Other waste" means waste that is not hazardous	Non-hazardous waste - waste that does not possess dangerous properties (paragraph 33, article 1 of the Environmental Code of the Republic of Kazakhstan);
8	Recuperation	Utilization of waste - use of waste as secondary material or energy resources (item 24, article 1 of the Ecological Code of the Republic of Kazakhstan)

3.2 List of substances subject to PRTR reporting

3.2.1 List of PRTR substances

Currently the list of substances subject to PRTR reporting in Kazakhstan has been established by the Rules for maintaining the State Register of Pollutant Release and Transfer, approved by the Order of Acting Minister of Energy of the Republic of Kazakhstan dated June 10, 2016 No. 241.

The lists of chemicals in the Regulations for air and water emissions are established in accordance with the list by the PRTR Protocol to the Aarhus Convention, except addition of chlorine and inorganic compounds (as HCl) to the list of water releases.

With respect to emissions to land (disposal of production and consumption wastes), the rules for maintaining a public PRTR list of chemicals have not been established.

Based on a review of existing methods for estimating emissions and discussions, it is proposed to amend the established list of chemicals.

First of all, for the purpose of harmonization with international PRTRs, it is recommended to use the entire list of chemicals established by the Protocol on PRTRs. At the same time, the transition to reporting on the entire list of pollutants for industrial enterprises will be gradual. First of all, enterprises will be able to report on those substances that are included in their current permit for emissions and for which they carry out industrial environmental control. In the future, the list of substances for which the enterprises will provide reporting will be expanded in order to approach the list which established by the PRTR Protocol.

According to the list of substances polluting the atmospheric air, add phenols, formaldehydes, hydrogen sulphide, benzapyrene, chromium and its compounds, solid particles.

To implement the first stage of the PRTR in Kazakhstan, it is proposed to establish the following list of pollutants in the ambient air:

1. Methane (CH4)
2. Carbon monoxide (CO)
3. Carbon dioxide (CO2)
4. Hydrofluorocarbon (HFC)
5. Nitrous oxide (N2O)
6. Ammonia (NH3)
7. Non-methane volatile organic compounds (NMVOCs)
8. Nitrogen oxides (NOx / NO2)
9. Perfluorocarbons (PFCs)
10. Six-fluoride sulphur (SF6)
11. Sulphur oxides (SOx / CO2)
12. Hydrochlorofluorocarbons (HCFCs)
13. Chlorofluorocarbons (CFCs)
14. Halons
15. Arsenic and its compounds (as As)
16. Cadmium and its compounds (in the form of Cd)
17. Chromium and its compounds (in the form of Cr)
18. Copper and its compounds (in the form of Cu)
19. Mercury and its compounds (in the form of Hg)
20. Nickel and its compounds (as Ni)

21. Lead and its compounds (in the form of Pb)
22. Zinc and its compounds (in the form of Zn)
23. Aldrin
24. Chlordan
25. Chlordecone
26. DDT
27. 1,2-Dichloroethane (DCE)
28. Dichloromethane (DCM)
29. Dieldrin
30. Endrin
31. Heptachlor
32. Hexachlorobenzene (HCB)
33. 1, 2, 3, 4, 5, 6-hexachlorocyclohexane (HCL)
34. Lindane
35. Mirex
36. PCDD + PCDF (dioxins + furans) (in the form of ect.)
37. Pentachlorobenzene
38. Pentachlorophenol (PCP)
39. Polychlorinated biphenyls (PCBs)
40. Tetrachlorethylene (TCE)
41. Tetrachloromethane (CTC)
42. Trichlorobenzenes (TCB)
43. 1, 1, 1-Trichloroethane
44. 1, 1, 2, 2-tetrachloroethane
45. Trichlorethylene
46. Trichloromethane
47. Taxothene
48. Vinyl chloride
49. Anthracene
50. Benzene
51. Ethylene oxide
52. Naphthalene
53. Di- (2-ethylhexyl) phthalate (DEHP)
54. Polycyclic aromatic hydrocarbons (PAHs) b
55. Chlorine and inorganic compounds (in the form of total HCl)
56. Asbestos
57. Fluorine and inorganic compounds (in the form of HF)

58. Hydrogen cyanide (HCN)
59. PM10 solid particles
60. Phenols
61. Formaldehydes
62. Hydrogen sulfide
63. Benzapyrene
64. Chromium and its compounds

According to the list of pollutants transferred to industrial wastewater, it is proposed to add: total iron, aluminum, suspended solids, surfactants, BOD, COD, nitrites, nitrates, phosphates, sulfates, ammonium nitrogen, dry residue.

To implement the first stage of the PRTR in Kazakhstan, it is proposed to establish the following list of pollutants in water (industrial wastewater):

1. Arsenic and its compounds (as As)
2. Cadmium and its compounds (in the form of Cd)
3. Chromium and its compounds (in the form of Cr)
4. Copper and its compounds (in the form of Cu)
5. Mercury and its compounds (in the form of Hg)
6. Nickel and its compounds (in the form of Ni)
7. Lead and its compounds (in the form of Pb)
8. Zinc and its compounds (in the form of Zn)
9. Alachlor
10. Atrazine
11. Chlordan
12. Chlordecone
13. Chlorfenvinphos
14. Chloroalkanes C10-C13
15. Chlorpyrifos
16. DDT
17. 1, 2-dichloroethane (DCE)
18. Dichloromethane (DCM)
19. Dieldrin
20. Diuron
21. Endosulfan
22. Endrin

23. Halogenated organic compounds (in the form of AOG)
24. Heptachlor
25. Hexachlorobenzene (HCB)
26. Hexachlorobutadiene (HCBD)
27. 1, 2, 3, 4, 5, 6-hexachlorocyclohexane (HCL)
28. Lindane
29. Mirex
30. PCDD + PCDF (dioxins + furans (in the form of ect.)
31. Pentachlorobenzene
32. Pentachlorophenol (PCP)
33. Polychlorinated biphenyls (PCBs)
34. Simazin
35. Taxothene
36. Vinyl chloride
37. Anthracene
38. Benzene
39. Brominated biphenyl ethers of BDE
40. Nonylphenol ethoxylates (NF / NPE) and related substances
41. Ethylbenzene
42. Ethylene oxide
43. Isoproturon
44. Naphthalene
45. Organotinic compounds (as a common Sn)
46. Di- (2-ethylhexyl) phthalate (DEHP)
47. Phenols (as a general C)
48. Polycyclic aromatic hydrocarbons (PAHs) b
49. Toluene
50. Tributylline and Compounds
51. Triphenyltin and compounds
52. Total organic carbon (TOC) (in the form of total C or COD / 3)
53. Trifluralin
54. Xylols
55. Chlorides (as a general Cl)
56. Chlorine and inorganic compounds (in the form of total HCl)
57. Asbestos
58. Cyanides (in the form of a common CN)
59. Fluorides (as a general F)

60. The total amount of iron
61. Aluminum
62. Suspended substances
63. SPAW
64. BOD
65. COD
66. Nitrite
67. Nitrates
68. Phosphates
69. Sulphates
70. Nitrogen ammonium
71. The dry residue

The rules of maintaining a State PRTR operating in Kazakhstan do not establish a list of pollutants, transferred their production and consumption wastes to the soil.

While the existing reporting requirements in the field of waste are intended to be reflected in the accounting of waste in tones and pieces (for mercury-containing lamps, equipment containing radioactive substances). This does not satisfy the provisions of the Protocol on PRTRs, which involves the accounting of pollutants by types of production and types of pollutants. Obviously, this form of waste report is not representative of PRTRs.

It is proposed to establish the following list of wastes containing hazardous chemicals for which reporting is required:

1. Total amount of nitrogen in the waste;
2. Total amount of phosphorus in the waste;
3. Wastes containing arsenic and its compounds (in the form of As);
4. Wastes containing cadmium and its compounds (in the form of Cd);
5. Waste containing chromium and its compounds (in the form of Cr);
6. Wastes containing copper and its compounds (in the form of Cu);
7. Wastes containing mercury and its compounds (in the form of Hg);
8. Wastes containing nickel and its compounds (in the form of Ni);
9. Waste containing lead and its compounds (in the form of Pb);
10. Wastes containing zinc and its compounds (in the form of Zn);
11. Wastes containing alachlor;

12. Waste containing aldrin;
13. Wastes containing atrazine;
14. Wastes containing chlordane;
15. Waste containing chlordecone;
16. Wastes containing chlorfenvinphos;
17. Wastes containing chloroalkanes, C10-C13;
18. Waste containing chlorpyrifos;
19. Wastes containing DDT;
20. Wastes containing 1,2-dichloroethane (DCE);
21. Waste containing dichloromethane (DCM);
22. Waste containing dieldrin;
23. wastes containing diuron;
24. Wastes containing endosulfan;
25. wastes containing endrin;
26. Wastes containing halogenated organic compounds (in the form of AOG);
27. wastes containing heptachlor;
28. Wastes containing hexachlorobenzene (HCB);
29. Wastes containing hexachlorobutadiene (HCBD);
30. Wastes containing 1,2,3,4,5,6-hexachlorocyclohexane (HCH);
31. wastes containing lindane;
32. wastes containing mirex;
33. Wastes containing PCDD + PCDF (dioxins + furans) (in the form of ET);
34. Wastes containing pentachlorobenzene;
35. Wastes containing pentachlorophenol (PCP);
36. Wastes containing polychlorinated biphenyls (PCBs);
37. wastes containing simazine;
38. wastes containing taxophane;
39. Wastes containing vinyl chloride;
40. wastes containing anthracene;
41. Wastes containing benzene;
42. Wastes containing brominated diphenyl ethers (BDE);
43. wastes containing nonylphenol ethoxylates (NF / NPE) and related substances;
44. Wastes containing ethylbenzene;
45. Wastes containing ethylene oxide;

46. wastes containing isoproturon;
47. wastes containing naphthalene;
48. wastes containing organotin compounds (in the form of a common Sn);
49. wastes containing Di- (2-ethylhexyl) phthalate (DEHP);
50. waste containing phenols (in the form of a common C);
51. Wastes containing polycyclic aromatic hydrocarbons (PAHs);
52. wastes containing toluene;
53. wastes containing tributylline and compounds;
54. Wastes containing triphenyltin and compounds;
55. Wastes containing trifluralin;
56. wastes containing xylenes;
57. wastes containing chlorides (as a general Cl);
58. wastes containing asbestos;
59. Wastes containing cyanides (in the form of a common CN);
60. Wastes containing fluorides (in the form of a general F).

The proposed lists of pollutants are preliminary. During the discussion with industrial enterprises, government agencies, non-governmental bodies, it is possible to introduce changes and additions to the lists.

In order to reduce duplication in reporting, the national PRTR system in Kazakhstan should be integrated with, for example, the existing information sources, such as reports on industrial environmental control statistical reporting forms, inventory reports.

3.2.2 Methods for verifying, adding or removing substances from a PRTR

The decision to include or exclude a chemical substance from the PRTR list should be taken after a general discussion with the stakeholders (government agencies, industry, non-governmental organizations). Representatives of all stakeholders are included in the National Steering Committee "The Global PRTR Implementation Project as a Tool for POPs Reporting, Dissemination and Awareness for Kazakhstan" and participate in discussions on various aspects of PRTR implementation in Kazakhstan.

During the pilot implementation of the PRTR in Kazakhstan, it is recommended to develop and approve decision methodology whether to add or exclude contaminants from the PRTR list, which will subsequently be guided by the authorized body in the field of environmental protection.

The process of reviewing the PRTR system in Kazakhstan and the corresponding revision of the list of substances to be reported (and threshold values) will be carried out by the authorized body in the field of environmental protection every two years.

Examples of decision criteria can be the following:

1) actual pollutant is relevant for the emissions of industrial enterprises in Kazakhstan (for example the emissions of halons into the atmosphere are not specific for Kazakhstan);

2) the pollutant is included in the system for the regulation of emissions in force in Kazakhstan;

3) Kazakhstan has a methodology for estimating (calculating) emissions of this pollutant or there is an international methodology for estimating emissions (for example, EMEP, UNEP, OECD, etc.).

The proposed criteria can be the main reference points when deciding whether to include or exclude a pollutant on the PRTR list.

3.3 Criteria and thresholds required to initiate reporting by enterprises or other sources of emissions

According to *paragraph 2 of Article 160 of the Environmental Code* only natural resource user who have objects of category I provide information to State PRTR.

In accordance with *Article 40 of the Environmental Code*, category I enterprises are activities related to the 1st and 2nd hazard classes according to the sanitary classification of production facilities, as well as exploration and mining of minerals, except than common ones.

The category of the facility is established depending on the capacity, operating conditions, the nature and quantity of pollutants released to the environment, noise, vibration, non-ionizing radiation, which have an adverse effect on the environment and human health, determined by the project organization, carrying out this activity with the following issuance of a sanitary-epidemiological conclusion of the territorial subdivision of the state body in the sphere of sanitary-epidemiological well-being of the population.

