
APPENDICES

**APPENDIX-I The Law of the Republic of Kazakhstan
on Environmental Protection**

**APPENDIX-II SURVEY :
Issues of Environmental Protection in
the Republic of Kazakhstan.
Environmental Situations. Problems and Solution.**

<p>NOTE: The page numbers and titles of the appendix do not correspond with the main report.</p>
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**The Law of the Republic of Kazakhstan
ON ENVIRONMENTAL PROTECTION**

Nature and its riches represent the natural basis for the life and activity of the peoples of the Republic of Kazakhstan, their stable social and economic development, and the growth of their well-being. This Law shall determine the legal, economic, and social bases for environmental protection in the interests of present and future generations and shall be aimed at ensuring ecological security, prevention of damaging effects on natural ecosystems from economic and other activities, preservation of biological diversity, and organization of the rational use of the environment.

CHAPTER I. GENERAL PROVISIONS

Article 1. Basic Terms and Definitions

In this Law the following basic terms and definitions shall be used:

"Environment" - all natural objects including organic and inorganic Natural Resources, including the atmosphere, water, soil, subsoil, flora and fauna, the climate and the interrelation there between;

"Environmental Protection" - the system of state and public measures aimed at harmonious interrelation between nature and people, improvement of the quality of the environment, and the rational use and renewal of Natural Resources;

"Objects of Environmental Protection" - integral parts of the environment protected by legislation;

"Natural Resources" - integral parts of the environment used in the course of economic and other activity in order to satisfy material, cultural, and other requirements of society;

"Use of Resources" - use of Natural Resources in the economy and other activities of the people;

"Environmental Quality" - characteristics of the composition and properties of the environment;

"Environmental Monitoring" - control over the state of the environment and providing warning of arising emergencies which are damaging or dangerous to the health of people and other living organisms;

"Environmental Quality Regulations" - the establishment of indexes for environmental quality to determine its suitability for human existence and to ensure the preservation of biological diversity and stable use of ecologic systems;

"Pollution of the Environment" - introducing potentially hazardous chemical and biological substances, radioactive materials, industrial and consumption wastes into the environment, and the effect on the environment of noise, vibrations, magnetic fields, and other damaging physical effects;

"Ecological Requirements" - obligatory restrictions and prohibitions of the economic and other activity adversely affecting the environment included in legislative and other secondary regulations and normative and technical acts of the Republic of Kazakhstan;

"Ecological Safety" - state of protectiveness of vital interests and rights of an individual and the society from threats resulting from human-caused and natural effects on the environment;

"Ecosystem" - interrelated, unified, functional aggregate living organisms and their non-living environment.

Article 2. Legislation of the Republic of Kazakhstan on Environmental Protection

1. The objectives of the legislation of the Republic of Kazakhstan on Environmental Protection shall be the regulation of relations in the interaction between society and nature, aimed at the improvement of Environmental Quality, the rational use and renewal of Natural Resources, and the reinforcement of law and order.

2. The legislation of the Republic of Kazakhstan on Environmental Protection shall be based on the Constitution of the Republic of Kazakhstan and shall include this Law, laws on the protection, renewal and use of Natural Resources, and other legislative and normative legal acts.

In the event of a conflict between this Law and any other act containing norms which regulate Environmental Protection, the latter may be applied only after the corresponding changes have been included in this Law.

The protection and use of land, subsoil, water, atmosphere, forests and other flora, fauna, objects of the Environment of special ecological, scientific, and cultural value, and specially protected natural territories not regulated by this Law shall be regulated by the relevant legislative and other normative legal acts of the Republic of Kazakhstan.

Article 3. Basic Principles of Environmental Protection

Environmental Protection shall be based on the following basic principles: the priority of the protection of the lives and health of people, the preservation and restoration of an Environment favorable for the life, labor, and recreation of the population; balanced resolutions of social and economic objectives and problems of the Environment for the purpose of the 'transition of the Republic of Kazakhstan toward stable development under a market economy and meeting the requirements of present and future generations in a healthy and favorable Environment; the provision of Ecological Safety and restoration of violated natural Ecosystems on territories with an unfavorable ecological situation; the rational use and renewal of Natural Resources, the gradual introduction of fees for the Use of Resources, and the introduction of economic incentives for Environmental Protection; ensuring the preservation of biological diversity and environmental objects of special ecological, scientific, and cultural value; state regulation and state control over the inevitability of liability for violations of environmental legislation; the prevention of damage to the Environment and assessment of any possible effect on the Environment; the active and democratic participation of the population, public associations, and local self-administrating agencies for Environmental Protection; and international cooperation in Environmental Protection on the basis of international law.

Article 4. Objects of Environmental Protection

Objects for protection from elimination, degradation, damage, exhaustion, pollution, irrational use, and other damaging effects shall include: land, subsoil, water, the atmosphere, forests and other flora, and fauna; and natural Ecosystems, the climate, and the ozone layer of the Earth; Environmental objects of special ecological, scientific, and cultural value, as well as specially protected natural territories, shall be subject to special protection.

CHAPTER II. RIGHTS AND OBLIGATIONS OF CITIZENS AND PUBLIC ASSOCIATIONS IN THE SPHERE OF ENVIRONMENTAL PROTECTION

Article 5. Rights and Obligations of Citizens as Regards Environmental Protection

1. Every citizen, stateless person and foreigner residing in the Republic of Kazakhstan shall have the right to an Environment favorable for their life and health, reliable information with regard to the state of the Environment and measures for the improvement thereof, and compensation for damage caused to their life and property as a result of violations of the legislation on Environmental Protection.

2. Citizens shall have the following rights:

- to use Natural Resources in the established procedure, perform measures for their protection and renewal, participate in the protection and improvement of the sanitary conditions of the Environment;
- to create public associations and public funds for the Environmental Protection;
- to participate in assemblies, meetings, pickets, processions and demonstrations, and referendums on Environmental Protection;
- to petition state agencies and organizations with letters, complaints, statements, and proposals with regard to Environmental Protection matters and demand the consideration thereof;
- to submit proposals with regard to public expert ecological examinations and participate therein;
- to demand the elimination by administrative or judicial procedure of decisions on the placement, construction, reconstruction, and initiation of the operations of enterprises, constructions, and other ecologically harmful objects and the restriction, suspension, or termination of the economic or other activity of legal entities and individuals affecting the Environment and human health;
- to raise issues regarding bringing lawbreaking organizations, officials, and citizens to justice, to make claims in court with regard to damage caused to health and property as a result of violations of the legislation on Environmental Protection; and
- to exercise in the due procedure other rights they hold as stipulated by legislative and other normative legal acts.

3. Each citizen shall be obliged to protect the Environment and treat Natural Resources with care, observe the legislation on Environmental Protection, improve the level of ecological knowledge, and assist the ecological education of young generations.

Article 6. Rights and Obligations of Public Associations for Environmental Protection

1. Public associations shall have the following rights with regard to Environmental protection in the course of their activity:

- to draw up, approve and promote their ecological programs, to protect the rights and interests of citizens, and to attract citizens on a voluntary basis to active involvement in Environmental Protection;
- to work on the protection and improvement of the Environment, the rational use and renewal of Natural Resources, to participate in the protection of objects of the Environment of special

ecological, scientific, and cultural value and in the organization and operation of specially protected natural territories;

- to work in the due procedure on ecological education and training and scientific research on Environmental Protection;
- to demand state expert ecological examinations and perform public expert ecological examinations;
- to exercise public control over Environmental Protection;
- to receive from state agencies and organizations prompt, complete, and reliable information about the state of the Environment and about measures to improve the sanitary conditions thereof;
- to cooperate and interrelate with state agencies and international organizations for Environmental Protection, to conclude agreements with the above, and to perform certain contracted works provided for by legislation;
- to participate in discussions of legislative drafts on Environmental Protection;
- to demand the elimination by administrative or judicial procedure of decisions regarding the placement, construction, reconstruction, or initiation of the operations of enterprises, constructions and other ecologically harmful objects and the restriction, suspension, and termination of economic and other activity of legal entities and individuals which affects the Environment and human health;
- to raise issues regarding bringing lawbreaking organizations, officials, and citizens to justice, to make claims in court with regard to damage caused to health and property as a result of violations of the legislation on Environmental Protection; and
- to exercise in the due procedure other rights they hold as stipulated by legislative and other normative legal acts.

2. Public associations shall be obliged to act in accordance with the legislation on Environmental Protection and on public associations.

CHAPTER III. COMPETENCE OF AGENCIES OF STATE POWER AND LOCAL SELF-ADMINISTRATION AS REGARDS ENVIRONMENTAL PROTECTION

Article 7. Competence of the Government of the Republic of Kazakhstan

Regarding Environmental Protection Regarding Environmental Protection, the Government of the Republic of Kazakhstan shall:

- develop the basic objectives of state policy, and strategic and tactical measures for the implementation thereof;
- develop national (state) ecological programs and programs aimed at various aspects of the Use of Resources, and shall submit the same to the President of the Republic of Kazakhstan for approval;
- manage the activity of ministries, state committees, central executive agencies which are not part of the Government, and local executive agencies, and shall supervise the execution of Presidential acts and acts of the Government of the Republic of Kazakhstan by the above agencies;

- manage state property, and shall develop and impose measures on the Government for the use thereof; - determine the procedure for the development and approval of standards for Environmental Quality and Ecological Requirements for economic and other activity;
- establish the procedure for exacting fees for Pollution of the Environment and the procedure for the protection and renewal of Natural Resources;
- approve regulations on state funds for Environmental Protection;
- establish the procedure and conditions for mandatory ecological insurance;
- in the circumstances established by legislation, issue decrees on the provision of Natural Resources to the Use of Resources, conclude agreements (contracts), and establish limits and quotas for the Use of Resources;
- approve a list of the types of Use of Resources for which users of nature shall require permits, as well as the procedure for the issuance of such permits;
- approve concepts on various types of Use of Resources, establish the procedure for the state structure for the Use of Resources, for the approval and implementation of plans for the comprehensive use, renewal, and protection of Natural Resources, and for the maintenance of state registration and state surveys of Natural Resources;
- establish the structure, maintenance, and procedure of state Monitoring of the Environment and monitoring of Natural Resources;
- approve a list of ecologically dangerous economic activities and the procedure for the mandatory state licensing thereof, and a list of groups of similar products (work, services) regarding Environmental Protection subject to mandatory standardization and certification;
- approve within their competence the list of Objects of Environmental Protection of special ecological, scientific, and cultural importance, organize state natural reserves, state national and nature parks, and other specially protected natural territories;
- determine the procedure for the provision of information and maintenance of state statistics on Environmental Protection;
- approve the list of specially authorized agencies performing functions of Environmental Protection, management of the Use of Resources and the state control thereof, determine the procedure for their operation, and establish the procedure for licensing and conducting ecological audits;
- exercise international cooperation; and exercise other powers in accordance with the legislation of the Republic of Kazakhstan.

Article 8. Competence of the Central Executive Agency of the Republic of Kazakhstan for Environmental Protection

The central executive agency of the Republic of Kazakhstan for Environmental Protection shall coordinate the activity of other central executive agencies performing the functions of Environmental Protection and the management of the Use of Resources and shall exercise supra-administrative state control.

The central executive agency of the Republic of Kazakhstan for Environmental Protection sphere shall:

- ensure pursue a unified state policy on Environmental Protection and arrange the execution of national (state) ecological programs;
- approve within its competence or coordinate the standards for Environmental Quality and Ecological Requirements for economic and other activities;
- manage the republican Environmental Protection fund in the procedure established by the Government of the Republic of Kazakhstan, and control its operations;
- issue licenses for ecologically dangerous economic activities, and for the disposal of harmful substances into the Environment; in the procedure established by the Government of the Republic of Kazakhstan, shall conclude agreements (contracts), establish limits and quotas, and issue permits for the Use of Resources;
- work on the state Environmental Monitoring and manage a unified system of Environmental Monitoring and monitoring of Natural Resources;
- organize the state expert ecological examination;
- coordinate and perform the general systematic management of the affairs of natural reserves and maintain the state survey of specially protected natural territories;
- exercise state control over the protection, renewal and use of flora and fauna; - maintain the state survey of rare and endangered types of flora and fauna, provide for the publication of the Red Book;
- exercise state control over Environmental Protection in accordance with its competence;
- participate in international cooperation on Environmental Protection; and perform other functions to effective Environmental Protection.

Article 9. Competence of other Central Executive Agencies of the Republic of Kazakhstan Engaged in Environmental Protection and Management of the Use of Resources

The legal status and competence of other central executive agencies engaged in Environmental Protection and the management of the Use of Resources shall be established by the Government of the Republic of Kazakhstan on the basis of legislative acts.

Article 10. Competence of Local Representative and Executive Agencies and Local Self-Administrating Agencies Regarding Environmental Protection

1. Local representative agencies shall:

- approve programs for Environmental Protection and the Use of Resources on the appropriate territories;
- approve expenses for Environmental Protection and improvement of the Environment from local budgets;
- hear the reports of the directors of local executive agencies and organizations with respect to Environmental Protection and the Use of Resources;

- adopt within their competence obligatory rules stipulating administrative liability for violations thereof on issues of the improvement of the Environment, Environmental Protection, the renewal and rational use of Natural Resources, and the protection of Environmental objects of special ecological, scientific, and cultural value. Such rules shall be effective at least two weeks after they become public.

2. Local executive agencies shall:

- exercise state control over Environmental Protection and regulate the Use of Resources within their competence;

- arrange the development and implementation of programs for Environmental Protection and Use of Resources on the relevant territories, expert ecological examinations, and the construction and reconstruction of facilities for Environmental Protection;

- approve charges for Pollution of the Environment, prepare opinions on the prohibition of construction and reconstruction of enterprises, constructions and other objects which received a negative opinion from an expert ecological examination, suspend economic and other activity in the event of violations of Ecological Requirements and take corresponding measures;

- make decisions or submit proposals to superior agencies concerning the protection of Environmental objects of special ecological, scientific, and cultural value, and concerning the creation of specially protected natural territories; and - exercise other powers in accordance with the law.

3. Local self-administrating agencies for Environmental Protection shall ensure the participation of the population in the resolution of matters of local importance within their authority as established by legislation.

CHAPTER IV. NATURAL RESOURCES AND THE USE OF RESOURCES

Article 11. Natural Resources

The land, subsoil, water, flora and fauna, and other Natural Resources shall constitute the material base for the sovereignty of the Republic of Kazakhstan and shall be owned by the state. Land also may be privately owned on the grounds, terms and conditions, and to the extent established by law.

Article 12. Users of Nature

Users of nature shall be subdivided into legal entities and individuals, state and non-state, national and foreign. National users of nature shall include citizens of the Republic of Kazakhstan and Kazakhstan legal entities, including those with foreign participation, and foreign users of nature shall include foreign citizens, foreign legal entities, foreign states, and international associations and organizations.

Users of nature may be:

- permanent (having an indefinite right to the Use of Resources) and temporary (whose right to the Use of Resources is limited to a definite period);

- primary (whose right to the Use of Resources is obtained from the state or from other primary users of nature in the procedure of THE alienation of that right) and secondary (whose right to the temporary Use of Resources is obtained on the basis of an agreement with the primary user of nature, who retains its status).

Article 13. General and Special Use of Resources

Natural Resources of the Republic of Kazakhstan shall be for the general or special Use of Resources. The general Use of Resources shall be provided without cost for satisfying vital requirements of the population and without granting Natural Resources to citizens and organizations. The general Use of Resources may be restricted if expressly stipulated by legislation.

Under special Use of Resources, Natural Resources shall be granted to users of nature in due procedure. The right to the special Use of Resources may be permanent or temporary, alienable or inalienable, acquired free-of-cost or on a fee basis, primary or secondary.

The peculiarities of the origin of the right to the special Use of Resources or limited Use of Resources (servitudes) shall be determined by the legislation of the Republic of Kazakhstan.

Article 14. Bases for Granting Natural Resources for the Use of Resources

Natural Resources shall be granted for the Use of Resources on the following bases:

- licenses for the usage of Natural Resources and performance of individual types of activity in the field of Environmental Protection;
- upon the decision of local executive agencies or by resolution of the Government of the Republic of Kazakhstan on granting Natural Resources for the Use of Resources; and agreements (contracts) for the Use of Resources.

Article 15. Limits and quotas for the Use of Resources

Limits and quotas for the Use of Resources shall constitute amounts established for users of nature for a definite period for the limited use (withdrawal) of Natural Resources, the discard and disposal of contaminants into the Environment, and the siting of industrial and consumption wastes.

The limits and quotas shall be established by the Government of the Republic of Kazakhstan in accordance with the prevailing standards of Environmental Quality and Ecological Requirements for economic and other activities.

Article 16. Permit for the Use of Resources

A permit for the Use of Resources shall be a document issued to a user of nature by the specially authorized state agency for Environmental Protection and certifying the right of a user of nature to use (withdraw) Natural Resources, dispose of and discard contaminants into the Environment, site industrial and consumption wastes, and specifying the actual dates and amounts, standards, and the terms and conditions of the Use of Resources and applied technology.

Article 17. State Regulation of the Use of Resources

In order to provide state regulation of the Use of Resources, its state structure shall be formed, plans shall be drawn up for the comprehensive use, renewal, and protection of Natural Resources, and state records and state surveys of Natural Resources and state Environmental Monitoring and monitoring of Natural Resources shall be maintained in accordance with national (state) programs funded by the budget.

Article 18. State System for the Use of Resources and Plans for the Comprehensive Usage, Renewal and Protection of Natural Resources

The state system for the Use of Resources shall constitute a system of measures aimed at the organization of the rational use, renewal, and protection of Natural Resources.

In circumstances envisaged by the legislation, plans for the comprehensive usage, renewal, and protection of Natural Resources shall be drawn up.

Article 19. State Records and State Surveys of Natural Resources

For the purpose of determining the quality and quantity of Natural Resources to be used for the needs of the population and sectors of the economy,' state records and state surveys of Natural Resources shall be maintained which shall consist of the total information compiled with regard to the condition, use, renewal, and protection of Natural Resources.

Article 20. Basic Obligations and Protection of the Rights of Users of Nature

1. Users of nature shall be obliged to:

- use Natural Resources in accordance with the intended purpose and the terms and conditions of the provision thereof;
- observe the established Ecological Requirements for economic and other activities, current standards, technical specifications, and standards of Environmental Quality;
- economically use the Natural Resources granted, not cause damage to the Environment and, not allow violations of the rights of other users of nature;
- conduct in the due procedure measures aimed at Environmental Protection and the renewal of Natural Resources;
- make timely payments for the use of Natural Resources, Pollution of the Environment, and for the protection and renewal of Natural Resources;
- submit necessary information upon the request of agencies exercising state control over Environmental Protection; and
- fulfill other requirements stipulated by the legislation of the Republic of Kazakhstan.

2. The rights of users of nature shall be protected by law. No person may be deprived of the right to the Use of Resources or restricted therein other than on the grounds specified by law. Violated rights of users of nature shall be subject to reinstatement in the procedure stipulated by the legislation of the Republic of Kazakhstan.

CHAPTER V. LICENSING THE USE OF NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION

Article 21. Activities Subject to Licensing

1. The following activities shall be subject to licensing:

- 1) the use of Natural Resources in accordance with the legislation thereon;
- 2) discarding (disposing of) contaminants into the Environment;
- 3) the burial and storage of production and consumption wastes which present a special hazard to the Environment and to the health of the population; and
- 4) ecological auditing.

2. Ecologically hazardous economic activities shall be subject to mandatory state licensing.

Article 22. Licensing of the Use of Natural Resources and Environmental Protection

Activities regarding the use of Natural Resources and Environmental Protection shall be licensed by specially authorized state agencies, the list of which shall be approved by the Government of the Republic of Kazakhstan.

The terms, conditions, and procedure for the issuance of licenses shall be regulated by legislation.

Article 23. Agreement (Contract) for the Use of Resources

An agreement (contract) for the Use of Resources shall be concluded between the user of nature and the executive agencies or the Government of the Republic of Kazakhstan in the procedure established by legislation.