The category I includes large industrial enterprises of chemical, metallurgical, mining and other industries. A detailed list of enterprises belonging to category I is provided in Appendix 1 to this document.

In implementation of Article 160 of the Environmental Code, the Order of the Minister of Energy of the Republic of Kazakhstan "On Approval of the Rules for Maintaining the State Register of Emissions and Transfer of Pollutants" dated June 10, 2016 No. 241 was adopted.

According to Article 9 of the above-mentioned Rules, the State pollutant release and transfer register (SPRTR) assumes the provision of information placement of natural resource user with Category I facilities in open access on the Internet resource of the Ministry of Energy of the Republic of Kazakhstan.

At the same time, we note that the largest volume of emissions to the environment is accounted for by natural resource user, who have objects of category I, which is more than 80%. In the Republic of Kazakhstan there are more than 2,000 natural resource users. In this regard, it is proposed to consider the category I of enterprises as the criterion necessary for the definition of accountable enterprises.

In accordance with the Order of the Minister of Environmental Protection of the Republic of Kazakhstan dated July 23, 2009 No. 143, it is proposed to divide the enterprises of the I category into two groups. The first group includes user of natural resources, whose emissions exceed:

1) 5 000 tons per year of pollutant emissions, for the oil and gas industry - 500 tons per year;
2) 10 000 tons per year of discharges of pollutants;
3) 500 000 tons per year of wastes of production and consumption.

These enterprises receive permission for emissions in the Committee for Environmental Regulation and Control of the Ministry of Energy of the Republic of Kazakhstan. The remaining enterprises, whose emissions do not exceed the above, are given permission in the territorial departments of the environment located in regions and cities of national importance.

Thus, it is proposed to include in the first stage (pilot) the implementation of PRTRs I category facilities that are authorized by the Committee for Environmental Regulation and Control of the Ministry of Energy of the Republic of Kazakhstan. This will make it easier to pass the approbation of the system. In the future, after setting up the system, it will be possible to connect the other objects of the I category.

3.4 Enterprises or other sources of emissions exempted from mandatory PRTR reporting

At present, Category I companies are subject to mandatory reporting without any exceptions. Natural resource user of II, III, IV categories can be considered exempt from PRTR reporting.

Enterprises of II, III, IV category relates to enterprises of various industries: chemical, metallurgical, construction, textile, food and others. For these enterprises, a sanitary protection zone is set up to 300 meters. The list of these activities related to enterprises of II, III, IV categories is regulated by national legislation and is presented in Annex 1 to this document.

According to analytical data in the Republic of Kazakhstan, the load in the environment from enterprises of Classes II, III, IV is only 20%. In this connection, the Ministry of Energy of the Republic of Kazakhstan made a decision to release enterprises of this category at the initial stage of the implementation of the State Pollutant Release and Transfer Register.

In case of approval by the government agencies, industrial enterprises and non-governmental organizations of the issue on the division of Category I facilities, entities that are exempt from compulsory reporting may include Category I entities that receive permission for emissions in the territorial subdivisions of the authorized body in the field of environmental protection.

This is expedient to introduce of PRTR at the first stage. In subsequent stages, it is advisable to increase the list of enterprises for reporting, including diffuse sources of pollutant emissions.

3.5. Consideration of requests for confidentiality claims

3.5.1 Procedures for claiming reported data as confidential

Ecological publicity as an ecological and social phenomenon is a complete, open and reliable information of the population and governing bodies in the established order on the state of the environment, on the use of natural objects, on their restoration and protection, on the incidence of the population caused by environmental pollution, on other environmental factors, as well as on measures aimed at eliminating the consequences of negative influence. With the availability of environmental information, environmental problems are better and more efficiently resolved, and sound management decisions are made. Therefore, the State aims to protect the environment that is conducive to human life and health,

the concealment of facts and circumstances threatening the life and health of people by officials, entails responsibility in accordance with the law (Article 31 of the Constitution of the Republic of Kazakhstan), legislation guarantees the right of everyone to access to environmental information and comprehensive public participation in addressing issues of environmental protection and sustainable development (Article 4 of the Environmental Code of the Republic of Kazakhstan), information Ecology, fire safety, as well as the sanitary-epidemiological and radiation situation, food safety is not subject to restriction of access (art. 6 of the Information Act).

In accordance with paragraph 2 of Article 4 of the Aarhus Convention), environmental information is provided on request as soon as possible, but not later than one month after the submission of the request, "unless the extent and complexity of the relevant information justifies the extension of this period to two months after the request is made." The applicant is informed of any extension of this period and of the reasons justifying the adoption of such a decision.

In accordance with Article 164 of the Environmental Code, the public has the right to receive environmental information in the requested form, if there is no reason to provide it in another form. In accordance with paragraph 4 of Article 165 of the Environmental Code, a public agency that does not have the requested environmental information shall forward the request to the competent state authority within the time limits established by law. According to Clause 6 of Article 7 of the Law of the Republic of Kazakhstan "On the Procedure for Consideration of Appeals from Individuals and Legal Entities", it is required to forward the appeal to the relevant entities whose competence includes resolving the issues raised in circulation, within a period not later than three working days, with a communication to the applicant.

The Code of the Republic of Kazakhstan No.193-IV of September 18, 2009 "On the health of the people and the health care system" (Article 88) provides for free receipt from government agencies and organizations of reliable information on factors affecting health, including the state of the environment.

The refusal to obtain environmental information regarding data and data with restricted access is based on the following legislative acts of the Republic of Kazakhstan: Civil Code of the Republic of Kazakhstan No. 268-XIII of December 27, 1994 (trade secrets and protection of intellectual property rights), Criminal Procedure Code of July 4, 2014 year 231-V ЗРК (the secret of operational and investigative activity, inquiry and preliminary investigation), the Law "On Informational support" the Government of the Republic of Kazakhstan dated June

8, 2006 N 526 (violation of the law "On State Statistics" of March 19, 2010 No. 257-IV (with amendments and additions as of October 29, 2015) (individuals and legal entities are guaranteed confidentiality of primary statistical information).

According to the Aarhus Convention, *paragraph 4*, *Article 4*, a request for environmental information may be denied if the public disclosure would adversely affect:

(a) The confidentiality of the proceedings of public authorities, where such confidentiality is provided for under national law;
(b) International relations, national defense or public security;
(c) The course of justice, the ability of a person to receive a fair trial or the ability of a public authority to conduct an enquiry of a criminal or disciplinary nature;
(d) The confidentiality of commercial and industrial information, where such confidentiality is protected by law in order to protect a legitimate economic interest. Within this framework, information on emissions which is relevant for the protection of the environment shall be disclosed;
(e) Intellectual property rights;
(f) The confidentiality of personal data and/or files relating to a natural person where that person has not consented to the disclosure of the information to the public, where such confidentiality is provided for in national law;
(g) The interests of a third party which has supplied the information requested without that party being under or capable of being put under a legal obligation to do so, and where that party does not consent to the release of the material; or
(h) The environment to which the information relates, such as the breeding sites of rare species.

Consideration of confidentiality claims of PRTR information requires a detailed analysis of the legislation of the Republic of Kazakhstan in the field of information. When establishing procedures for entering and viewing data subject to confidentiality, Article 12 of the PRTR Protocol should be followed.

In accordance with *paragraph 1 of Article 12 of the Protocol on PRTRs*, the Ministry of Energy of the Republic of Kazakhstan has the right to maintain the

confidentiality of information contained in the PRTR if public disclosure of this information will have adverse consequences for:

• international relations, national defence or state security;

• the administration of justice, the ability of any person to have access to a fair trial or the ability of a public authority to conduct a criminal or disciplinary investigation;

• confidentiality of commercial and industrial information in cases where such confidentiality is protected by law in order to protect legitimate economic interests;

• Intellectual property rights;

• confidentiality of personal data and / or files relating to a natural person, unless that person has given consent to disclosure of such information to the public where such confidentiality is provided for in national legislation.

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When considering requests for confidentiality, the Ministry of Energy of the Republic of Kazakhstan should take into account two aspects:

• If the disclosure of information is of public interest

• If the information is related to emissions or release of pollutants into the environment, the competent authority should consider the claims in a restrictive way.

Information relevant to the public interest is considered information about factors that are harmful to human health and the environment (for example, excessive emissions of pollutants, pollution of natural waters, etc.), environmental deviations from standards, changes in biodiversity of animals and flora. Information can be recognized as relevant to the public interest if there are requests for information from the public with appropriate justification.

After consideration of the request for confidentiality of information, the Ministry of Energy decides whether to permit or prohibit access to such information.

According to the Protocol on PRTRs, all information is publicly available. Accordingly, the burden of proving the existence of a real threat to commercial or other interests, rests with a company or a person claiming that such a threat exists. In cases where there is a real threat to the commercial or other interests of the company or an individual, the company should be provided with a justification so

that the authorized body can then verify the truth of their fears. If the dissemination of information does not pose a real threat to private interests, the authorized body shall reject the request for confidentiality and allow public access to these data.

3.5.2 Procedures for entering general information into the PRTR database instead of information declared classified

A clear procedure for entering general information into the PRTR database instead of the information declared confidential is being developed.

When developing the procedure, it is recommended that the provisions of the PRTR Protocol and international guidelines be taken into account. In cases where the confidential status of information is maintained, the register can specify the type of information withdrawn through, for example, providing general information on the chemical properties and the reasons for such withdrawal.

The form of presentation of information that has the status of confidential, can vary depending on the type of information. In the case where the name of the chemical is confidential, the category of chemicals or similar general information can be indicated.

In any case, the register should clearly indicate the number of cases in which confidentiality provisions were applied and the reasons for which the information was seized. The explanations should not be limited to mentioning the reason that was used to extract information, for example, protection of economic interests. They should explain the reasons for which it was considered that disclosure of this information would have adverse consequences for the economic interests of the facility, as well as why public interest in its disclosure was not regarded as a factor that outweighed it. For example, one of the legitimate reasons might be that the disclosure of the name of the chemical, as well as quantitative emission indicators, will allow competitors to determine by chemical inversion the content of the production process and the efficiency of the facility.

3.6 Reporting formats

In accordance with the current legislation of the Republic of Kazakhstan, reports for the state pollutant release and transfer register are submitted by users of natural resources to the territorial body of the Ministry of Energy of the Republic of Kazakhstan in paper form. In turn, the territorial body provides information for the PRTR in electronic form.

Prior to the introduction and testing of software for online PRTR reporting, users of natural resources will also submit reports in paper form to the territorial offices of the Ministry of Energy.

After the successful implementation of the software and the introduction of appropriate amendments to the Environmental Code of the Republic of Kazakhstan (Article 160) and the Rules for maintaining the State Pollutant Release and Transfer Register, approved by the Order of the Acting Minister of Energy of the Republic of Kazakhstan dated June 10, 2016 No. 241, the reporting will be provided electronically immediately on the portal of the national PRTR of the Republic of Kazakhstan.

3.6.1 Section on general information about the facilities

The provided characteristics of enterprises in the framework of reporting on the Pollutant Release and Transfer Register in Kazakhstan are established by the Environmental Code of the Republic of Kazakhstan and the Rules for maintaining a public PRTR.

In particular, according to Environmental Code information on user of natural resources includes:

1) the name, legal address, type of activity of the user of natural resources;

2) Geographic location of the facilities

2) electronic version of the issued environmental permit;

3) information on the volume of actual emissions to the environment;

4) electronic version of the program of industrial environmental control and reports of environmental monitoring, an action plan for environmental protection;

5) the results of state environmental control;

6) information on mandatory payments to the budget for emissions to the environment, including over-set standards.

Also, as part of the general information on user of natural resources, information is provided on the geographical location of the production site, the main type of economic activity and the production process.

Appendix 1 to the Rules of Maintenance of the State Pollutant Release and Transfer Register specifies the form by which data on user of the natural resources are provided. This form is presented in Annex 2 to this document.

3.6.2 Section on substances used and reported

The information on the actual emissions of pollutants into the ambient air and water in accordance with the Kazakhstan Rules for maintaining a PRTR includes:

- CAS registry number (unique numeric identifier of chemical compounds);
- the name of the pollutant;
- the established standard (tons per year);
- actual emissions (tons per year);
- methods for determining actual emissions (calculation method, instrumental measurements).

During development software for online reporting on PRTRs and introducing amendments to the legislation of the Republic of Kazakhstan on PRTRs, it will be possible to include the following information in the reporting:

• Use of chemicals included in the PRTR list in production processes;

• Transfers from the site (indicating units of measure and quantities of reusable, processed and / or buried substances, including indication of the burial site);

• Accidental releases to the air, water and soil;

• Explanation of changes in emissions / releases or transfers of pollutants compared to those indicated in the previous report;

• Expected or planned reduction of emissions and transfers.

3.7 Methods for estimating emissions

Today Kazakhstan has more than 50 methods for estimating the emissions of various pollutants.

A number of new methodological guidelines in the field of environmental protection are currently under development, as well as being in the stage of adjustment, harmonization and approval.

However, appropriate estimation techniques of emission have been developed for not all pollutants today. In this regard, it is recommended that the use of international emission estimation techniques (for example, developed by EMEP, UNECE, OECD and other international organizations and programs) be ensured at the legislative level. Also in order provide the improvement to the

methodological base of the Republic of Kazakhstan on methods for estimating emissions of pollutants.

Calculation of emissions should be understood as pollutant release and transfer data that is based on experts' assessment, rather than on public reference materials, as well as emission estimations for which there are no accepted international emission estimation methodologies or guidelines for good practice.

Data on emissions and transport of pollutants submitted for each facility can be based on the following three main methods of determination:

- Measurements using measurement techniques included in the register of the state system for ensuring the uniformity of measurements of the Republic of Kazakhstan;
- Calculations using estimation methods and emission factors that are representative of the industrial sectors;
- estimates (non-standardized), based on the best assumptions or forecasts of experts.
- Statistics on the production and use of chemicals.

In addition, methods for estimating emissions, such as materials accounting, emission factors and technical estimates can be used in Kazakhstan. A single assessment of emissions presented in a PRTR can be a combination of some or all of these methods. At the same time, the report should indicate which method of estimating emissions was used.

3.7.1 Existing methods for estimating emissions

In accordance with the legislation of the Republic of Kazakhstan, only methods approved by authorized bodies in accordance with the established procedure can be legitimately applied in the territory of Kazakhstan. Today, Kazakhstan has a number of Orders of the Ministry of Energy of the Republic of Kazakhstan approving the methodology for calculating emissions. Here are some techniques that work in Kazakhstan:

1. Methodology for calculating pollutant emissions into the atmosphere at gas transportation and storage facilities
2. Methodology for calculating gross emissions of harmful substances into the atmosphere for oil refining and petrochemical enterprises

3. Methodology for determining emissions of pollutants into the atmosphere for thermal power plants and boiler houses

4. Methodology for determination of gross emissions of harmful substances into the atmosphere by the main technological equipment of engineering enterprises

5. Methodology for calculating emissions of harmful substances into the atmosphere when working with plastic materials;

6. Methodology for calculating pollutant emissions into the atmosphere from cement production enterprises;

7. Methodology for calculating emissions of pollutants into the atmosphere from Category 4 facilities;

8. Methodology for calculating emission standards from unorganized sources;

9. Methodology for calculating emission standards for harmful substances from stationary diesel installations;

10. Methodology for calculating the norms for placing ash and slag wastes for boilers of various capacities working on solid fuels;

11. Methodology for calculating pollutant emissions into the atmosphere from landfills of solid household waste;

12. Method for calculating the concentrations of harmful substances in the ambient air from emissions of enterprises;

13. Methodology for calculating pollutant emissions into the atmosphere for certain technological processes in metallurgical production.

14. Methodology for calculating pollutant emissions into the atmosphere at gas transport and storage facilities;

15. Methodical guidelines for calculating gross emissions of harmful substances into the atmosphere for oil refining and petrochemical enterprises;

16. Methodology for calculating pollutant emissions from road transport enterprises

17. Methodology for determining emissions of pollutants into the atmosphere for thermal power plants and boiler houses;

18. Methodology for determination of gross emissions of harmful substances into the atmosphere by the main technological equipment of machine-building enterprises;

19. Methodology for calculating emissions of harmful substances into the atmosphere for non-ferrous metallurgy enterprises;

20. Methodology for calculating emissions of harmful substances into the atmosphere in the production of products from plastics and polymeric materials;

21. Methodical guidelines for calculating pollutant emissions into the atmosphere from cement production enterprises;

22. Methodology for calculating emissions of pollutants into the atmosphere from Category 4 facilities;

23. Methodological guidelines for calculating the values of emissions into the atmosphere of pollutants from the main technological equipment of enterprises of the agro-industrial complex, processing raw materials of animal origin (meat processing plants, glutinous and gelatinous plants;

24. The methodology for calculating emissions from enterprises for the production of building materials;

25. Methodology for calculating pollutant emissions from road construction enterprises, including Asphalt-concrete plants;

26. Methodical recommendations on the calculation of emissions from unorganized sources;

27. Methodical recommendations on the calculation of emissions from stationary diesel installations;

28. Method of calculating ash and slag wastes for boilers of various capacities operating on solid fuel;

29. Methodical instructions for calculating pollutant emissions into the atmosphere from landfills;

30. The method of calculating the concentrations of harmful substances in the ambient air from emissions of enterprises;

31. Methodological recommendations on the calculation of discharge standards (maximum permissible discharge) for hazardous substances with sewage into water bodies, filtration fields, on terrain and in wastewater storage facilities

32. A methodology for calculating the emissions of benzapyrene into the atmosphere by steam boilers from power plants;

33. Methodology for calculating pollutant emissions into the atmosphere at railway transport enterprises;

34. Method of calculating pollutant emissions into the atmosphere for certain technological processes in metallurgical production.

35. Methodology for determination of gross and specific emissions into the atmosphere for grain processing enterprises and elevators;

36. Methodological guidelines for calculating pollutant emissions into the atmosphere from forest and steppe fires;

37. Methodology for calculating the amount of waste, trapped and emitted into the atmosphere harmful substances by coal mining and processing enterprises;

38. Methodology for managing emissions under unfavorable meteorological conditions;

39. Methodology for calculating emissions of harmful substances into the atmosphere for enterprises of ferrous metallurgy.

40. ERDF (Environmental regulatory documents federative) 14.1: 2: 4.139-98 "Quantitative chemical analysis of waters. Method for measuring mass concentrations of cobalt, nickel, copper, zinc, chromium, manganese, iron, silver, cadmium and lead in samples of drinking, natural, and waste water using atomic absorption spectrometry "

41. ERD F14.1: 2: 4.135-98 "Quantitative chemical analysis of waters. Method for measuring the mass concentration of elements in samples of drinking, natural, sewage and atmospheric precipitation by the method of atomic-emission spectroscopy with inductively coupled plasma"

42. ERD F14.1: 2.195-03 "Quantitative chemical analysis of waters. Method for performing measurements of mass concentration of elements in samples of drinking, natural, sewage and atmospheric precipitation using atomic-emission spectroscopy with inductively coupled plasma "

43. ERD F14.1: 2.248-07 "Quantitative chemical analysis of waters. Method for performing measurements of mass concentrations of orthophosphates, polyphosphates and phosphorus of total and dissolved orthophosphates (phosphate ions) in samples of drinking, natural, waste water.

These techniques will be used as reference documents in the preparation of a national guide on assessment methods for key and priority sectors to be developed under the Global PRTR Implementation Project as a tool for POPs reporting, dissemination and awareness-raising for Kazakhstan. Key priority sectors in the pilot phase of PRTR implementation include oil refining, mining, energy, metallurgy, and chemical industries.

3.8 Supporting and Promoting Reporting Enterprises

3.8.1 Information, instructions and training for reporting industrial facilities

Within the framework of support and assistance to reporting enterprises, the following tools are relevant:

1. Development of a mechanism for the constant informing of companies that fall under the requirements of reporting. The mechanism of constant information may include training on reporting requirements, sending information to users of natural resources through the territorial departments of the environment of the Ministry of Energy of the Republic of Kazakhstan, creating a call-center to support the users of natural resources.

2. The process of training the technology of information collection, mastering the skills of accounting and reporting mechanisms. The questions posed by representatives of industrial enterprises can form the basis for the development of experience, on the basis of which subsequent data collection activities can be most effectively corrected in accordance with the requests of enterprises.

3. The process of instructing enterprises to provide a better understanding of reporting requirements.

4. Development of a manual for the preparation of reports explaining what types of data are needed for analysis, types and methods of estimating measurement data, recommendations on the use of mass-balance estimates or engineering calculations in cases where measurements are not possible, and so on.

For the purpose of training accountable enterprises within the framework of the joint project UNITAR and RSE on the CEC the "Information and Analytical Center for Environmental Protection" of the Ministry of Energy of the Republic of Kazakhstan, "A Global PRTR Implementation Project as a Tool for POPs Reporting, Dissemination and Awareness for Kazakhstan" will be held series of training seminars on PRTR implementation in Kazakhstan. The seminars will be held in 2017-2018 in three cities: Astana, Aktobe, Pavlodar. Table 5 provides a timetable for conducting training seminars for industrial enterprises, government agencies and NGOs.

Table 5 - Schedule of training seminars for industrial enterprises, government agencies and NGOs on the introduction of PRTRs

№	Seminar	Date
1	Training seminar on PRTR in Astana	30th – 31st October 2017
2	Training seminar on PRTR in Pavlodar	2nd November 2017
3	Training seminar on PRTR in Aktobe	26th October 2017
4	Training seminar on PRTR in Astana	February-March 2018

5	Training seminar on PRTR in Pavlodar	February-March 2018
6	Training seminar on PRTR in Aktobe	February-March 2018

Within the framework of the Global PRTR Implementation Project as a Tool for POPs Reporting, Dissemination and Raising Awareness for Kazakhstan, the key and priority sectors are: mining, oil refining, energy, metallurgy and chemicals. Priority in training will be given precisely to these sectors. In the pilot testing of the online reporting system for PRTR developed in Kazakhstan, the enterprises of these five industries will participate from the pilot regions: Aktobe region, Pavlodar region and Karaganda region, which will be trained at seminars in February-March 2018.

3.8.2 Assistance provided during the first reporting cycle

As assistance provided during the first reporting cycle on PRTRs, it is planned to create a call center on clarifying reporting issues on the basis of the RSE on the CEC "Information and Analytical Center for Environmental Protection" of the Ministry of Energy of the Republic of Kazakhstan.

Also on the online reporting site is planned the placement of detailed instructions for completing the reporting.

In addition, the RSE on the CEC "Information and Analytical Center for Environmental Protection" of the Ministry of Energy of the Republic of Kazakhstan on a regular basis conducts training on PRTR.

All this will assist enterprises in properly providing information for inclusion in the state pollutant release and transfer register.

4. Consideration of non-point sources of emissions

At the initial stage of PRTR implementation in Kazakhstan, it is proposed not to include non-point sources of emissions, such as agriculture and transportation, in the list of objects reporting for PRTRs, as well as objects that do not meet the criteria and thresholds necessary to initiate reporting by enterprises or other sources of emissions.

It will be considered to include non-point sources starting from the third cycle of reporting, when a valid methodology for the assessment and calculation of such type of emissions in the country will be available.

5. Data Management System of PRTR

In order to implement a PRTR in Kazakhstan, it is necessary to develop a portal / information system that would allow for the maximum automation of the PRTR maintenance process.

5.1 Requirements and specifications for the software of the PRTR system

During the engineering design of the Pollutant Release and Transfer Register portal the following technical features are taken into account:

1) The amount of substances for which a record is kept in the PRTR. By designing a database of the PRTR system, it is necessary to take into account all substances reflected in the register in accordance with the PRTR Maintenance Rules. Also, one of the requirements for the system should be scalability by the number of substances, the amount of stored data.

2) Technological process and reporting thresholds. For technical design, it is necessary to take into account the approved PRTR maintenance procedure.

3) List of data to be collected (see Annex 2). Data are collected on the volume of actual emissions of pollutants into the air, water bodies (section 3.2.1 of the National Proposal), data on production and consumption wastes, on the location of sulphur, etc. The data is stored both on paper and in electronic media. If the report is submitted on paper, the Ministry of Energy of the Republic of Kazakhstan should include PRTR data in the online reporting system. Natural resource users, who own several production sites located in the same region, provide information on emissions to the environment for each production site separately. Also, each production site shall have a geospatial reference. It assumes not only manual data entry, but also the attachment of scanned versions of documents to the system.

4) Forms of reporting. Screen forms of data entry should strictly comply with the forms of reporting approved in the PRTR Maintenance Rules (Annex 2).

5) Features of the assessment, collection and use of data. As a result of the collection of information at the initial level, information should be structured in accordance with the sections of the database. The information should be presented in a user-friendly form, in accordance with its functional responsibilities and the established access delimitation. The cycle of data collection, processing and transmission should be as close as possible to real time. By entering data into the system, it is necessary to provide format-logical and arithmetic logic control, in order to minimize errors when entering the data and reducing the influence of the human factor. The data transferred by natural resource users should be verified and coordinated by the authorized body before being placed in the public domain. The cartographic block is intended for visualization of spatial data of the location of production sites. The PRTR system should provide for the availability of an analytical tool for the rapid processing of data, the possibility of its development and expansion.