The agreement (contract) for the Use of Resources shall be deemed void without the preliminary obtaining of a license by the user of nature, if the usage of Natural Resources and the performance of individual types of activities in the field of Environmental Protection require mandatory state licensing.

The conditions and effective term of an agreement (contract) shall be determined by agreement between the parties in accordance with the legislation of the Republic of Kazakhstan or by the license.

Terms and conditions of an agreement (contract) which contradict the license shall be deemed void. Withdrawal of the license shall result in the termination of the agreement (contract).

An agreement (contract) for the Use of Resources shall be subject before its signing to approval by a specially authorized state agency for Environmental Protection.

CHAPTER VI. ENVIRONMENTAL MONITORING AND MONITORING OF NATURAL RESOURCES

Article 24. State Environmental Monitoring and Monitoring of Natural Resources

1. State Environmental Monitoring and monitoring of Natural Resources shall be conducted by specially authorized state agencies performing functions of Environmental Protection and management of the Use of Resources, which shall include:

1) observation under a defined program of the condition of the Environment and Natural Resources and the sources of the human effect thereon;

2) assessment of the condition of the said objects of observation;

and

3) prognosis of their change.

2. Environmental Monitoring and monitoring of Natural Resources shall be conducted in order to provide for managerial and economic decisions on Environmental Protection and the use of Natural Resources.

3. A Single State System for Environmental Monitoring and monitoring of Natural Resources shall be established and shall function in the Republic of Kazakhstan.

4. The functional structure, content, and procedure of the state Environmental Monitoring and monitoring of Natural Resources shall be determined by legislation,

5. Information received within the framework of the Single State System for Environmental Monitoring and monitoring of Natural Resources shall be state property and shall be used by executive agencies for drafting and adopting economic decisions, controlling the use of said information, and for informing the population.

Article 25. Industrial Environmental Monitoring

1. Legal entities which are users of nature shall be obliged to conduct industrial Environmental Monitoring, and maintain records and reports on the effect of their economic activity on the Environment.

2. Measurement equipment used for industrial Environmental Monitoring shall conform to the requirements of standardization and metrology.

3. Industrial monitoring data and reports on effects on the Environment shall be submitted to the specially authorized executive agencies of the Republic of Kazakhstan for Environmental Protection within the time periods agreed upon therewith.

CHAPTER VII. ECONOMIC MECHANISM FOR ENVIRONMENTAL PROTECTION

Article 26. Economic Methods for Environmental Protection

Economic methods for Environmental Protection shall be:

- planning and financing measures for Environmental Protection;
- fees for the usage of Natural Resources;
- fees for Pollution of the Environment;
- fees for the protection and renewal of Natural Resources;
- economic incentives for Environmental Protection;
- ecological insurance; and the establishment of Environmental Protection funds.

Article 27. Planning and Financing Environmental Protection Measures

1. Environmental Protection measures shall be accounted for in prognostic and program-purpose documents and materials, which shall be included in drafts for indicative planning of the social and economic development of the Republic of Kazakhstan and national (state) programs and concepts on various trends of the Use of Resources.

The procedure for developing ecological programs and concepts on various trends of the Use of Resources shall be determined by the legislation of the Republic of Kazakhstan.

2. Ecological programs and Environmental Protection measures shall be financed from:

- the republican budget and local budgets;
 - Environmental Protection funds;
 - ecological insurance; the funds belonging to users of nature;
 - voluntary contributions and donations from legal entities and individuals; and
 - other sources of financing not prohibited by the legislation of the Republic of Kazakhstan.
- Financing for Environmental Protection measures shall be a separate item in budgets of all levels.

Article 28. Fees for the Use of Natural Resources

Fees for the use of Natural Resources shall be collected from users of nature in the forms of general state taxes, local taxes and duties, special payments, and taxes envisaged for certain types of the use of Natural Resources.

Article 29. Fees for Pollution of the Environment

Fees for Pollution of the Environment shall be collected from organizations and citizens for the disposal and discard of contaminants and the siting of industrial and consumption wastes.

Fees for Pollution of the Environment which exceeds the established limits shall be collected in increased amounts in the procedure established by legislation.

Fee rates for Pollution of the Environment shall be approved by regional Akims (city of Almaty) in coordination with the central executive agency for Environmental Protection.

Article 30. Fees for Protection and Renewal of Natural Resources

Fees for the protection and renewal of Natural Resources shall be collected from users of nature as compensation for the budget costs thereof.

Article 31. Economic Incentives for Environmental Protection

1. Economic incentives for Environmental Protection shall be executed via an ecologically oriented policy of subsidies for legal entities which are users of nature which effectively protect the Environment, and other incentive measures.

2. Economic incentives for Environmental Protection may be executed with the help of measures which do not contradict legislation.

Article 32. Ecological Insurance.

1. Ecological insurance shall be a relationship for the protection of the property of legal entities and citizens (insured) in the event of certain insured circumstances due to Pollution of the Environment and irrational use of Natural Resources through the payment of insurance compensations from monetary funds formed by insurers from insurance payments made by insured* persons and other sources not prohibited by legislation.

2. Legal entities and citizens engaged in ecologically hazardous types of economic or other activities shall be subject to mandatory ecological insurance. An agreement for mandatory insurance may be concluded only with an insurer which holds a license for that type of insurance.

3. Voluntary ecological insurance shall be purchased by legal entities and individuals at their own will. The types, terms and conditions, and procedure for voluntary ecological insurance shall be determined by agreements between insurers and insurable persons.

Article 33. Environmental Protection Funds

1. Environmental Protection funds shall be created for financing the resolution of urgent Environmental Protection tasks, rehabilitation of losses in the Environment, compensation of damage and other Environmental Protection measures.

2. Environmental Protection funds shall be legal entities and may be both state and public. State Environmental Protection funds shall be divided into republican and local funds.

3. The republican Environmental Protection fund shall be created from deductions from the local funds.

4. Local Environmental Protection funds shall be created from funds received from users of nature as fees for Pollution of the Environment received in lawsuits for damages, penalties for violations of the legislation on Environmental Protection, funds from the sale of confiscated hunting and fishing equipment, illegally obtained products, and from other monies not contradicting the legislation of the Republic of Kazakhstan.

5. The activity of state funds and the use of their money shall be determined by regulations on Environmental Protection funds.

6 The formation and spending of the money of public Environmental Protection funds shall be determined by regulations (charters) thereon.

Article 34. Use of State Environmental Protection Funds

1. State Environmental Protection funds shall be used, not replacing other sources of financing, for:

- 1) scientific and technical research and assisting the implementation of resource-saving and ecologically clean technologies;
- 2) participation in the financing of the construction and reconstruction of facilities which protect nature, performed by legal entities which are users of nature;
- 3) implementing measures for the renewal of Natural Resources which suffered damage as a result of Pollution of the Environment;
- 4) payment in due procedure as compensations to citizens for damage caused to their health by contamination or other unfavorable effects on the Environment;
- 5) shared participation in the development and implementation of programs, projects, and normative and methodical documents aimed at the improvement of Environmental Quality;
- 6) development of ecological education and training;
- 7) creation and organization of specially protected natural territories;
- 8) strengthening the material and technical base of executive agencies for Environmental Protection; and
- 9) other purposes connected with Environmental Protection.

2. It shall be prohibited to spend money from Environmental Protection funds for purposes not connected with Environmental Protection.

CHAPTER VIII. ENVIRONMENTAL QUALITY REGULATIONS

Article 35. Basic Objectives and Requirements for Environmental Quality Regulations

Environmental Quality Regulations shall have the purpose of establishing scientifically-based maximum acceptable standards for influencing the Environment, guaranteeing Ecological Safety and the protection of the health of the population, and ensuring the prevention of Pollution of the Environment, and the renewal and rational use of Natural Resources.

The main tasks of Environmental Quality Regulations shall include:

- the establishment of criteria of Environmental Quality and determination of its effect on the health of people, and on the protection, renewal, and rational use of Natural Resources; and
- the establishment of maximum acceptable amounts and levels of damaging influence on the Environment. Exceeding the established standards of Environmental Quality or replacing them with temporary or reduced norms shall not be permitted.

The standards may be made stricter depending on the specific ecological conditions of territories. Approved Environmental Quality Regulations shall be compulsory for all legal entities and individuals and shall be published and freely distributed.

If in the country of an investor or supplier (manufacturer) of equipment, less strict standards for Environmental Quality are in effect as compared to the Republic of Kazakhstan, such a project may be implemented in the Republic of Kazakhstan in accordance with the foreign standards, subject to a positive opinion of the state expert ecological examination.

Article 36. Main Types of Standards for Environmental Quality

The main types of standards for Environmental Quality shall include:

- standards for the maximum acceptable levels of concentration of hazardous substances in the Environment;
- standards for the maximum acceptable levels of discarded and disposed-of contaminants in the Environment;
- standards for the maximum acceptable levels of noise, vibration, magnetic fields and other damaging physical effects;
- standards for the maximum acceptable radiation level;
- standards for the maximum acceptable levels of use of chemicals in agriculture and forestry;
- standards for restricted-access, sanitary, and other protected zones. The legislation of the Republic of Kazakhstan may stipulate other types of standards for Environmental Quality.

Article 37. Standards for the Maximum Acceptable Levels of Concentrations of Hazardous Substances in the Environment

For the purpose of the protection of the health of the population, flora and fauna, and the preservation of their gene pools, standards for the maximum acceptable levels of concentrations of potentially hazardous chemical and biological substances which contaminate the air, water, soil, and subsoil shall be established.

Article 38. Standards for the Maximum Acceptable Levels of Discarded and Disposed-of Contaminants in the Environment

For the purpose of the prevention of Pollution of the Environment, taking into account all sources and amounts of contamination on the relevant territory, the comprehensive effect thereof on the health of the population and on flora and fauna and standards for the acceptable levels of discarded contaminants disposed of into the Environment shall be established for each source of contamination.