6) Planning of a PRTR database, a list of software and equipment. Planning of PRTR database is carried out by the first stage in engineering design. The structure of the database should strictly correspond to the reporting forms approved in the PRTR Rules. By planning it should be possible to increase and develop it. By choosing a database management system, the requirements for the structure stored data should be determined. The equipment shall ensure the uninterrupted operation of the system and have sufficient power to perform all necessary requests and operations.

7) Interaction with adjacent systems. The PRTR system should not be closed to adjacent systems and should support the ability to export data to related systems. The system should provide the ability to download data from adjacent systems, including spatial data. Compatibility of the system with adjacent ones should be ensured by using a single data exchange format and a common set of reference and classified information.

8) Design and implementation of the system should be carried out in compliance with information security requirements, approved by the legislation and standards of the Republic of Kazakhstan.

5.2 Requirements for the equipment and configuration of the PRTR system

The technical means of the Web portal include the following types of technical means:

- Servers;
- Workstations;

• Active network equipment.

Web portal servers are installed in specially equipped server rooms. Servers, their external storage systems, network switches, shall be scalable and should provide performance enhancements during operation.

The requirements for the additional composition, the number of servers, as well as the requirements for the characteristics of servers, workstations, active network equipment are determined at the engineering stage of the Web portal.

6. Management of the National PRTR system

6.1 Organizational responsibility for data collection and management

Organizational provision of the PRTR system should represent a set of documented organizational and technological solutions and procedures that determine the operating procedure with software and hardware for personnel, both in its normal mode of operation and in the most likely emergency operation modes.

All users should use user manuals that correspond to their duties when working with the system.

6.1.1 Description of procedures and responsible organizations

The execution of the process includes the following sequence:

1) At production sites, the natural resource user having facilities of Category I performs measurements on emissions to the environment (in the air, in water, on production and consumption wastes, and on the location of sulphur formed at production sites). A production site is a protected and fenced territory for the location of production, administrative, sanitary and auxiliary buildings and facilities of an enterprise where the user of natural resources is engaged in activities involving emissions into the environment.
2) The natural resource user every year before April 1 provides information for the previous year on the location of each production site to the territorial body of the authorized environmental protection body (Department of Ecology).
3) The territorial body is identified in the Department of Ecology, which provides information to the Ministry of Environment of the Republic of Kazakhstan, Committee for Environmental Regulation and Control, after checking and conforming information during the second quarter of the year following the reporting year.

4) The authorized body (MoE RK, Committee for Environmental Regulation and Control) places publicly available environmental information on the SPRTR in open access (the State Environmental Information Fund, requests of individuals and legal entities, dissemination in the media, special publications, posting on the Internet, etc.).

The dynamic indicators of the process include the actual emissions of pollutants into the atmosphere; actual emissions of pollutants into water bodies; production and consumption wastes generated at the production site; placement of sulphur formed at the production site; information on mandatory payments for emissions into the environment. In accordance with the Environmental Code of the Republic of Kazakhstan, emissions into the environment are emissions, discharges of pollutants, the placement of production and consumption wastes in the environment, and the placement and storage of sulphur in the environment in an open form.

General management of processes is carried out by the Ministry of Energy of the Republic of Kazakhstan.

Table 6 - The list of tasks and functions to be solved in the management practice is presented in the table.

Member of the process	Main functions and tasks
MoE RK	• Creation of conditions for the preservation, restoration and improvement of the quality of the environment; • Formulating and implementing state policy, improving the system of public administration in the areas of environmental protection, protection, control and supervision of rational use of natural resources, handling of solid domestic waste, state environmental control, economic methods of environmental protection and provision of regulatory legal acts in the field technical regulation and normative and technical documents within the limits of their competence; • Coordination of the activities of central and local executive bodies in the implementation of the state policy in the sphere of activities within the competence of the Ministries; • Improving the quality of the environment, conserving natural resources, ensuring environmental safety and achieving a favorable level of environmentally sustainable development of

	society; • Development of a system for dissemination of information and education in the field of environmental protection; • Organization of the maintenance of the State Environmental Information Fund; • Maintenance of the State Pollutant Release and Transfer Register.
Committee for Environmental Regulation and Control, MoE RK, territorial subdivisions	• Improving the quality of the environment, ensuring environmental safety, conserving natural resources and achieving a favourable level of environmentally sustainable development of society; • improvement of the system of state regulation in the field of environmental protection and state environmental control within its competence; • organization, coordination, regulation of emissions and issuance of environmental permits; • implementation of state environmental control; • issuance of permits for emissions into the environment of facilities within the limits of competence and establishes in them limits on emissions to the environment; • collection, verification, quality control of SPRTR data.
Natural resource user	• implementation of the use of natural resources and (or) emissions into the environment; • provision of information within the framework of the SPRTR.
RSE on CEC "IAC EP" MoE RK	• information and analytical support for the activities of the authorized body of the relevant industry for planning and implementing measures to protect the environment and the realization of the citizens' right to a favourable and healthy environment; • Carrying out of the state environmental information fund, servicing of the SPRTR system.

6.1.2 The demand for staffing and training of staff involved in information collection and data management

The number of personnel involved in collecting information and managing data during the pilot project will be 6 people, including staff of the Ministry, IAC EP. After implementation, the number will be 10 people, including staff of the Ministry, IAC EP. The number of operational personnel and personnel providing the operation of the SPRTR system is determined at the design stage and is specified by the results of the pilot operation.

Staff is divided into two main categories:

- staff directly working with application software;
- service personnel (technical specialists), employees who ensure the operability of technical and software tools.

Qualification of users and attendants of the System:

- Users. General basic and special education necessary for the performance of their direct professional duties; passing the training course on working with the SPRTR system.
- Service staff: General basic and special education necessary for the performance of their direct professional duties; passing the training course on the technologies used in the creation of the SPRTR system.

Users and personnel of the system shall possess the qualifications that provide, at a minimum:

- Basic skills of work on a personal computer with a graphical user interface;
- Basic skills of using the standard client program (browser) in the Internet environment (configuration of typical configurations, installation of connections, access to websites, navigation, forms and other typical interactive elements);
- Basic skills in working with office applications;
- Knowledge of the basics of information security;
- Knowledge of the principles of organization of the process of preparation and publication of materials on the Internet.

Technical specialists should have the knowledge and experience of working with the technologies used in the creation of the SPRTR system:

- operating server systems;
- relational database management systems;
- system integration of business processes;
- systems to ensure the safety of customers.

The mode of operation of the personnel of the SPRTR system should correspond to the internal regulations for the work of automation facilities employees, with the exception of technical personnel, i.e. persons responsible for maintaining the hardware and software complex. Such persons need to provide access to the software and hardware complex in 24/7 mode.

7.1.3 Infrastructure and budget requirements for data collection and data management procedures

The processes of information gathering and data management will take place within the framework of the maintenance of the SPRTR system, after commissioning. The tracking procedure will be organized on the basis of the RSE on the CEC "IAC EP" of the Ministry of Energy of the Republic of Kazakhstan. The cost of the annual maintenance will be determined after the creation of the system in accordance with approved methods.

7.2 Organizational responsibility for the analysis and dissemination of data.

Data collection and dissemination processes will take place as part of the maintenance of the SPRTR system.

Implementation of the processes of gathering report, data analysis, setting up access and dissemination and use of data, is entrusted to the organization servicing the SPRTR system (RSE on the CEC "IAC EP" of the Ministry of Energy of the Republic of Kazakhstan). During accumulating data, it is necessary to provide structuring of information on various indicators. Data analysis is proposed to be automated as much as possible within the framework of the development of the SPRTR system, and also to provide for the proper staff units.

The SPRTR data is supposed to be placed on the web portal of SPRTR prtr.kz, as well as disseminate environmental information within the existing fund. On the web page prtr.ecogosfond.kz the reports of enterprises on PRTRs, information on PRTR implementation in Kazakhstan are posted. Accounts are created in social networks Facebook (link: https://www.facebook.com/prtr2016/), Twitter, VK, where news and information on PRTR activities in Kazakhstan are posted.

8. Action plan for the implementation of the National PRTR

№	Activities	Term (month/year)	Outcome
1	Provision of the necessary technical infrastructure	April 2018	The infrastructure of the PRTR
2	Distribution of reporting materials, instructions and guidelines for assessing data	August 2017 March 2018	Materials, manuals, instructions
3	Supporting and promoting accountable enterprises	September 2017 February 2019	Lectures

4	Training of personnel in all aspects of reporting	October 2017 February-March 2018	Seminars, trainings
5	The program for collecting, managing, analysing and disseminating data and publishing results	January 2018 February 2019	Program

9. Inspection procedures

9.1. Responsibilities and procedures for the periodic review and updating of the national PRTR system

During the development of the PRTR web portal it is necessary to draw on the reviews of related experts in the field of industrial pollution monitoring and analysis, legal, institutional and information technology experts, taken into account the multifunction of the being developed software product, as well as a number of system participants.

In this regard, after the pilot implementation of the national PRTR system, the Ministry of Energy of the Republic of Kazakhstan will conduct operational monitoring during the first year of operation of the current PRTR system.

Monitoring includes the collection, synthesis, analysis and assessment of the practice of the National PRTR System.

The implementation of the Monitoring also takes into account the practice of applying the International experience of implementing PRTRs in countries that participated in the project to improve the access and accuracy of environmental data on POPs and other priority chemicals, raise public awareness and participation on issues relating to the environment through the full implementation of the national operational register system emissions and transport of pollutants.

The following is used while conducting the monitoring:

a) the practice of entering data on pollutants into the national system by enterprises;

b) the practice of interaction of state bodies, enterprises and non-governmental organizations;

c) the presence of errors in completing the National System and the practice of reconciling PRTR data by government agencies;

d) the information received from public, scientific, human rights and other organizations;

e) the information obtained from the mass media;

f) the information received from citizens;

g) the information received from other sources;

h) the statistical information obtained on the basis of statistical indicators and other state bodies;

The monitoring of the National System can be carried out on additional indicators determined by the authorized body in the field of environmental protection if it necessary.

10. Recommendations for the further development of the National PRTR System

For the further development of the PRTR system in Kazakhstan, the following actions have been identified:

- Ratify the Protocol on Pollutant Release and Transfer Registers to the Aarhus Convention on Access to Information, Public Participation and Access to Justice in Environmental Matters.

Ratification of the Protocol on PRTRs is included in the Perspective Plan for Conclusion of International Treaties of the Republic of Kazakhstan for 2018-2020. Proposal was sent to the Ministry of Foreign Affairs of the Republic of Kazakhstan to include ratification of the Protocol on PRTRs for 2018.

The domestic procedures for the coordination of the Protocol on PRTRs in accordance with the Law on International Agreements of the Republic of Kazakhstan of May 30, 2005 No. 54 were conducted: positive statements were received from interested state bodies and subjects of private entrepreneurship, positive conclusions of scientific and legal, scientific, linguistic and legal expertise, the Ministry of Foreign Affairs of the Republic of Kazakhstan has been approved

At present, work is under way to harmonize the draft resolution of the Government of the Republic of Kazakhstan and the draft law "On ratification of the Protocol on Pollutant Release and Transfer Registers to the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters";

- adopt a normative legal act on the organization of work (including, if necessary, preparation for amendments and additions to existing legislative acts) on the construction of a PRTR system in Kazakhstan;

- develop normative documents that would define the procedure for collecting, processing and disseminating information at the local, regional and national levels;

- Identify the organizations that will maintain and serve the PRTR database.

Due to the fact that the RSE "Information and Analytical Center for Environmental Protection" has been the working body of the Aarhus Convention since 2009 and it operates the National Aarhus Center and the pilot version of the Kazakhstan PRTR, the Ministry of Energy of the Republic of Kazakhstan is considering the issue of transferring the PRTR database to the RSE " Information and Analytical Center for Environmental Protection ";

- Identify a structure that can undertake obligations to disseminate information and ensure equal access to it by all interested parties (state structures, science, business, non-governmental organizations, citizens and the media);

- Develop a unified computer program product for the implementation of the PRTR system in Kazakhstan;

- unify the existing reporting system or develop new forms of obtaining information for the PRTR system;

- organize and conduct regular seminars for the training of responsible persons at enterprises, state and other institutions with the aim of implementing and maintaining the PRTR system in Kazakhstan.