Article 39. Standards for the Maximum Acceptable Levels of Noise, Vibration, Magnetic Fields and Other Hazardous Physical Effects

For the purposes of the preservation of the health and capacity for labor of the population, the protection of flora and fauna, and an Environment favorable for life, standards for the maximum acceptable levels of noise, vibration, magnetic fields, and other hazardous physical effects shall be established.

Article 40. Standards for the Maximum Acceptable Levels of Radiation

For the purposes of the prevention of danger for the health and gene pool of the human population and the protection of flora and fauna, standards for the maximum acceptable radiation levels shall be established for the Environment and food products.

Article 41. Standards for the Maximum Acceptable Levels of Agro-Chemicals in Agriculture and Forestry

For the purpose of the protection of the health and gene pool of the human population and the protection of flora and fauna, standards shall be established for the maximum acceptable levels of mineral fertilizers, pesticides, stimulants, and other agro-chemicals in agriculture and forestry, applied in doses ensuring compliance with the standards for the maximum acceptable level of trace quantities of chemicals in food products, subsoil, and water.

Article 42. Restricted-Access, Sanitary, and Other Protected Zones

For the purpose of the prevention of hazardous effects on the Environment and preservation of objects requiring special protection, restricted-access, sanitary, and other protected zones shall be

established. The sizes of restricted-access, sanitary, and other protected zones and the modes of operation thereof shall be established in accordance with legislation.

CHAPTER IX. STANDARDIZATION AND CERTIFICATION IN THE FIELD OF ENVIRONMENTAL PROTECTION

Article 43. Objects of Standardization and Certification in the Field of Environmental Protection

Objects of standardization and certification in the field of Environmental Protection shall include products (work, services) manufactured in the Republic of Kazakhstan or imported products (work, services) which may threaten the ecological safety, life and health of the population, or the renewal and rational use of Natural Resources.

Article 44. Standardization in the Field of Environmental Protection

State standards of the Republic of Kazakhstan and technical specifications in the field of Environmental Protection shall be developed, approved, and registered in the procedure established by legislation. The development, manufacture, supply (sale), storage, transportation, use (operation), and repair of products (manufactured goods), and the performance of work (provision of services) which violates the requirements of the registered standards and technical specifications in the field of Environmental Protection shall be prohibited.

Article 45. Certification in the Field of Environmental Protection

In order to determine the compliance with the standards and technical specifications in the field of Environmental Protection, mandatory and voluntary certification shall be carried out in the procedure established by legislation. The sale of products (work, services) subject to mandatory certification in the field of Environmental Protection shall be prohibited without a certificate of compliance.

CHAPTER X. ECOLOGICAL REQUIREMENTS FOR ECONOMIC AND OTHER ACTIVITIES

Article 46. Assessment of Effects on the Environment

Effects on the Environment shall be assessed in order to determine ecological and other consequences of adopted management and economic decisions, to draw up recommendations aimed at the improvement of the sanitary conditions of the Environment, prevent the elimination, degradation, damage, and exhaustion of natural Ecosystems and Natural Resources.

Results of the assessment of effects on the Environment shall be formed into a document which shall be an integral part of pre-project and project materials. It shall be prohibited to develop and implement projects which have an impact on the Environment without any assessment of the effects thereon.

Restructuring, conservation, changes of ownership and liquidation of enterprises, constructions, and other objects adversely affecting the Environment may be performed only in coordination with

the specially authorized state agencies for Environmental Protection, or after tests executed thereby for the assessment of effects on the Environment, elimination of discovered violations, and compensation in due procedure for damage caused.

The procedure for the assessment of effects on the Environment shall be determined by the legislation on expert ecological examination.

Article 47. Ecological Requirements for Use of Natural Resources

Ecological Requirements for the use of land, subsoil, waters, the atmosphere, forests and other flora, fauna. Objects of Environmental Protection having special ecological, scientific, and cultural value, specially protected natural territories, and territories with unfavorable ecological situations shall be determined by legislative and other normative legal acts.

Economic or other activity which causes the destruction of natural Ecosystems, the destruction of the human gene pool or flora and fauna, or changes in the Environment hazardous for the life and health of the population shall be prohibited.

Article 48. Ecological Requirements for Project Planning

Planned projects for settlements, enterprises, buildings and constructions, industrial and agricultural facilities, water supply and sewage systems, hydraulic engineering constructions, vehicles, communications equipment, technological processes, goods, equipment, and other objects shall take into account standards for Environmental Quality, for neutralization and utilization of hazardous wastes, low-waste or no-waste technologies and manufacturing processes, effective measures for the prevention of Pollution of the Environment, and the renewal and rational use of Natural Resources.

Projects which do not receive positive opinions from the state expert ecological examination shall not be approved and financing for the realization of such projects shall not be permitted.

Article 49. Ecological Requirements for the Siting of Enterprises, Installations, and Other Objects

The siting of enterprises, installations, and other facilities shall be determined with compliance with the conditions and rules of Environmental Protection, the renewal and rational use of Natural Resources, with consideration of the ecological consequences of the activity of such facilities.

Restricted-access, sanitary, and other protected zones shall be established during the siting of enterprises, installations and other facilities.

Article 50. Ecological Requirements for Construction and Reconstruction of Enterprises, Installations and Other Facilities

Enterprises, installations and other facilities may be constructed and reconstructed with the obtainment of a positive opinion from the state expert ecological examination and in accordance with the standards for

Environmental Quality. No changes which may cause harm to the Environment shall be allowed in an approved project or in construction costs.

Measures for the recultivation of land, renewal and rational use of Natural Resources, and the improvement of territories and sanitary conditions of the Environment shall be taken in the course of construction.

Article 51. Accounting for Ecological Requirements and Obligations in the Course of Privatization of State Property

1. The executive agency authorized to conduct privatization shall ensure compliance with the Ecological Requirements in the course of the privatization of state property.

2. Enterprises and other facilities shall be privatized subject to ecological situation test results. Tests of the ecological situation of state enterprises and other facilities shall be provided for by the privatization plan for the enterprise or other facility and shall be conducted with the participation of the state ecological control agency.

3. Measures for the cleaning and disinfection of enterprises or other privatized facilities shall be financed by the state and/or from the following sources with the consent of the new owner:

- 1) funds reinvested by the new owner of the enterprise for the construction, reconstruction, and technical refurbishment of facilities for protecting nature;
- 2) funds credited to the privatized enterprise or other facility as purpose-oriented credits, interest-free credits, and purpose-oriented funding for the needs of protecting nature;
- 3) funds received by the enterprise through the ecological insurance system;
- 4) part of the funds received from the sale of the state block of shares; and
- 5) other sources envisaged by legislation.

Article 52. Accounting for Ecological Requirements and Obligations in the Event of Bankruptcy

1. In the event of initiating a bankruptcy case against a legal entity which is a user of nature, the ecological situation of the enterprise or other facility shall be tested.

2. The responsibility for conducting the testing of the ecological situation of the enterprise or other facility shall be vested in the body performing the sanitation or an external manager.

3. The objects of the testing shall be the results of the economic activity which caused the bankruptcy and the compliance with the Ecological Requirements by the enterprise.

4. In the course of bankruptcy proceedings against a legal entity which is a user of nature, the interests of creditors with regard to ecological obligations shall be accounted for.

Article 53. Accounting for Ecological Requirements and Obligations in the Event of Liquidation and Reorganization of a Legal Entity

1. The liquidation and reorganization of a legal entity which is a user of nature shall be conducted with consideration of Ecological Requirements on the basis of the data of the test of the situation at the enterprise and/or expert ecological examination, and such results shall be reflected in the liquidation balance sheet prepared in the event of the appropriate form of reorganization of a legal entity.

2. The test of the ecological situation of a legal entity undergoing liquidation or reorganization shall be conducted with the participation of the state expert ecological examination agency.

3. In the event of the reorganization of a legal entity, the legal succession of ecological obligations regarding the new owner shall be provided for in accordance with the division balance.

4. A legal entity shall be liquidated with consideration of creditors' interests regarding ecological obligations.

Article 54. Ecological Requirements for Start-Up and Operation of Enterprises, Installations and other Facilities

The operations of enterprises, installations, and other facilities shall be started up subject to their complete compliance with all the Ecological Requirements stipulated by the project under the acts of acceptance commissions created with the participation of the specially authorized state agencies for Environmental Protection.

It shall be prohibited to start up the operations of enterprises, installations and other facilities not equipped with devices and equipment for cleaning, disinfection, and utilization of hazardous wastes, discarding contaminants up to the level of the maximum acceptable standards, and devices for controlling Pollution of the Environment, or without the completion of planned works for the recultivation of lands and the renewal and rational use of Natural Resources.

Article 55. Ecological Requirements for Operation of Industrial, Energy, Transportation, Communications, Agricultural, and Melioration Facilities.

Industrial, energy, transportation, communications, agricultural, and melioration facilities shall be operated with consideration of the established Ecological Requirements and with the use of ecologically justified technologies, necessary cleaning devices, and sanitary zones which eliminate Pollution of the Environment. Low-waste or no-waste technologies shall be implemented in the operation of such facilities and they shall be equipped with effective means for the cleaning, disinfection, and utilization of hazardous substances, shall use safe fuel types, shall economically and rationally use Natural Resources, and shall take measures for Ecological Safety.

Project planning and construction of atomic and hydroelectric power stations on densely populated areas, seismically dangerous zones, or traditional places of public recreation and medical treatment of the population shall be prohibited.

Article 56. Ecological Requirements for Construction of Cities and Other Settlements

Project planning, construction, and reconstruction of cities and other settlements shall provide the best possible conditions for the life, labor, and recreation of the population, taking into consideration the requirements of Ecological Safety and preservation of the Environment.

In the course of planning and constructing cities and other settlements, sanitary cleaning, disinfection, utilization, storage, safe removal, processing, and burial of industrial and domestic wastes shall be provided for and carried out. Forested parks, green zones, and protected zones with a limited Use of Resources regime shall be created within big cities and industrial centers.

Article 57. Ecological Requirements for the Use of Radioactive Materials

Organizations and citizens shall be obliged to observe the established rules with regard to the production, storage, transportation, use, utilization, removal, and burial of radioactive materials, not to allow any violations of the standards of the maximum acceptable radiation levels, take measures to prevent and liquidate radioactive Pollution of the Environment.

It shall be prohibited to import radioactive wastes and materials from other states to the Republic of Kazakhstan for storage or burial. Burial (siting) of radioactive wastes and materials on the surface of the earth and in the subsoil shall be prohibited without taking measures for the elimination of the possibility of radioactive materials entering the Environment.

In the event of discovery of any radioactive Pollution of the Environment, organizations and citizens shall be obliged to immediately inform the controlling agencies thereof.

Article 58. Ecological Requirements for the Production and Use of Potentially Hazardous Chemicals and Biological Substances

The production and use of potentially hazardous chemicals and biological substances shall be permitted after the necessary hygienic-toxicological and ecotoxicological research, hygienic regulations for handling the same, the establishment of hygienic and ecological standards, and the state registration of such substances in the procedure established by the Government of the Republic of Kazakhstan.

The cultivation and disposal in the Environment of biological objects which are alien to the local natural surroundings or artificially created shall be allowed with relevant ecological grounds and permits issued by the specially authorized state agencies for Environmental Protection.

Article 59. Protection of the Environment from Hazardous Physical Effects

Organizations and citizens shall be obliged to take necessary measures to prevent and eliminate the hazardous effects of noise, vibration, magnetic fields, and other hazardous physical effects in industrial, public, and residential premises, streets, courtyards, city squares, and other settlements, in public recreation areas, and in places inhabited by wildlife.

The standards for the maximum acceptable levels of noise, vibration, magnetic fields, and other hazardous physical effects shall be taken into account in the planning and construction of cities and other settlements, in the project planning, construction, reconstruction, and operation of industrial

and other facilities, in the creation, development, and operation of new technology, vehicles, and communications devices.

Article 60. Ecological Requirements for Handling Industrial and Consumption Wastes

1. The storage, destruction, and burial of wastes shall be performed in places determined by the decisions of local executive agencies in coordination with the specially authorized executive agencies for Environmental Protection and other executive agencies of the Republic of Kazakhstan which perform Environmental Protection functions.

2. Wastes may be imported to the Republic of Kazakhstan for processing, burial, or storage only by special authorization from the Government of the Republic of Kazakhstan.

3. The import of products which lack technologies for their neutralization or utilization after use shall be prohibited.

4. Ecological Requirements for handling wastes shall be determined by the legislation on wastes and other normative legal acts in addition to this Law.

5. The formation and use of industrial and domestic wastes shall be subject to state registration.

Article 61. Ecological Requirements for Military and Defense

Installations and Military Activity Ecological Requirements established by this Law shall fully cover military and defense installations and military activity except in special situations stipulated by the legislation of the Republic of Kazakhstan.

Article 62. Protection of the Climate and the Ozone Layer

The climate and the ozone layer shall be protected in accordance with the legislation of the Republic of Kazakhstan and international treaties ratified by the Republic of Kazakhstan.

CHAPTER XI. EXPERT ECOLOGICAL EXAMINATION

Article 63. Expert Ecological Examination and Types Thereof

Expert ecological examination shall be a determination of conformity of economic and other activity to the standards for Environmental Quality and Ecological Requirements, and of the acceptability for implementation of the object of examination in order to prevent the possible negative effects and related consequences of such activity on the Environment.

The Republic of Kazakhstan shall perform state expert ecological examination and public expert ecological examination.

Article 64. State Expert Ecological Examination

State expert ecological examination shall be conducted by the specially authorized state agencies for expert ecological examination.

The list of objects subject to mandatory state expert examination and the procedure for the conduct thereof shall be determined by the legislation of the Republic of Kazakhstan.

The production or import of products into the territory of the Republic of Kazakhstan (work, services) for Environmental Protection, which are subject to expert ecological examination, shall be prohibited without a positive opinion from such expert examination.

Expert ecological examination opinions shall be official documents, shall be enforceable and may be contested in court.

Article 65. Public Expert Ecological Examination

Public associations and other groups of the population may conduct public expert ecological examinations.

The organizational forms for conducting public expert ecological examinations, and the authority of public associations in relation to expert ecological examinations shall be determined by the legislation on expert ecological examinations.

Opinions of public expert ecological examination shall have an informative and recommendation character.

CHAPTER XII. OBJECTS OF ENVIRONMENTAL PROTECTION OF SPECIAL ECOLOGICAL, SCIENTIFIC AND CULTURAL VALUE

Article 66. State Nature Reserve Fund

The state nature reserve fund shall be the total of the objects of the Environment brought under special state protection which have ecological, scientific, and cultural value as natural specimens, unique objects or relics, genetic reserves, objects of scientific research, education, and recreation.

The protection of the state nature reserve fund shall be provided for by establishing prohibitions and restrictions on the use of objects of the Environment of a special ecological, scientific, and cultural value.

Article 67. Specially Protected Natural Territories

1. Specially protected natural territories shall be plots of land, water, forests and subsoil which are under a legal regime of special protection or a regulated economic regime providing for preservation and rehabilitation of the state nature reserve fund.

2. The following types of specially protected natural territories, which differ in their purposes, protection regimes, and specification of use, shall be created in the Republic of Kazakhstan:

- state natural reserves, including biospheric reserves;

- state national and nature parks;
- state natural monuments;
- state natural reserve zones;
- state natural game reserves;
- state zoological parks; and state botanical gardens and dendrological parks.

The legislation of the Republic of Kazakhstan may provide for other types of specially protected natural territories. Specially protected natural territories may be of republican or local significance.

3. The procedure for the formation and the regimes of protection and use of specially protected natural territories shall be established by legislative and other normative legal acts of the Republic of Kazakhstan.

CHAPTER XIII. EMERGENCY ECOLOGICAL SITUATIONS AND ECOLOGICAL DISASTER AREAS

Article 68. Emergency Ecological Situations

An emergency ecological situation shall be deemed an unfavorable ecological circumstance arising on a certain territory as a result of human activity or a natural disaster, characterized by deep and long-lasting negative changes in the Environment, hazardous for the life and health of the people and the preservation of flora and fauna.

On territories in the Republic of Kazakhstan experiencing emergency ecological situations, certain types of economic or other activity and the use of nature may be prohibited or restricted;

operative measures for rehabilitation (renewal) of Natural Resources, sanitary improvement of the Environment, and social protection of the population shall be taken in the procedure envisaged by legislation.

Article 69. Ecological Disaster Areas

1. Territories with emergency ecological situations shall be declared ecological disaster areas, if as a result of the unfavorable ecological situation a material harm has been done to the health of the population and/or natural Ecosystems have been destroyed or flora and fauna have been degraded.

2. Ecological disaster areas in each separate case shall be subdivided into subzones (ecological catastrophes, ecological crises, ecological pre-crisis conditions, etc.) subject to the difficulty and graveness of the ecological emergency situation or the factors which caused it.

3. Measures for the renewal of Natural Resources, improvement of the sanitation of the natural Environment, and medical aid to the population shall be developed and exercised differentially in individual ecological disaster areas in accordance with republican purpose-oriented programs approved by the Government.

4. In ecological disaster areas:

- 1) the activity of the economic entities which caused the appearance of the unfavorable ecological circumstance shall be terminated;
- 2) the operation of organizations, shops, units, and equipment which damage people's health and the Environment may be suspended;
- 3) certain types of the Use of Resources shall be restricted; and
- 4) if necessary, measures shall be taken to evacuate people.

5. Citizens who suffered as a result of an ecological emergency situation and those residing in ecological disaster areas shall have the right to damages including compensations, benefits, and other social protection.

The procedure for determining which citizens have suffered as a result of an ecological emergency situation and the forms of social protection shall be defined by legislation.

Article 70. Declaration of Ecological Emergency Situations and Ecological Disaster Areas

Ecological emergency situations on separate territories of the Republic of Kazakhstan shall be declared by the Government. Ecological disaster areas shall be declared by laws of the Republic of Kazakhstan. The borders of ecological disaster areas shall be determined by the Government subject to the positive opinion of the specially authorized executive agencies for Environmental Protection, health care, and science.

CHAPTER XIV INFORMATION AND STATE STATISTICS ON ENVIRONMENTAL PROTECTION

Article 71. Information on Environmental Protection

Information on Environmental Protection shall be deemed information on the situation, contamination, and sanitary improvement of the Environment, on financing (sources of financing), expenses toward the protection and sanitary improvement of the Environment, on the condition, renewal, and use of Natural Resources which affect the Environment, regulation of the quality thereof, and Ecological Requirements for economic and other activities. Information shall be open, public, and shall be published in the mass media.

Any concealment, untimely presentation, or falsification of information on Environmental Protection by officials shall be prohibited.

Article 72. State Statistics on Environmental Protection

The specially authorized state agencies shall maintain state statistics on Environmental Protection on the basis of the objectiveness of statistical information and comparability with international statistics.

Legal entities and individuals shall provide statistics in a definite amount and within the established time periods in the form of state statistical reports at the expense of the information provider.

The minimal requirements for state statistical reports and the procedure for the maintenance of state statistics on Environmental Protection shall be determined by legislative and other normative legal acts.

CHAPTER XV. ECOLOGICAL EDUCATION AND TRAINING, SCIENTIFIC RESEARCH IN THE SPHERE OF ENVIRONMENTAL PROTECTION

Article 73. General and continuous ecological education and training

In order to enhance the ecological knowledge of society and to train specialists, a system of general and continuous ecological education and training shall be established, which shall envelop the entire process of pre-school, secondary, professional technical, secondary special, and higher education, and the retraining and the improvement of the qualifications of specialists.

Ecological knowledge shall be disseminated amongst the population by state agencies and public associations via the mass media and in Other procedures not contradicting the legislation.

Article 74. Ecological Education

Educational institutions, regardless of their profile and their form of ownership, shall provide for the teaching of ecological disciplines.

Officials and experts engaged in activity which harmfully affects the Environment shall be obliged to possess the necessary ecological background and knowledge of the basics of Environmental Protection legislation. The professional ecological training of managers and experts shall be taken into consideration in their appointment to a position, and their assessment and re-assessment.

Article 75. Scientific Research on Environmental Protection

For the purpose of the development and creation of a scientific basis for Environmental Protection, scientific research shall be conducted in the procedure established by legislation.