ANNEX 1

Categories of industrial enterprises in accordance with the Environmental Code and the sanitary classification of production facilities

ENTERPRISES OF THE I CATEGORY
(1 and 2 hazard class according to the sanitary classification, sanitary protection zone - not less than 1000 meters and 500 meters respectively)

1. **Chemical production**

1) production of bound nitrogen (ammonia, nitric acid, nitrogen fertilizers and other fertilizers);
2) production of products and semi-products of aniline-and-paint industry of benzene and ether - aniline, nitrobenzene, nitroaniline, alkylbenzene, nitrochlorobenzene, phenol, acetone, chlorobenzene and others;
3) the production of semi-products of naphthalene and anthracene series - betanaphthol, az-acid, phenylperic acid, pericrylslot, anthraquinone, phthalic anhydride and others;
4) the production of cellulose and semi-cellulose in acidic sulfite and bisulphite or monosulfite methods based on the combustion of Sulphur or other Sulphur-containing materials, as well as the production of cellulose by the sulfate method (sulfate-cellulose);
5) chlorine production by electrolysis, semi-products and products based on chlorine;
6) production of rare metals by the chlorination method (titanomagnesium, magnesium and others);
7) production of artificial and synthetic fibers (viscose, caproic, lavsan, nitron and cellophane);
8) production of dimethyl terephthalate;
9) production of caprolactam;
10) production of carbon bisulphide;
11) production of products and semi-products for synthetic polymer materials;
12) production of arsenic and its compounds;
13) production of oil, associated petroleum and natural gas processing;
14) production of picric acid;
15) production of fluorine, hydrogen fluoride, intermediates and products based on them (organic, inorganic);
16) production of processing of oil shale;
17) production of soot;
18) the production of phosphorus (yellow, red) and organophosphorus compounds (thiophos, carbofos, mercapto-phos, and others);
19) production of superphosphate fertilizers;
20) production of calcium carbide, acetylene from calcium carbide and acetylene derivatives;
21) manufacture of artificial and synthetic rubber;
22) production of hydrocyanic acid, organic intermediates and products based on it (acetone cyanohydrin, ethylene-cyanohydrin, methacrylic and acrylic esters, diisocyanates, etc.); production of cyanide salts (potassium, sodium, copper and others), cyanic acid, dicyanamide, calcium cyanamide;

23) production of acetylene from hydrocarbon gases and products based on it;
24) production of synthetic chemicals and pharmaceuticals;
25) production of synthetic fatty acids, higher fatty alcohols by direct oxidation with oxygen;
26) production of mercaptans, centralized gas odorization devices with mercaptans, odorant warehouses;
27) production of chromium, chrome anhydride and salt based on them;
28) production of esters;
29) production of phenol-formaldehyde, polyester, epoxy and other artificial resins;
30) production of methionine;
31) production of carbonyls of metals;
32) production of bitumen and other products from the remnants of distillation of coal tar, oil, pine needles (tar, half-hull, etc.);
33) production of beryllium;
34) production of synthetic alcohols (butyl, propyl, isopropyl, amyl);
35) production of hydrometallurgy of tungsten, molybdenum, cobalt;
36) production of feed amino acids (fodder lysine, premixes);
37) production of pesticides;
38) manufacture of ammunition, explosives, warehouses and landfills;
39) production of aliphatic amines (mono-di-tri-methylamines, diethyl-triethylamines and others) and products based on them (simazine and others);
40) dumps, tailing dumps and sludge accumulators of chemical industries.
41) production of bromine, intermediates and products based on it (organic, inorganic);
42) production of gases (light, water, generator, oil);
43) stations for underground gasification of coal;
44) production of organic solvents and oils (benzene, toluene, xylene, naphthol, cresol, anthracene, phenanthrene, acridine, carbozole and others);
45) facilities for the processing of coal and products based on it (coal pitch, tar and others);
46) facilities for chemical processing of peat;
47) production of sulphuric acid, oleum, sulphur dioxide;
48) production of hydrochloric acid;
49) production of synthetic ethyl alcohol by sulphuric acid method or direct hydration method. Production of phosgene and products based on it (steam and other);
50) production of acids: aminoenant, aminoundecano, aminopelargonic, thiodiveralian, isophthalic;
51) production of sodium nitrite, thionyl chloride, carboammonium salts, ammonium carbonate;
52) production of dimethylformamide;
53) production of ethyl liquid;
54) production of catalysts;
55) production of sulphur organic dyes;
56) production of potassium salts;
57) manufacture of artificial leather with the use of volatile organic solvents;
58) production of vat dyes of all classes of azotols and azoamines;
59) production of ethylene oxide, propylene oxide, polyethylene, polypropylene;

60) production of 3,3-di (chloromethyl) oxoxycyclobutane, polycarbonate, ethylene-propylene copolymers, polymers of higher polyolefins based on petroleum gas;
61) manufacture of plasticizers;
62) manufacture of plastics based on vinyl chloride;
63) points for cleaning, washing and steaming of tanks (for the transportation of oil and oil products);
64) manufacture of synthetic detergents;
65) production of household chemicals in the presence of production of raw materials;
66) production of boron and its compounds;
67) production of paraffin;
68) production of tar, liquid and volatile epaulettes from wood, methyl alcohol, acetic acid, turpentine, terpine oils, acetone, creosote;
69) production of acetic acid;
70) production of acetyl cellulose with raw acetic acid and acetic anhydride production;
71) hydrolysis production on the basis of processing of plant raw materials by pentosan compounds;
72) production of isoacetyl alcohol, oily aldehyde, butyric acid, vinyltoluene, polystyrene, polyvinyltoluene, polyformaldehyde, regeneration of organic acids (acetic, oily, etc.), methylpyrrolidone, polyvinylpyrrolidone, pentaerythritol, urotropine, formaldehyde;
73) production of kapron and lavsan fabric.

2. Metallurgical, machine-building and metalworking objects

1) the production of ferrous metallurgy with a full metallurgical cycle of more than 1,000,000 tons per year (hereinafter t / year) of iron and steel;
2) production of non-ferrous metals (copper, lead, zinc) in the amount of more than 3,000 tons per year;
3) the production of smelting pig iron directly from ores and concentrates with a total volume of blast furnaces to 1500 m3;
4) production of steel by open-hearth and converter methods with waste treatment workshops (grinding of the slag and others);
5) production of non-ferrous metals directly from ores and concentrates (lead, tin, copper, nickel);
6) production of aluminum by electrolysis of molten aluminum salts (alumina);
7) production of smelting special-purpose vessels;
8) production of ferroalloys;
9) production of agglomerating ores of ferrous and non-ferrous metals and pyrite cinder;
10) production of alumina (aluminum oxide);
11) production of mercury and devices with mercury (mercury rectifiers, thermometers, lamps);
12) coke production (coke oven).
13) production of smelting pig iron with a total volume of blast furnaces from 500 m3 to 1500 m3;
14) production of ferrous metallurgy with a full metallurgical cycle with a capacity of up to 1,000,000 tons / year of iron and steel;

15) production of open-hearth steel, electric smelting and converter methods with waste treatment plants (grinding of slag and others) for the production of basic products in quantities up to 1,000,000 tons / year;
16) production of magnesium (by all means except chloride);
17) production of cast iron castings in the amount of more than 100,000 tons / year;
18) production of coke combustion;
19) production of lead accumulators;
20) aircraft production, maintenance;
21) objects of the automobile industry;
22) production of steel structures;
23) manufacture of wagons with foundry and painting shops;
24) production of secondary processing of non-ferrous metals (copper, lead, zinc and others) in quantities from 2000 to 3000 tons / year.

3. Extraction of ores, non-metallic minerals, natural gas

1) career of non-metallic building materials;
2) mining and processing industries;
3) production of oil during the release of hydrogen sulfide from 0.5 to 1 tons per day, as well as a high content of volatile hydrocarbons;
4) production of natural gas;
5) production of polymetallic (lead, mercury, arsenic, beryllium, manganese) ores and rocks of the VIII-XI category by open development;
6) production of asbestos;
7) the production of iron ore and rock mining open development;
8) production of gypsum;
9) Open-cast mining of metalloids;
10) dumps, tailing dumps and sludge accumulators during the extraction of non-ferrous metals;
11) coal mines, production for the extraction of stone, brown and other coals.
12) hydroscale and concentrating plants with a wet enrichment process;
13) dumps and sludge accumulators during the extraction of iron and coal;
14) oil production by the release of hydrogen sulfide to 0.5 tons / day with a low content of volatile hydrocarbons;
15) production for the extraction of phosphorites, apatites, pyrites (without chemical treatment), iron ore;
16) mining of metal ores and metalloids by mining, except for lead ores, mercury, arsenic and manganese;
17) mining of rocks of VI - VII categories of dolomites, magnesites, tar asphalt open development;
18) production of oil shale;
19) production of peat extraction;
20) production of briquettes from small peat and coal;
21) production of rock salt;
22) mine waste pits without measures to suppress spontaneous combustion;

23) production (quarrying) for the extraction of marble, gravel, sand, clay by open development using explosives.

4. Construction industry

1) production of cement (portland - slag portport - pozzolan cement and others), as well as local cements (clay cement, romantcement, gypsum, phosphor slag and others);
2) production of magnesite, dolomite and chamotte with roasting in shaft, rotating and other furnaces;
3) production of asbestos and articles thereof;
4) production of asphalt concrete on stationary objects.
5) lime production (calcareous plants with shaft and rotary kilns);
6) production of art glass, casting and crystal;
7) manufacture of glass and basalt cotton wool and slag wool;
8) production of gravel, gravel and sand, enrichment of quartz sand;
9) production of roofing felt and roofing felt;
10) production of ferrites;
11) production of building polymer materials;
12) manufacture of bricks (red, silicate, ceramic and refractory products);
13) transshipment of bulk cargo (coal, ore) by a crane method;
14) house-building factory;
15) manufacture of reinforced concrete products.

5. Wood processing

1) wood chemical production (production of chemical processing of wood and production of charcoal).
2) production of canning of wood (impregnation);
3) production of sleepers and their impregnation;
4) production of products from wood wool: wood chipboards, wood-fiber boards using synthetic resins as binders;
5) woodworking production.

6. Textile production and production of light industry

1) objects for the primary processing of cotton with the device of shops for processing seeds with mercury-organic preparations;
2) manufacture of artificial leather and film materials, oilcloths, plastics using volatile solvents;
3) objects for chemical impregnation and treatment of tissues with carbon disulphide.
4) objects for continuous impregnation of fabrics and paper with oil, oil-asphalt, bakelite and other varnishes;
5) facilities for impregnating and processing fabrics (dermatine, granitol) with chemicals, except for carbon disulphide;
6) production of polyvinylchloride unilateral reinforced films, films of combined polymers, rubber for the bottom of footwear, regenerator with the use of solvents;
7) spinning and weaving.

7. Processing of animal products

1) the production of glue-making, making glue from the remnants of the skin, field and dump bone and other animal wastes and garbage;
2) production of technical gelatin from bone, mezdra, skin debris and other animal wastes and garbage with storage in stock;
3) recycling facilities for processing dead animals, fish, their parts and other animal wastes and garbage (transformation into fats, animal feed, fertilizers);
4) bones burning and kostemolnye.
5) production salotopennye (production of technical fat);
6) central warehouses for collection of recyclable materials.

8. Processing of food products and gustatory substances

1) objects for the draining of fat from marine animals;
2) intestinal-washing objects;
3) the production of cheese;
4) production of meat-smoking;
5) fish-smoking plants.
6) beet-sugar production;
7) fisheries;
8) mills more than 2 t / h, croup, grain-brewing enterprises and feed mills;
9) production of cooking, malt and yeast;
10) production of albumin, dextrin, glucose, molasses.

9. Microbiological industry

1) production of protein-vitamin concentrates (hereinafter - PVC) from hydrocarbons (paraffins oil, ethanol, methanol, natural gas);
2) objects that use pathogenicity groups 1-2 in the production of microorganisms;
3) production of fodder bacitracin;
4) production of pectins from vegetable raw materials.
5) production of fodder yeast, furfural and alcohol from wood and agricultural waste by hydrolysis;
6) production of food yeast;
7) production of amino acids by the method of microbiological synthesis;
8) production of biopreparations (Trichogram and others) for the protection of agricultural plants;
9) production of plant protection products by the method of microbiological synthesis;
10) production of antibiotics;
11) production of enzymes for various purposes with a surface method of cultivation.

10. Agricultural facilities

1) farm for raising pigs from 100 to 5000 heads and above;
2) a poultry farm with more than 400,000 laying hens and more than 3,000,000 broilers a year;

3) farm for raising and fattening cattle more than 5000 heads;
4) open storage of manure and litter;
5) warehouses for the storage of pesticides over 500 tons;
6) meat processing enterprise (large and small cattle), meat processing plants, including bases for pre-slaughtering livestock within up to three-day stock of raw stock.
7) farm for growing and fattening cattle from 1200 to 5000 cows and 6000 livestock for young animals;
8) farms of fur farms (mink, foxes and others) more than 100 heads;
9) a poultry farm from 100,000 to 400,000 laying hens and from 1,000,000 to 3,000,000 broilers per year;
10) open storage of biologically treated liquid fraction of manure;
11) closed storage of manure and litter;
12) production of seed treatment and dressing;
13) warehouses of liquefied ammonia.