Scientific research, construction experiments, and introductory work in the field of Environmental Protection shall be financed by the republican budget upon their inclusion in national (state) programs.

CHAPTER XVI. CONTROL OVER ENVIRONMENTAL PROTECTION

Article 76. Tasks and Types of Control over Environmental Protection

1. Control over Environmental Protection shall stipulate superintendence over the state of the Environment and the changes therein influenced by economic and other activities, verification of the fulfillment of plans and measures taken with regard to the protection and sanitary improvement of the Environment, the renewal and rational use of Natural Resources, compliance with the legislation on Environmental Protection, and quality standards and Ecological Requirements.

2. The Republic of Kazakhstan shall exercise state, departmental, industrial, and public control in the field of Environmental Protection.

Article 77. State Control over Environmental Protection

1. State control over Environmental Protection shall be exercised by the specially authorized state agencies, within their competence, and by local executive agencies.

2. Officials of the specially authorized-state agencies for Environmental Protection shall have the right to:

- unimpeded visits (subject to presentation of official credentials) to organizations and other facilities, regardless of their form of ownership and subordination (including military and defense installations, in due procedure), to request and obtain without payment documents, results of analyses, and other materials necessary for the exertion of state control;

- verify the fulfillment of plans and measures related to the protection and sanitary improvement of the Environment, the renewal and use of Natural Resources, compliance with legislative requirements for Environmental Protection, quality standards and Ecological Requirements, and the operation of cleaning facilities and other disinfection devices and the means of control thereof;

- verify compliance with the terms and conditions established by licenses for the use of Natural Resources, the performance of certain activities connected with Environmental Protection, and the fulfillment of agreements (contracts) and permits for the Use of Resources, to revoke the same in the established procedure, and to give instructions or submit proposals with regard to such revocation;

- submit proposals with regard to state expert ecological examination and check the fulfillment of the opinions thereof;

- give instructions on prohibiting the import into and transit (further transportation) within the Republic of Kazakhstan of ecologically hazardous loads (goods), wastes, and raw materials performed in violation of the standards for Environmental Quality and Ecological Requirements;

- present demands to legal entities and individuals and give instructions with regard to the elimination of violations regarding Environmental Protection;

- give instructions with regard to the restriction and suspension of the operations of enterprises, installations and objects, prohibiting the start-up of same, to restrict or suspend economic or other activity carried out in violation of Ecological Requirements, or to submit proposals on the termination of such activities;

- consider, in the procedure established by legislation, cases on administrative offenses regarding Environmental Protection, and submit materials on bringing the guilty to administrative or criminal amenability with the relevant agencies;

- determine (participate in the determination of) the damage caused as a result of a violation of the Environmental Protection legislation, and on such basis present claims to responsible persons with regard to voluntary compensation of such damage or initiating court proceedings;

- submit instructions to the appropriate financial organizations with regard to termination of the financing of construction, the operation of facilities, and economic or other activity performed in violation of Ecological Requirements or without the positive opinion of the expert ecological examination;

- verify compliance with the standards and rules for departmental and industrial control over Environmental Protection; and

- exercise other rights granted by the current legislation.

3. The decisions of officials of the specially authorized state agencies for Environmental Protection, taken within their competence, shall be binding on all legal entities, officials, and citizens, and may be contested in the procedure of subordination or in court.

Article 78. Departmental and Industrial Control over Environmental Protection

Departmental and industrial control shall be exercised on the basis of regulations thereon approved by central executive agencies or organizations by consent of the specially authorized state agencies for Environmental Protection.

Article 79. Public Control over Environmental Protection

Public control shall be exercised by public associations at their initiative, on agreement with users of nature and the specially authorized state agencies for Environmental Protection.

The procedure for the exertion of public control shall be determined by public associations in accordance with their charters.

Article 80. Measures for the Protection of Persons

Exercising Control over Environmental Protection Persons exercising state control over Environmental Protection shall be subject to mandatory insurance and shall have the right to damages in the established procedure in the event of death or mutilation.

In the cases stipulated by legislation, persons who exercise control over Environmental Protection shall have the right to keep, bear, and use special devices and firearms.

CHAPTER XVII. ECOLOGICAL AUDIT

Article 81. Ecological Audit

An ecological audit shall be deemed an independent verification of the economic or other activity of organizations and citizens with the purpose of their compliance with the standards and rules for Environmental Protection, Ecological Requirements, including the correctness of the compilation of reports on the use and renewal of Natural Resources.

Article 82. Ecological Auditing Activity

Ecological audits shall be conducted by independent persons (ecological auditors) and audit organizations on the basis of an agreement with the client. In the cases established by legislation, audits shall be mandatory.

Foreign auditors and audit organizations may be contracted for an ecological audit, Ecological auditing activity shall be subject to state licensing, and an ecological auditor may be an individual or a legal entity attested to by a qualification commission and having a qualification certificate (credential) for the right to engage in auditing activity on the territory of the Republic of Kazakhstan.

Article 83. The Procedure for Conducting Ecological Audits

The procedure and conditions for ecological auditing activity, attestation of auditors, conducting ecological audits, and the rights, obligations, and liability of ecological auditors and audit organizations shall be established by legislation.

CHAPTER XVIII. SETTLEMENT OF DISPUTES REGARDING ENVIRONMENTAL PROTECTION AND LIABILITY FOR VIOLATION OF ENVIRONMENTAL PROTECTION LEGISLATION

Article 84. Settlement of Disputes Regarding Environmental Protection

Disputes regarding Environmental Protection shall be settled by courts or in the procedure established by the legislation of the Republic of Kazakhstan.

Article 85. Liability for Violation of Environmental Protection Legislation

Individuals and legal entities guilty of committing a violation of Environmental Protection legislation shall be liable in accordance with the legislation of the Republic of Kazakhstan.

Article 86. Compensation for Damage Caused by Violations of Environmental Protection Legislation

1. Legal entities and individuals cause damage to the Environment, health of citizens, or the property of organizations, citizens, and the state as a result of a violation of Environmental Protection legislation shall be obliged to compensate damages in accordance with the prevailing legislation.

Damage caused as a result of a violation of Environmental Protection legislation shall be compensated for voluntarily or by court decision in accordance with the fees and methods of calculation of damage established in due procedure, and in the absence thereof, damages shall be compensated in accordance with the actual expenses for the rehabilitation of the violated state of the Environment taking the losses incurred into account.

Damages recovered shall be transferred to Environmental Protection funds, and in the cases established by legislation, shall be transferred to the legal entity or individual who has suffered detriment.

2. Legal entities and individuals whose activity is associated with increased danger to the Environment shall be obliged to compensate for the damage caused thereby, unless they can prove that the damage was caused as a result of a force majeure or by design of the victim.

3. Damages caused to the health or property of citizens due to any violation of Environmental Protection legislation shall be subject to compensation in full, including for the loss of the victim's ability to work, expenses for his treatment and rehabilitation, care for the ill, and other expenses and losses.

The amount of compensation for damages to the health and property of citizens shall be determined in accordance with the prevailing legislation, and damages shall be compensated for on the basis of a court decision.

Moral damages caused as a result of any violation of Environmental Protection legislation shall be subject to compensation in the procedure established by the Civil Code of the Republic of Kazakhstan.

CHAPTER XIX. INTERNATIONAL COOPERATION FOR ENVIRONMENTAL PROTECTION

Article 87. International Cooperation for Environmental Protection

The Republic of Kazakhstan shall carry out international cooperation for Environmental Protection on the basis of the principle of observance of universal Ecological Safety.

Article 88. Activity of Foreign Organizations and Foreign Citizens in the Field of Environmental Protection on the Territory of the Republic of Kazakhstan

The activity of foreign organizations and foreign citizens shall be allowed on the territory of the Republic of Kazakhstan if it does not contradict the legislation of the Republic of Kazakhstan or is regulated by international treaties ratified by the Republic of Kazakhstan.

Article 89. International Treaties of the Republic of Kazakhstan on Environmental Protection

If international treaties ratified by the Republic of Kazakhstan establish standards others than those contained in the legislation of the Republic of Kazakhstan, then the rules of the international treaties shall apply.

President of the Republic of Kazakhstan

N. NAZARBAEV

Almaty, 15 July 1997



C4 Climate
Change
Coordination
Centre
Kazakhstan

SURVEY:
Issues of Environmental Protection
in the Republic of Kazakhstan.
Environmental Situations.
Problems and Solution.



Content

INTRODUCTION -----	2
1. GOVERNMENTAL ORGANIZATION -----	3
1.1. Organization of the Parliament -----	3
1.2. Organization of the Government -----	6
2. THE MINISTRY OF ENVIRONMENTAL PROTECTION -----	8
2.1. The Laws for establishment of the Ministry -----	8
2.2. Organizational chart -----	10
2.3. Functions and duties of the departments of Ministry -----	15
2.3.1. Basic tasks and functions of the Department of strategic planning and analysis -----	15
2.3.2. Primary functions and duties of the department of Ecological Expertise and nature management Adjustments -----	17
2.3.3. Primary functions and duties of the department normative and legal providing and international co-operation -----	18
2.3.4. Primary functions and duties of the Department on organizational-and-financial work ----	19
2.3.5. Primary functions and duties of Department on organizational and financial work -----	20
2.4. Budget in the past 3 years (2003, 2004, 2005 years) -----	22
2.4.1. Basic articles of expenses in 2003 were: -----	22
2.4.2. Basic articles of expenses in 2004 were: -----	23
2.4.3. Basic articles of expenses in 2005 -----	24
3. LOCAL GOVERNMENTS -----	25
3.1. Functions of local governments and Responsibility in environmental protection issues -----	25
3.2. Procedure for Inspection -----	26
4. ENVIRONMENTAL LAWS -----	27
4.1. Analysis of Legislation of the Republic of Kazakhstan regulating issues on emissions of pollutants into the ambient air -----	27
4.2. Signed or ratified international conventions and protocols -----	39
4.3. Environmental standards -----	40
4.4. Emission standards -----	40
4.5. Law enforcement mechanism -----	41
4.5.1. Procedure for EIA (Environment Impact Assessment) -----	41
4.5.2. Environmental inspection system -----	41
5. ENVIRONMENTAL POLICY AND PROGRAMS -----	42
5.1. Long-term policy -----	42
5.2. Mid-term policy -----	42
5.3. Annual programs and budgets in 2002, 2003, 2004 -----	43
6. ENVIRONMENTAL SITUATIONS -----	43
6.1. Nature including forest preservation, desertification prevention, biodiversity and natural disasters -----	43
6.2. Ambient air -----	44
6.3 Water Resources -----	46
6.4. Land Degradation -----	52
6.5 Waste Management -----	53
6.6 Energy saving and Utilization of Renewable energies -----	53
6.7. Greenhouse Gas Emission Reduction -----	54
7. ENVIRONMENTAL MONITORING -----	55
7.1. Environmental Monitoring System -----	55
7.2. Results of Environmental Monitoring - 2003 and 2004 -----	56
8. CHALLENGES OF THE GOVERNMENT -----	58
9. BILATERIAL AND MULTILATERAL COOPERATION -----	61

INTRODUCTION

The present work is prepared in compliance with Memorandum of Agreement between Climate Change Coordination Centre, Kazakhstan and Overseas Environmental Cooperation Center, Japan.