11. Sanitary and technical facilities, transport infrastructure, installations and utilities
1) the field of sewage;
2) cemetery with burial in pits;
3) scrap plants for the liquidation of animal corpses;
4) stations and points for cleaning and washing cars after the transportation of livestock (de-washing stations and points);
5) the smearing field;
6) composting areas for solid waste and sewage of the settlement (central);
7) previously buried anthrax cattle cemeteries, cemetery with burial in pits, with biological chambers;
8) drain stations;
9) polygons for locating, neutralizing, dumping toxic waste production and consumption of 1 and 2 hazard classes;
10) incinerators, waste sorting and garbage processing facilities with a capacity of 40 thousand tons per year (hereinafter - m / y).
11) central facilities for collection of recyclable materials;
12) areas for greenhouses and greenhouses using garbage;
13) composting of garbage without manure and faeces;
14) incineration, waste sorting and garbage processing facilities with a capacity of up to 40 tons / g;
15) facilities for the incineration of medical waste from 120 kilograms per hour and more (hereinafter referred to as kg / hour), landfills for disposal, neutralization, dumping of toxic wastes of production and consumption of 3 and 4 hazard classes.

12. Warehouses, berths and places of cargo handling and storage, production of fumigation of cargo, ships, railway transport, gas disinfection, deratization and disinsection
1) open warehouses and places of unloading of apatite concentrate, phosphorite flour, cement and other dusting cargo at a turnover of more than 150,000 tons / year.

2) places of transshipment and storage of liquid chemical goods and liquefied gases (methane, propane, ammonia, etc.), production compounds of halogens, sulphur, nitrogen, hydrocarbons (methanol, benzene, toluene and others), alcohols, aldehydes and other compounds;
3) test and wash-steaming stations, disinfection and washing facilities, points for stripping vessels, tanks, receiving and treatment facilities that serve to receive ballast water and rinsing-oil containing waters from specialized plavers;
4) berths and places of production of fumigation of cargo and vessels, gas disinfection, deratization and disinsection.
5) open warehouses and places of unloading of apatite concentrate, phosphorite flour, cements and other dusting cargo at a turnover of less than 15,000 tons / year;
6) open warehouses and places of coal transshipment;
7) open warehouses and places of reloading of mineral fertilizers, asbestos, lime, ores (except radioactive) and other minerals (sulphur, sulphur pyrite, gypsum and others);
8) places of reloading and storage of crude oil, bitumen, fuel oil and other viscous petroleum products and chemical cargo;
9) open and closed warehouses and places of transshipment of pitch and pitch containing cargo. Storage and reloading of wooden sleepers impregnated with antiseptics.

13. Production of electric and heat energy during combustion mineral fuel

1) thermal electric power station (hereinafter - TEPS) of equivalent electric power of 600 megawatts (hereinafter - MW) and above, using coal and fuel oil as fuel;
2) TEPS of equivalent electric power in 600 MW and higher, operating on gas and gas-oil fuels;
3) TEPS with an equivalent electric capacity of less than 600 MW, as well as a central heating power plant (hereinafter - CHPP) and district heating plants with a heat capacity of 200 gigacallories (Gcal) and above, operating on coal and mazut fuel.

ENTERPRISES II CATEGORY (class 3 according to the sanitary classification, sanitary protection zone - not less than 300 meters)

1. Chemical production
1) production of niobium;
2) production of tantalum;
3) production of soda ash in an ammonia process;
4) production of ammonium, potassium, sodium, calcium nitrate;
5) production of chemical reagents;
6) production of plastics from cellulose ethers;
7) production of corundum;
8) production of barium and its compounds;
9) production of ultramarine;
10) production of fodder yeast and furfural from wood and agricultural waste by hydrolysis;
11) production of nicotine;
12) production of synthetic camphor by isomerization method;
13) production of melamine and cyanuric acid;
14) manufacture of polycarbonates;

15) production of mineral salts, with the exception of salts of arsenic, phosphorus, chromium, lead and mercury;
16) production of plastics (carbolite);
17) production of phenol-formaldehyde press materials, pressed and winding products made of paper, fabrics based on phenol-formaldehyde resins;
18) production of artificial mineral paints;
19) objects for the regeneration of rubber and rubber;
20) manufacture of tires, rubber products, ebonite, glued footwear, as well as rubber mixtures for them;
21) technical processing of tires;
22) manufacture of tires, rubber products, ebonite, glued footwear, as well as rubber mixtures for them;
23) chemical processing of ores of rare metals for obtaining salts of antimony, bismuth, lithium and others;
24) production of coal products for the electrical industry (brushes, electric coals and others);
25) rubber vulcanization production;
26) production and basic ammonia water storage;
27) production of acetaldehyde by a vapor-phase method (without the use of metallic mercury);
28) production of polystyrene and styrene copolymers;
29) production of organosilicon varnishes, liquids and resins;
30) gas distribution stations of main gas pipelines with odorizing installations from mercaptan;
31) production of sebacic acid;
32) manufacture of vinyl acetate and products based on it (polyvinyl acetate, polyvinyl acetate emulsion, polyvinyl alcohol, viniflex and others);
33) manufacture of varnishes (oil, alcohol, printing, insulating, for the rubber industry and others);
34) production of vanillin and saccharin;
35) production of compressed and liquefied separation products;
36) production of technical salomass (with hydrogen production by non-electrolytic method);
37) manufacture of perfumery;
38) production of artificial leather based on polyvinylchloride and other resins without the use of volatile organic solvents;
39) production of epichlorohydrin;
40) production of compressed nitrogen, oxygen;
41) production of fodder yeast;
42) production of oil products processing at steam evaporating plants and a capacity of no more than 0.5 tons per hour (t / h) for processed raw materials.

2. Metallurgical, machine-building and metalworking objects

1) production by grinding the slag;
2) production of non-ferrous metals in the amount from 100 to 2000 tons / year;
3) production of antimony by pyrometallurgical and electrolytic methods;
4) production of cast-iron shaped casting in the amount from 20,000 to 100,000 tons / year;

5) production of zinc, copper, nickel, cobalt by electrolysis of aqueous solutions;
6) production of metal electrodes (using manganese);
7) production of shaped non-ferrous die casting with a capacity of 10,000 tons / year (9,500 tons of die cast aluminum alloys and 500 tons of zinc alloy castings);
8) production of phosphors;
9) metal ware production;
10) manufacture of sanitary ware;
11) enterprises of meat and dairy engineering;
12) production of mine automation;
13) foundry plants (with possible lead emissions);
14) production of bare cable;
15) production of alkaline batteries;
16) production of hard alloys and refractory metals in the absence of chemical treatment of ores;
17) ship-repairing production;
18) the production of smelting pig iron with a total volume of blast furnaces less than 500 m3.

3. Extraction of ores, non-metallic minerals, natural gas
1) production (career) for the extraction of potassium carbonate by open development;
2) production for the extraction of stone is not an explosive method.

4. Construction industry
1) production of artificial aggregates (expanded clay and others);
2) production of artificial stones;
3) warehouses of cements and other dusting materials;
4) production of building materials from waste thermal power plants;
5) manufacture of concrete products;
6) production of porcelain and earthenware;
7) stone foundries;
8) natural stone processing;
9) production of gypsum products, production of gypsum (alabaster), chalk;
10) production of fibrolite, cane, straw, trim and others;
11) manufacture of construction parts;
12) bituminous plants.

5. Wood processing
1) production of coniferous-vitamin flour, chlorophyll-carotene paste of coniferous extract;
2) production of wood wool;
3) production of sawmill, plywood and parts of wooden standard buildings;
4) shipbuilding yards for the manufacture of wooden vessels (motor boats, boats);
5) assembling furniture with varnishing and painting.

6. Textile production and production of light industry
1) production of primary processing of vegetable fiber (flax, hemp, cotton, kendyr);

2) bleaching and dyeing-finishing organizations;
3) the production of yarn and fabrics of wool, cotton, flax, and also in a mixture with synthetic and artificial fibers in the presence of dyeing and bleaching shops;
4) manufacture of haberdashery-tanning cardboard with finishing with polymers using organic solvents;
5) points for the reception of raw cotton;
6) the production of sports products;
7) printing production;
8) production of accessories.

7. Processing of animal products

1) production of processing raw furs animal skins and dyeing (sheepskin coat, sheepskin-tanning, fur), production of suede, morocco;
2) the processing of raw animal skins: leather-rawhide, leather-tanning with processing of waste;
3) Wool washing facilities;
4) warehouses for temporary storage of wet and untreated skins;
5) production of the highest-grade gelatin from fresh, decayed bones with a minimum shelf life in specially constructed cold storage warehouses;
6) production of processing hair, bristles, down, feathers, horns and hooves;
7) production of skeletons and visual aids from animal corpses;
8) feed mills (production of feed for animals from food waste);
9) manufacture of felting and garbage;
10) production of lacquered leather;
11) production of intestinal strings and catgut;
12) warehouses of wet salted leather (up to 200 pieces) for temporary storage (without processing).

8. Processing of food products and gustatory substances

1) elevators;
2) production of coffee roasting;
3) production of oleomargarine and margarine;
4) production of food alcohol;
5) fish-processing plants, fish canning and fish-processing enterprises with waste compartments (without smoking shops);
6) beet-sugar plants without pulp storage;
7) corn-starch, corn-tailing plants;
8) vegetable processing (drying, pickling, souring);
9) starch production;
10) production of tobacco (tobacco-fermentation, tobacco and cigarette-tobacco factory);
11) factories of primary winemaking.

9. Microbiological industry

1) production of fodder yeast from wood and agriculture waste (sunflower husk, straw, corn cobs) without furfural production;
2) production of feed antibiotics, including biological methods;
3) production of enzymes for various purposes with a deep cultivation method

10. Agricultural facilities

1) farm for raising and fattening cattle less than 1200 heads (all specializations), horse farms;
2) farms with the maintenance of animals (pigsties, fur farms) to 100 heads;
3) farm for growing and fattening sheep from 3000 to 5000 heads;
4) poultry farming up to 100,000 laying hens and up to 1,000,000 broilers;
5) grounds for manuring of manure;
6) warehouses for storage of mineral fertilizers, pesticides more than 50 tons;
7) treatment of agricultural land with pesticides with the use of tractors from the boundaries of the field to the settlement;
8) rabbit breeding farms;
9) objects for the sale of farm animals.

11. Sanitary and technical facilities, transport infrastructure, installations and utilities

1) bases of district assignment for collection of recyclable materials;
2) mechanized transport parks for cleaning the city;
3) Warehouses for temporary storage of recyclable materials without its processing;
4) vehicle maintenance facilities (trucks, buses of public transport);
5) gasoline stations of stationary type for refueling
1) vehicles with a gross mass exceeding 3.5 tonnes and tractors;
6) cemeteries, crematoria;
7) customs terminals, wholesale markets;
8) facilities for burning medical waste up to 120 kg / h.

12. Warehouses, berths and places of cargo handling and storage, production of fumigation of cargo, ships, railway transport, gas disinfection, deratization and disinsection

1) open warehouses and places of unloading and loading of dusting cargo (apatite concentrate, phosphorite flour, cement) at a freight turnover of less than 5000 tons / year;
2) closed warehouses, places for reloading and storage of a contaminated chemical cargo (fertilizers, organic solvents, acids and other substances);
3) land depots and open shipping sites for magnesite, dolomite and other dusting cargoes;
4) depots of dust and liquid cargo (ammonia water, fertilizers, soda ash, paint and varnish materials and others);
5) open land warehouses and places for unloading dry sand, gravel, stone and other mineral-building materials;
6) warehouses and sites for reloading meal, cake, copra and other dusty plant products by open method;
7) warehouses, reloading and storage of recyclable materials;

8) warehouses, reloading and storage of wet salted unprocessed skins (more than 200 pieces) and other raw materials of animal origin;
9) areas of constant reloading of livestock, animals and birds;
10) warehouses and reloading of fish, fish products and products of whaling.

13. Production of electric and thermal energy during the burning of mineral fuel
1) Thermal electric power station with an equivalent electric capacity of less than 600 MW, as well as Central Heating and Power Plant and district boiler houses with a heat output of 200 Gcal and above, operating on gas and gas-oil fuels (the latter as standby);
2) ash dump of Thermal electric power station and Central heating power plant.