Issues of Organization of the Ministry of Environmental Protection, finance of environmental activity are considered, environmental legislation is reviewed, interaction of territorial bodies on environmental protection with other local authority bodies (akimats), environmental situation of Kazakhstan, priority problems in environmental protection sphere, environmental development strategy of Kazakhstan and international cooperation issues in the work.

The Republic of Kazakhstan is included in the of environmental protection process as on an international and national level.

Kazakhstan ratified 19 international Conventions and Protocols and takes part in multilateral regional agreements on Central Asia level and in bilateral intergovernmental agreements.

As shown from researches in Kazakhstan for environmental protection objectives Kazakhstan provides more and more recourses and finance. If in 2003 form 2 mlrd tenge and in 2005 5,5 mlrd tenge were provided from Republican.

However, experience shows that these recourses are not sufficient. Nowadays, when Kazakhstan is formed economically and structurally as sustainable state with stable market economy and environmental protection finance, it does not obtain finance on permanent principle and from 2006 will obtain funds in whole necessary extent.

Important environmental problems for Kazakhstan are water quality deterioration, air pollution in cities and industrial centers, oil and industrial pollution, accompanying gas utilization in fields, biodiversity preservation and including uncommon and endemic animals, deforestation, enhance of national preserves potential, transboundary pollution transport, quality and joint use of transboundary waterway, ozone layer protection issues, global climate change problems, reduction of greenhouse gas emissions. Also historical pollution problems, which became not only national, but also regional problems – Aral sea shrinkage, Baikonur, Semipalatinsk nuclear ground and other military grounds.

Environmental threats have important significant for Kazakhstan and the most right for us is progressive technology assumption and environmental policy, adopted in other countries. The importance tasks are reformation and being legislation improvement, foundation of environmental thought, and introduction of environmental education among citizens of Republic. Kazakhstan has a great potential for environmental projects development, it has desire and possibility to implement all of them including jointly with the Government of Japan and companies.

1. GOVERNMENTAL ORGANIZATION

1.1. Organization of the Parliament

Parliament of the Republic of Kazakhstan

Constitution of the Republic of Kazakhstan of 1995 defines Parliament as higher state organ, which performs the legislative functions. People can express their political will not only directly but also through the Parliament.

The Parliament confirms republican budget and government report and Counting Committee on republican budget implementation control, makes alterations and additions in budget. The parliament can approve or decline the government program and express vote of censure to the government.

The Parliament of the Republic of Kazakhstan fulfills its job in sessional order. Session of the Parliament consists of joint and separate sittings of chamber, chamber office, permanent committees and joint commissions of the chambers.

Periodical sessions are held one time a year, beginning from the first working day of September and till the last workday of June. Parliament session opens and closes on the joint sittings of Senate and Mazhilis. Parliament session is opened by the President of the Republic, and in case of his absence by the Mazhilis Chairman.

The parliament of the Republic of Kazakhstan consists of two chambers of Upper (Senate) and Lower (Mazhilis)

38 deputies are in the session in the Senate of the Parliament by 5 committees, which are showed in picture 1.1

76 deputies are in the session in the mazhilis of the Parliament by 7 committees, which are showed in picture 1.2.

**Structure of the Mazhilis of
the Parliament of the
Republic of Kazakhstan
Picture 1.1.**

**Chairman – Oral
Mukhamedzhanov**

**Deputy -Sergey
Diyachenko**

**Committee on
legislation and
judicial- and-
legal reform**

**Committee on
social-and-
cultural
development**

**Committee on
international
affairs, defense
and security**

**Committee on
agricultural
issues**

**Committee on
environmental
and nature
management
issues**

**Committee on
economic reform
and regional
development**

**Committee on
finances and
budget**

Members of Committee:

1. **Sergey Zhalybin
(chairman)**
2. Kulyash Agataeva
3. Valeryi Doskalov
4. Sergey Kiselyuv
5. Nurlan Itemgenov
6. Mukhtar Tinekeev

Members of Committee:

1. **Zaure Kadyrova
(chairman)**
2. Onalbay Ayashev
3. Valeryi Kotovich
4. Beken Alimzhanov
5. Amangeldy
Duissekeev
6. Dinar Nuketaeva
7. Gadilbek
Shalahmetov
8. Bekbolat Tilekhan

Members of Committee;

1. **Serik Abdrahmanov
(chairman)**
2. Bagila BAigambetova
3. ErasyI Abylkasymov
4. Zeinolla Alshymbaev
5. Sauyrbai Eszhanov
6. Tokhtar Aubakirov
7. Ualikhan Kalizhanov
8. Murat Karimov
9. Tolegen
Muhamedzhanov
10. Tokhtarhan
Nurahmetov
11. Muhtar Shahanov
12. Amalbek Tshanov
13. Amzebek
Zholshibekov
14. Ravil Cherdabaev

Members of Committee

1. **Romin Madinov
(chairman)**
2. Ivan Chirkalin
3. Mikhail Troshihin
4. Nurlan Zhylykyshev
5. Askar Beisenbaev
6. Bolat Abishev
7. Uzakkali Eleubaev
8. Amangeldi Aitaly
9. Ermuhanbet Omarov
10. Nurdaulet Sarsenov
11. Erkin Ramazanov
12. Nurbah Rustemov

Members of Committee

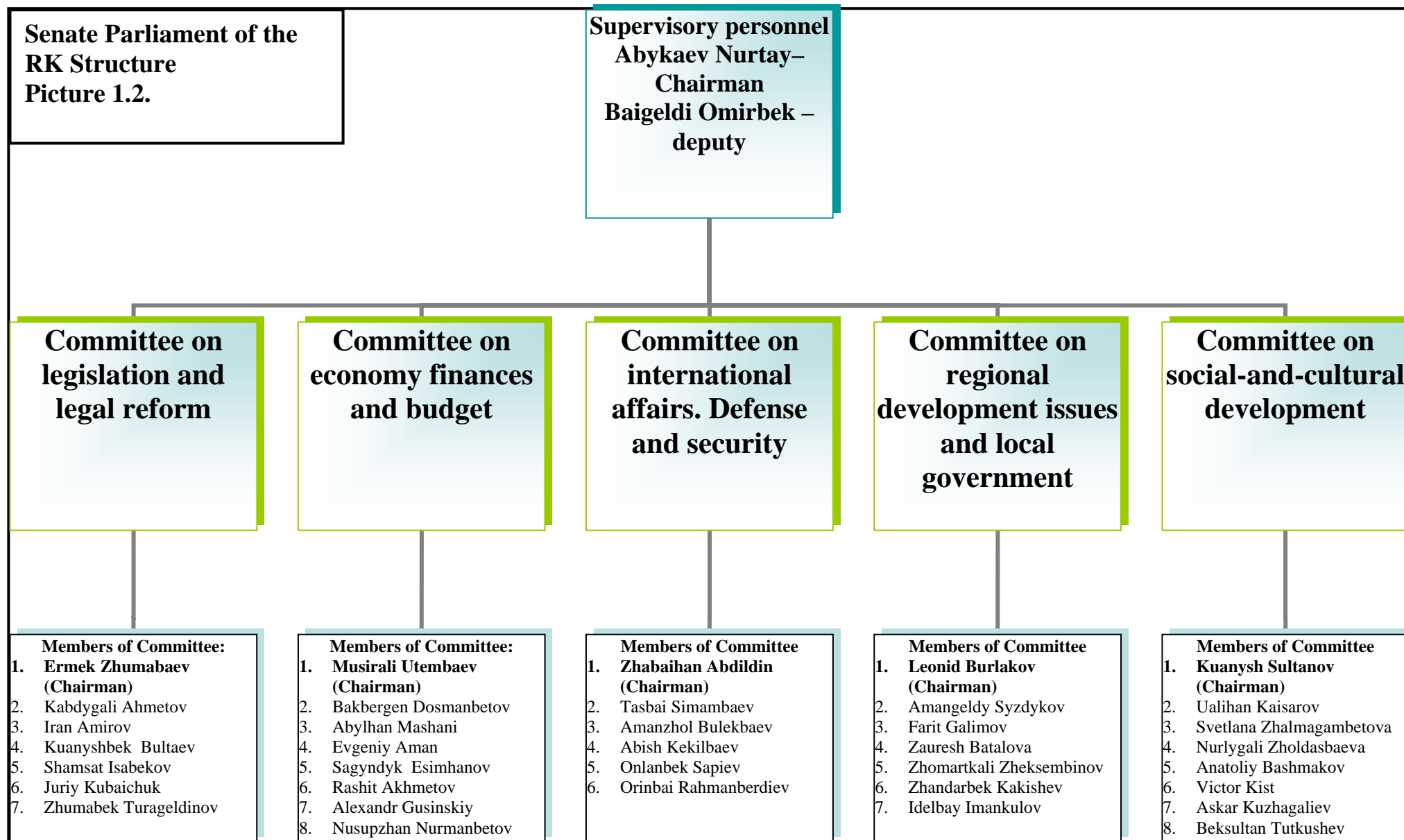
1. **Erlan Nigmatulin
(chairman)**
2. Serik Konakbaev
3. Tanirbergen
Berdongarov
4. Sergey Boyarkin
5. Raimbek Aiyashev
6. Orynbasar Kalkabaev
7. Uzakbay Karamanov
8. Dariya Klebanova
9. Vladimir Nehoroshev
10. Baibol Utepbaev

Members of Committee

1. **Vera Suhorukova
(chairman)**
2. Shaimerden
Yrazalinov
3. Satybaldy Ibragimov
4. Nurpeis Mahashev
5. Rauan Shaeken
6. Amangeldy Taspilov
7. Elena Tarasenko
8. Amangoss Utegenov
9. Erzhan Rahmetov

Members of Committee

1. **Kenzhegali
Sagadiev
(chairman)**
2. Victor Egorov
3. Ermek Abasov
4. Vladimir Bobrov
5. Turarbek Asanov
6. Tuledek
Kosmambetov
7. Maral Itegulov
8. Alexandor Ilutin
9. Serik Ospanov
10. Nurtai Sabiliyanov
11. Tito Syzdykov
12. Aldiyarbek Tusupov
13. Oralbek Zhakiyanov
14. Amanzhan Zhamalov



1.2. Organization of the Government

Government of the Republic of Kazakhstan realizes executive power of the Republic of Kazakhstan, heads system of executive powers and leads their activity.