ENTERPRISES III CATEGORY (4 hazard class according to the sanitary classification)

1. Chemical production

1) production of fertilizer mixtures;
2) production of fluoroplastic processing;
3) production of paper from finished cellulose and rags;
4) production of glycerin;
5) production of galalite and other protein plastics (aminoplastics and others);
6) production of enamels on condensation resins;
7) production of soap;
8) production of salt and salt-grinding;
9) production of pharmaceutical salts of potassium (chloride, sulphate, potash);
10) production of mineral natural (chalk, ocher and other) paints;
11) production of tanning extract;
12) factories of printing paints;
13) photochemical production (photographic paper, photographic plates, photo and film films);
14) production of household chemical goods from finished source products and warehouses for their storage;
15) production of drying oil;
16) production of fiberglass;
17) production of medical glass (without the use of mercury);
18) production of plastic processing (casting, extrusion, pressing, vacuum-molding);
19) manufacture of polyurethanes

2. Metallurgical, machine-building and metalworking objects
1) enrichment of metals without hot treatment;
2) manufacture of leaded or rubber-insulated cables;
3) production of cast-iron shaped casting in the amount from 10,000 to 20,000 tons / year;
4) the production of non-ferrous metals (copper, lead, zinc and others) in the amount of up to 1000 tons per year;
5) production of heavy presses;

6) production of machines and devices of the electrical industry (dynamos, capacitors, transformers, searchlights and others) in the presence of small foundries and other hot shops;
7) manufacture of devices for the electrical industry (light bulbs, lanterns and others) in the absence of foundries and without the use of mercury;
8) objects for repair of road vehicles, cars, bodies, rolling stock of railway transport and underground;
9) manufacture of coordinate boring machines;
10) production of the metalworking industry with cast iron, steel (up to 10,000 tons / year) and non-casting (up to 100 tons / year) casting;
11) production of metal electrodes;
12) foundry plants (without lead emissions);
13) printing production;
14) offset printing factories;
15) printing houses using lead;
16) machine building with metalworking, painting without casting;
17) manufacture of locomotives and electric locomotives.

3. Construction industry
1) production of clay products;
2) glass blowing, mirror manufacture, grinding and grass of glasses;
3) mechanical processing of marble;
4) installation for the production of concrete;
5) a career, an enterprise for the extraction of gravel, sand, clay.

4. Wood processing
1) the production of wagons;
2) production of cooperage products from finished riveting;
3) production of cobweb-weaving;
4) production of canning of wood salt and aqueous solutions (without salts of arsenic), superblock;
5) shipbuilding yards for the manufacture of wooden vessels (boats, boats);
6) joinery and carpentry objects, furniture parquet, box-type.

5. Textile production and production of light industry
1) production of cottonin;
2) coconut and silk screening objects;
3) production of melange;
4) production of rope, twine, rope and finishing ends;
5) production of artificial scribble;
6) footwear production;
7) the production of yarn and fabrics of cotton, linen, wool in the absence of dyeing and bleaching shops;
8) production of knitted and lace;

9) silk-weaving production;
10) sewing factories;
11) manufacture of carpets;
12) manufacture of shoe cartons on leather and leather-cellulose fibers without the use of solvents;
13) bobbin and reel manufacture;
14) manufacture of wallpaper;
15) hosiery production.

6. Processing of animal products

1) manufacture of products from the finished leather;
2) manufacture of bristles and hair brushes;
3) Felting workshops.

7. Processing of food products and gustatory substances

1) confectionery factories;
2) production of table vinegar;
3) production of beer, kvass and soft drinks;
4) tea-packing factories;
5) distillery plants;
6) oil mills (vegetable oils);
7) canneries;
8) sugar refineries;
9) factories of brandy alcohol;
10) macaroni factories with a capacity of more than 1.0 t / day;
11) dairy and butter factories (animal oils);
12) production of sausages, with a capacity of more than 3.0 tonnes of processed meat / day;
13) bakeries and bakery production, with a capacity of more than 3.0 t / day;
14) food factories, billets;
15) refrigerators with a capacity of more than 600 tons;
16) factories of grape juice;
17) factories of fruit and vegetable juices and soft drinks;
18) mills with a capacity of 0.5 to 2 tons per hour.

8. Agricultural facilities

1) hothouse and greenhouse farms;
2) warehouses for storage of mineral fertilizers, pesticides up to 50 tons;
3) warehouses of dry mineral fertilizers, chemical plant protection products (the zone is installed and up to the enterprises for storage and processing of food products);
4) land reclamation facilities using livestock drains;
5) shops for the preparation of feed, including the use of food waste;
6) garages and parks for repair, maintenance and storage of trucks and agricultural machinery;
7) farms with the maintenance of animals (pigsties, barns, poultry houses, stables, fur farms) to 50 heads;

8) warehouses of fuels and lubricants.

9. Sanitary and technical facilities, transport infrastructure, installations and utilities

1) objects for servicing cars (cars, except for citizens belonging to citizens, buses, except for public transport buses);
2) trolleybus and tramway parks;
3) filling stations for refueling motor vehicles, the total mass of which does not exceed 3.5 tons;
4) refueling stations of block-container type, equipped with a gas return system, with a capacity of more than 80 gas stations per hour "peak";
5) cemeteries for burial after cremation;
6) dry cleaning, laundry (more than 75 kg / shift);
7) veterinary hospitals with animals, vivariums, nurseries, canine centers, animal survivors;
8) filling stations for fueling vehicles with liquid and gas motor fuel.

10. Warehouses, berths and places of cargo handling and storage, production of fumigation of cargo, vessels, railway transport, gas disinfection, deratization and disinsection

1) warehouses and reloading of hides (including wet-skinned skins up to 200 pieces);
2) warehouses and open places for grain unloading;
3) warehouses and open places for unloading table salt;
4) warehouses and open places for unloading of wool, hair, bristles and other similar products;
5) transport and technical schemes for reloading and storing apatite concentrate of phosphorite flour, cement and other dusting goods carried in bulk using warehouse elevators and pneumatic conveying or other installations and storage facilities that exclude the removal of dust into the external environment.

11. Production of electric and thermal energy during the combustion of mineral fuel

1) different types of boiler houses with a heat output of less than 200 Gcal operating on solid, liquid and gaseous fuels;
2) pumping stations for hot water supply.

ENTERPRISES OF THE IV CATEGORY (class 5 according to the sanitary classification)

1. Chemical production

1) production of ready-made dosage forms (without making components);
2) production of paper from waste paper;
3) factories of dry cleaning clothes with a capacity of over 160 kg / day;
4) production of plastic and synthetic resin products (machining);
5) production of carbon dioxide and "dry ice";
6) manufacture of artificial pearls;
7) production of matches.

2. Metallurgical, machine-building and metalworking objects

1) production of boilers;

2) the object of pneumoautomatics;
3) metalstamp object;
4) the object is agricultural;
5) mechanical workshops.

3. Wood processing
1) assembling furniture from finished products without varnishing and painting.

4. Textile production and production of light industry
1) facilities for small-scale production of footwear from finished materials using water-soluble adhesives.

5. Processing of food products and gustatory substances
1) small capacity facilities (mini-production): meat processing up to 3.0 t / day, milk - up to 3.0 t / day, bread and bakery products production - up to 3.0 t / day, fish - up to 3 , 0 t / day, objects for the production of confectionery products with cream up to 0.1 t / day, objects for the production of confectionery without cream to 0.3 t / day; production of pasta less than 0.1 tons per day;
2) industrial installations for low-temperature storage of food products with a capacity of up to 600 tons;
3) production of beer (without malt);
4) production of mayonnaise;
5) objects for bottling of food acetic acid;
6) objects for packing finished food products.

6. Agricultural facilities
1) storage facilities, warehouses of fruits, vegetables, potatoes, grains;
2) material warehouses.

7. Facilities for sanitation, transport infrastructure, installations and utilities
1) refueling stations of block-container type, equipped with a gas return system, with a capacity of less than 80 gas stations per hour "peak"; receiving points of secondary raw materials;
2) objects with a sales area of more than 1000 sq. M: stand-alone hypermarkets, supermarkets, shopping centers and centers, small wholesale markets, food and industrial goods markets with on-site parking with a capacity of 101 to 300 cars.

8. Warehouses, berths and places of cargo handling and storage, production of fumigation of cargo, ships, railway transport, gas disinfection, deratization and disinsection
1) open warehouses and reloading of moistened mineral building materials (sand, gravel, rubble, stones, etc.);
2) sections for storage and reloading of pressed cake, hay, straw, tobacco-tobacco products and others;

3) warehouses, reloading of food products (meat, milk, confectionery), vegetables, fruits, beverages and others;
4) storage and loading areas for food (wine, butter, juices);
5) unloading and loading areas for refrigerated vessels and wagons;
6) river berths.

ANNEX 2

Regulations for the maintenance of the State Pollutant Release and Transfer Register

Chapter 1. General Provisions

1. These Regulations for the maintenance of the State Pollutant Release and Transfer Register (hereinafter - the Regulations) have been developed in accordance with sub-item 29) of Article 17 of the Environmental Code of the Republic of Kazakhstan dated January 9, 2007 (hereinafter - the Code) and define the procedure for maintaining the State Pollutant Release and Transfer Register.

2. In accordance with item 1 of Article 160 of the Code, the State Pollutant Release and Transfer Register (hereinafter - SPRTR) is a structured database on the condition of emissions and pollution of the environment, placed in an open access, which is maintained by the authorized body in the field of environmental protection (hereinafter - authorized body) in order to ensure transparency.

3. The SPRTR contains information on the maximum permissible concentrations of pollutants, their impact on health and the environment, as well as other scientifically valid information on pollutant releases and transfers and information on users of natural resources.

4. In accordance with item 3 of Article 160 of the Code, information on users of natural resources includes:

1. the name, legal address, type of activity of the user of natural resources;
2. electronic version of the issued environmental permit;
3. information on the volume of actual emissions into the environment;
4. electronic version of the program of industrial environmental control and reports of environmental monitoring, an action plan for environmental protection;
5. the results of state environmental control;
6. information on mandatory payments to the budget for emissions into the environment, including over-set standards.

5. A production site is a protected and fenced territory for the location of production, administrative, sanitary and auxiliary buildings and facilities of an enterprise where the activities of the user of natural resources are associated with which emissions to the environment are connected.

The terms and definitions used in these Regulations shall be applied in accordance with the legislation of the Republic of Kazakhstan in the field of environmental protection.

Chapter 2. The procedure for the maintenance the State Pollutant Release and Transfer Register

6. Users of natural resources who have Category I facilities (hereinafter Users of natural resources) shall provide with the following information for the previous year to the territorial body of the authorized body for environmental protection (hereinafter - territorial body) at the location of each production site:

1. general information on the User of natural resources in the form, according to Appendix 1 to these Regulations;
2. electronic version of the issued environmental permit;
3. information:

- by the volume of actual emissions of pollutants into the air in the form, in accordance with Annex 2 to these Regulations;
- on the volume of actual emissions of pollutants into water bodies in the form, in accordance with Annex 3 to these Regulations;

- on production and consumption wastes generated at the production site, in the form, in accordance with Appendix 4 to these Regulations;
- on the placement of sulphur generated at the production site, in the form, in accordance with Appendix 5 to these Regulations;

4. an electronic version of the production environmental control program and the environmental monitoring report;
5. the plan of measures for environmental protection and the report on the implementation of this plan, in the form approved by the authorized body in accordance with item 2 of Article 99 of the Code;
6. the results of state environmental control;
7. information on mandatory payments to the budget for emissions into the environment, including for over-set standards in the form, according to Appendix 6 to these Regulations.

7. Users of natural resources, who own several production sites located in the territory of one region (cities of national importance, the capital), provide information on emissions into the environment for each production site separately.

8. Within the second quarter of the year following the reporting year, the territorial body shall provide to the authorized body, in electronic form, in accordance with the inventory, the information specified in item 6 of these Regulations.

9. The authorized body places the SPRTR in an open access, in accordance with item 2 of Article 163 of the Code.

	Appendix 1 to the Regulations for the maintenance of the State Pollutant Release and Transfer Register

Form

General information on user of the natural resources who has facilities
I category (hereinafter – User of natural resources)

№	Name	Data of the User of natural resources
1	Reporting period *	
2	Name of the User of natural resources and his legal address, contact phone number, e-mail address	
3	Business Identification Number of the User of natural resources (BIN)	
4	The main economic activity of the User of natural resources	
5	The name of the production site, its geographical coordinates (degrees, minutes, seconds) and a brief description of the production process	

Note:

* The User of natural resources submits information for the reporting period from January 1 to December 31 of each year.

Head of the User of natural resources_____ _____

Full name Signature Stamp

	Appendix 2 to the Regulations for the maintenance of the State Pollutant Release and Transfer Register

Form

Information on the volume of actual emissions of pollutants into the air

Name of the User of natural resources

Name of production site

Reporting period

№	CAS number**	The name of the pollutant	The established standard (tons per year)	Actual emissions (tons per year)	Methods for determining actual emissions (calculation method, instrumental measurements)
1	74-82-8	Methane (CH4)			
2	630-08-0	Carbon monoxide (CO)			
3	124-38-9	Carbon dioxide (CO2)			
4		Hydrofluorocarbons (HFCs)			
5	10024-97-3	Nitrous oxide (N2O)			
6	7664-41-7	Ammonia (NH3)			
7		Non-methane volatile organic compounds (NMVOC)			
8		Nitrogen oxides (NOx / NO2)			
9		Perfluorocarbons (PFCs)			
10	2551-62-4	Six-fluoride sulphur (SF6)			
11		Sulphur oxides (SOx / SO2)			
12		Hydrochlorofluor Carbon (HCFC)			
13		Chlorofluorocarbons (CFCs)			
14		Halons			
15	7440-38-2	Arsenic and its compounds (as As)			
16	7440-43-9	Cadmium and its compounds (in			

		the form of Cd)			
17	7440-47-3	Chromium and its compounds (in the form of Cr)			
18	7440-50-8	Copper and its compounds (in the form of Cu)			
19	7439-97-6	Mercury and its compounds (in the form of Hg)			
20	7440-02-0	Nickel and its compounds (in the form of Ni)			
21	7439-92-1	Lead and its compounds (in the form of Pb)			
22	7440-66-6	Zinc and its compounds (in the form of Zn)			
23	309-00-2	Aldrin			
24	57-74-9	Chlordan			
25	143-50-0	Chlordecone			
26	50-29-3	DDT			
27	107-06-2	1,2-dichloroethane (DCE)			
28	75-09-2	Dichloromethane (DCM)			
29	60-57-1	Dieldrin			
30	72-20-8	Endrin			
31	76-44-8	Heptachlor			
32	118-74-1	Hexachlorobenzene (HCB)			
33	608-73-1	1, 2, 3, 4, 5, 6-hexachlorocyclohexane (HCL)			
34	58-89-9	Lindane			
35	2385-85-5	Mirex			
36		PCDD + PCDF (dioxins + furans) (in the form of ect.)			

37	608-93-5	Pentachlorobenzene			
38	87-86-5	Pentachlorophenol (PCP)			
39	1336-36-3	Polychlorinated biphenyls (PCBs)			
40	127-18-4	Tetrachlorethylene (TCE)			
41	56-23-5	Tetrachloromethane (CTC)			
42	12002-48-1	Trichlorobenzenes (TCB)			
43	71-55-6	1, 1, 1-Trichloroethane			
44	79-34-5	1, 1, 2, 2-tetrachloroethane			
45	79-01-6	Trichlorethylene			
46	67-66-3	Trichloromethane			
47	8001-35-2	Taxothene			
48	75-01-4	Vinyl chloride			
49	120-12-7	Anthracene			
50	71-43-2	Benzene			
51	75-21-8	Ethylene oxide			
52	91-20-3	Naphthalene			
53	117-81-7	Di- (2-ethylhexyl) phthalate (DEHP)			
54		Polycyclic aromatic hydrocarbons (PAHs) b			
55		Chlorine and inorganic compounds (in the form of a common HCl)			
56	1332-21-4	Asbestos			
57		Fluorine and inorganic compounds (in the form of HF)			
58	74-90-8	Hydrogen cyanide (HCN)			

59		Particulate matter PM10			
60		*** Other pollutants by name:			

Note:

* The User of natural resources submits information for the reporting period from January 1 to December 31 of each year.

** CAS number - a unique numerical identifier of chemical compounds, is filled in by the authorized body;

*** It is necessary to indicate the name of the pollutant.

Head of the User of natural resources_____ _____

Full name Signature Stamp

	Appendix 3 to the Regulations of the maintenance of the State Pollutant Release and Transfer Register

Form

Information on the volume of actual emissions of pollutants into the water bodies

Name of the User of natural resources_____

Name of production site_____

Reporting period _____

№	CAS number**	The name of the pollutant	The established standard (tons per year)	Actual emissions (tons per year)	Methods for determining actual emissions (calculation method, instrumental measurements)
1		Total amount of nitrogen			
2		Total amount of phosphorus			
3	7440-38-2	Arsenic and its compounds (as As)			
4	7440-43-9	Cadmium and its compounds (in the form of Cd)			
5	7440-47-3	Chromium and its compounds (in the form of Cr)			
6	7440-50-8	Copper and its compounds (in the form of Cu)			
7	7439-97-6	Mercury and its compounds (in the form of Hg)			

8	7440-02-0	Nickel and its compounds (in the form of Ni)			
9	7439-92-1	Lead and its compounds (in the form of Pb)			
10	7440-66-6	Zinc and its compounds (in the form of Zn)			
11	15972-60-8	Alachlor			
12	1912-24-9	Atrazine			
13	57-74-9	Chlordan			
14	143-50-0	Chlordecone			
15	470-90-6	Chlorfenvinphos			
16	85535-84-8	Chloroalkanes C10-C13			
17	2921-88-2	Chlorpyrifos			
18	50-29-3	DDT			
19	107-06-2	1, 2-dichloroethane (DCE)			
20	75-09-2	Dichloromethane (DCM)			
21	60-57-1	Dieldrin			
22	330-54-1	Diuron			
23	115-29-7	Endosulfan			
24	72-20-8	Endrin			
25		Halogenated organic compounds (in the form of AOG)			
26	76-44-8	Heptachlor			
27	118-74-1	Hexachlorobenzene (HCB)			
28	87-68-3	Hexachlorobutadiene (HCBD)			
29	608-73-1	1, 2, 3, 4, 5, 6-hexachlorocyclohexane			

		(HCL)			
30	58-89-9	Lindane			
31	2385-85-5	Mirex			
32		PCDD + PCDF (dioxins + furans (in the form of ect.)			
33	608-93-5	Pentachlorobenzene			
34	87-86-5	Pentachlorophenol (PCP)			
35	1336-36-3	Polychlorinated biphenyls (PCBs)			
36	122-34-9	Simazin			
37	8001-35-2	Taxothene			
38	75-01-4	Vinyl chloride			
39	120-12-7	Anthracene			
40	71-43-2	Benzene			
41		Brominated diphenyl ethers of BDE			
42		Nonylphenol ethoxylates (NF / NPE) and related substances			
43	100-41-4	Ethylbenzene			
44	75-21-8	Ethylene oxide			
45	34123-59-6	Isoproturon			
46	91-20-3	Naphthalene			
47		Organotinic compounds (in the form of a common Sn)			
48	117-81-7	Di- (2-ethylhexyl) phthalate (DEHP)			
49	108-95-2	Phenols (as a general C)			
50		Polycyclic aromatic			

		hydrocarbons (PAHs) b			
51	108-88-3	Toluene			
52		Tributylline and compounds			
53		Triphenyltin and compounds			
54		Total organic carbon (TOC) (in the form of total C or COD / 3)			
55	1582-09-8	Trifluralin			
56	1330-20-7	Xylols			
57		Chlorides (as a general Cl)			
58		Chlorine and inorganic compounds (in the form of a common HCl)			
59	1332-21-4	Asbestos			
60		Cyanides (in the form of a common CN)			
61		Fluorides (as a general F)			
62		*** Other pollutants by name:			

Note:

* The User of natural resources submits information for the reporting period from January 1 to December 31 of each year.

** CAS number - a unique numerical identifier of chemical compounds, is filled in by the authorized body;

*** It is necessary to indicate the name of the pollutant.

Head of the User of natural resources_____ _____

Full name Signature Stamp

	Appendix 4 to the Regulations of the maintenance of the State Pollutant Release and Transfer Register

Form

Information on production and consumption wastes generated at the production site

Name of the User of natural resources_____

Name of production site_____
Reporting period _____

№	Name of waste	Waste hazard level	Aggregate state of waste	Total amount of waste placed on the industrial site at the beginning of the reporting period (tons per year)	The amount of generated waste (tons per year)	The amount of waste transferred to the entities that perform operations for collection, transportation, utilization, processing and disposal for the reporting period, (tons per year)	The amount of recycled waste by the owner of the waste at the industrial site (tons per year)	Number of waste actually disposed at the industrial site during the reporting period	Waste management methods
1	2	3	4	5	6	7	8	9	10

Note:

* The User of natural resources submits information for the reporting period from January 1 to December 31 of each year.

Head of the User of natural resources_____ _____

Full name Signature Stamp

	Appendix 5 to the Regulations of the maintenance of the State Pollutant Release and Transfer Register

Form

Information on the location of sulphur formed at the production site
Name of the User of natural resources_____
Name of production site_____
Reporting period _____

№	State of aggregation	The amount of sulphur at the industrial site at the beginning of the reporting period (tons per year)	The amount of sulphur formed (tons per year)	The transferred amount to disposal, decontamination, etc. sulphur (tons per year)	The amount of recycled sulphur (tons per year)	The amount of sulphur accumulated on the industrial site as of the reporting period
1	2	3	4	5	6	7

Note:

* The User of natural resources submits information for the reporting period from January 1 to December 31 of each year.

Head of the User of natural resources_____ _____

Full name Signature Stamp

	Appendix 6 to the Regulations of the maintenance of the State Pollutant Release and Transfer Register

Form

Information on mandatory payments to the budget for emissions into environment, including over-set standards

№	Name of the User of natural resources	Number and validity of the permit	Paid for regulatory emissions of thousand tenge.			Paid for over-standard emissions thousand tenge.		
			Air	Water	Waste	Air	Water	Waste
1	2	3	4	5	6	7	8	9

Head of the User of natural resources_____ _____

Full name Signature Stamp

References

1. Organization for Economic Co-operation and Development (OECD), Pollutant Release and Transfer Registers (PRTRs): Instrument for Environmental Policy and Sustainable Development: A Guide for Governments. Paris, 1996

2. United Nations Institute for Training and Research (UNITAR), Preparation of PRTR infrastructure assessment: Annex 1, July 1997.

3. The United Nations Institute for Training and Research (UNITAR), the Manual for Facilities for Data Assessment and Reporting of PRTRs. Final project, July, 1997.

4. United Nations Institute for Training and Research (UNITAR), Guidelines for the Assessment of Non-Point Source Emissions. Final project, July, 1997.

5. UNITAR: Handbook "Developing key aspects of the national PRTR system" Final report, July 1997.

6. UNITAR: Review of industry issues related to Pollutant Release and Transfer Registers. Final report, August 1998.

7. UNECE. Your right to a healthy society. Simplified guidance to the Protocol on Pollutant Release and Transfer Registers, 2011

8. Report on the first session of the Meeting of the Parties to the Protocol on Pollutant Release and Transfer Registers (Geneva, 20 22 April 2010), Doc. UN ECE / MP.PRTR / 2010/2 dated 28.03.2011

9. Protocol on Pollutant Release and Transfer Registers. Electronic resource: https://www.unece.org/fileadmin/DAM/env/pp/prtr/Protocol%20texts/

PRTR_Protocol_r.pdf

10. The European Pollutant Release and Transfer Register (E-PRTR). URL: http://prtr.ec.europa.eu/Home.aspx

11. Ecological Code of the Republic of Kazakhstan, Decree of the President of the Republic of Kazakhstan dated January 9, 2007, No. 212-III.

12. On approval of the Rules for maintaining the State Register of Pollutant Release and Transfer. Order of the Acting President. Minister of Energy of the Republic of Kazakhstan of June 10, 2016 No. 241.

13. Resolution of the Government of the Republic of Kazakhstan of October 13, 2016 No. 589 "On Approval of the Rules for the Maintenance of the State Environmental Information Fund."

14. Order of the Minister of Environmental Protection of the Republic of Kazakhstan from April 18, 2008 No. 100-p "On approval of certain methodological documents in the field of environmental protection"

15. Order of the Minister of Environmental Protection of the Republic of Kazakhstan dated 29 November 2010 No. 298 "On Amendments to the Order of the Minister of Environmental Protection of the Republic of Kazakhstan dated April 18, 2008 No. 100-p

"On approval of certain methodological documents in the field of environmental protection"

16. Order of the Minister of Environment and Water Resources of the Republic of Kazakhstan of June 12, 2014 No. 221-Ө "On approval of certain methodological documents in the field of environmental protection"

17. Order of the Minister of Environmental Protection of the Republic of Kazakhstan of April 16, 2012 No. 110-</s>. "On the Approval of the Methodology for the Determination of Emission Standards in the Environment".

18. Convention on Public Participation in Decision-making in the Field of Environmental Protection. Aarhus (Denmark), June 25, 1998 Ratified by the Law of the Republic of Kazakhstan No. 92-I of October 23, 2000

19. Protocol on Pollutant Release and Transfer Registers. Electronic resource: https://www.unece.org/fileadmin/DAM/env/pp/prtr/Protocol%20texts/

PRTR_Protocol_r.pdf

20. The Code of the Republic of Kazakhstan on Taxes and Other Mandatory Payments to the Budget (Tax Code) No. 99-IV of December 10, 2008.

21. UNITAR: Structuring the Proposal for a National PRTR, July 1997.