Activity of the government is regulations by the Constitution of the Republic of Kazakhstan, the Constitutional law of the Republic of Kazakhstan "On the government of the Republic of Kazakhstan", other normative legal acts of the Republic of Kazakhstan and the present Order.

Government of the Republic of Kazakhstan is lead by the Prime-Minister, who has 2 deputies.

Informational-and-legal, documentation and other providing activities of the Prime-Minister of the Republic of Kazakhstan and government are fulfilled by the Prime-Minister Office of the Republic of Kazakhstan.

Structure of the government includes Ministry and Departments indicated in graph 1.2.:

Prime-Minister of RK

Graph 1.2
Structure of the Government of
RK

Prime-Minister's deputy (2)

Prime-Minister's office

The Ministry of Industry and Trade

The Ministry of Culture, Information and Sport

The Ministry of Education and Science

The Ministry of Transport and Communication

The Ministry of Finances

The Ministry of Economy and Budget Planning

The Ministry of Justice

The Ministry of Internal Affairs

Land Resources Management Agency

Natural Majors' Regulation Agency

The Ministry of Health

The Ministry of Foreign Affairs

The Ministry of Defense

The Ministry of Agriculture

The Ministry of Labour and Social Protection

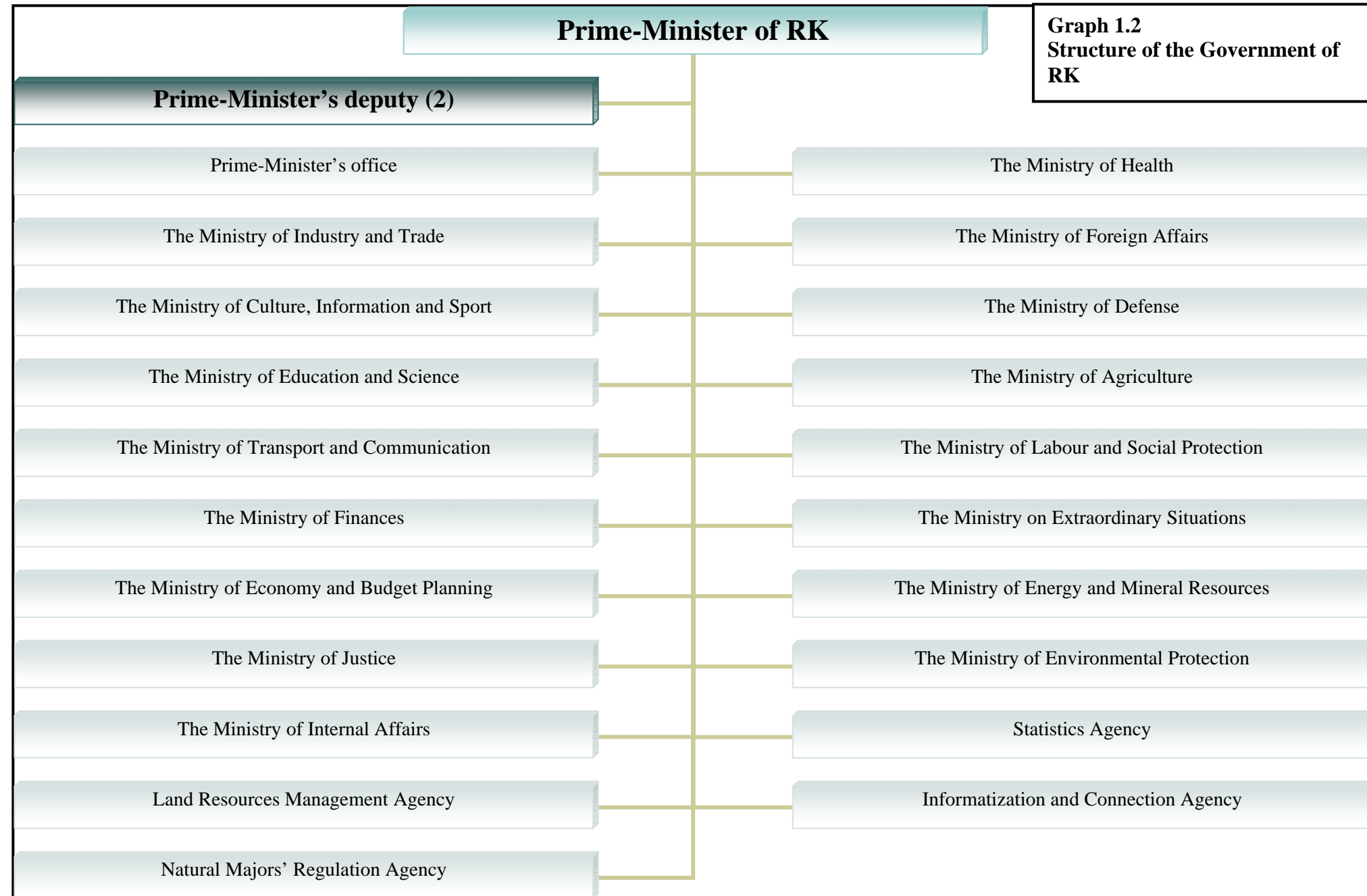
The Ministry on Extraordinary Situations

The Ministry of Energy and Mineral Resources

The Ministry of Environmental Protection

Statistics Agency

Informatization and Connection Agency



2. THE MINISTRY OF ENVIRONMENTAL PROTECTION

2.1. The Laws for establishment of the Ministry

The Ministry of Environmental Protection of the Republic of Kazakhstan (MEP of RK) is the central authority power, which realizes inter-branch coordination on development and realization of state policy issues in environmental protection area and nature management as well.

Basic task of Ministry is improvement of environment quality and achievement of favorable level of environmentally society sustainable development.

Ministry carries out its activity in compliance with Constitution and laws of the Republic of Kazakhstan, deed of the President, government of the Republic of Kazakhstan, other normative and legal documents, also the present Regulation.

In 50-60 years separate conservancy services had existed, consisting of ministries and departments:

The Ministry of forestry – conservancy services

The Ministry of agriculture- conservancy services

The Ministry of health protection - conservancy services

The Ministry of water industry - conservancy services

State engineering supervision - conservancy services

In 1988 State Committee on environmental protection had been founded, which belonged to conservancy services of the following ministries and departments:

The Ministry of forestry - conservancy services

The Ministry of agriculture - conservancy services

The Ministry of fish industry - conservancy services

State factory-farm

The Ministry of geology

Kazhydromet

Lately of 10 years there were following changes:

State Committee had been founded on environmental protection then it was reformed to the Ministry of ecology and bioresource. Then the Ministry of ecology and natural resources had

been founded and lately the Ministry of natural resources and environmental protection and since 2002 Ministry of environmental protection has been functioning.

Now Ministry of environmental protection is functioning on the basis of N 1113 Resolution of the government of the Republic of Kazakhstan from October 28, 2004 «Issues of the Ministry of environmental protection of the Republic of Kazakhstan»

Text of the Resolution:

«Issues of the Ministry of environmental protection of the Republic of Kazakhstan»

N 1113 the Resolution of the Government of the Republic of Kazakhstan from October 28, 2004

The Resolution acts collection of the government (RACG) of the Republic of Kazakhstan, 2004, N 40, Article 524

With a view of the Degree of the President of the Republic of Kazakhstan from September 29, 2004 N 1449 "On measures on further state management system perfection of the Republic of Kazakhstan" Government of the Republic of Kazakhstan is decreeing:

1. To confirm attachments:

- 1) The Regulations of the Ministry of environmental protection of the Republic of Kazakhstan;
- 2) List of organizations, being under the jurisdiction of the Ministry of environmental protection of the Republic of Kazakhstan;
- 3) List of public institutions – territorial bodies of the Ministry of environmental protection of the Republic of Kazakhstan.

2. To found Committee on environmental control of the Ministry of environmental protection of the Republic of Kazakhstan.

3. To permit Minister of environmental protection to have three vice-ministers, including one first vice-minister.

4. To the Ministry of energy and mineral resources of the Republic of Kazakhstan in accordance with the established procedure of legislation to provide a transfer all necessary appropriate material and technical means to the Ministry of environmental protection of the Republic of Kazakhstan to the day of realizable the Decree signature.

5. To the Ministry of environmental protection of the Republic of Kazakhstan to take actions, following present resolution.

6. To declare stale followings:

- 1) The Resolution of the Government of the Republic of Kazakhstan from November 6, 2002 N 1173 "Issues of the Ministry of environmental protection of the Republic of Kazakhstan "(RACG Republic of Kazakhstan, 2002, N 39, article 398).
- 2) Subparagraph of article 3) The Resolution of the Government of the Republic of Kazakhstan from December 5, 2003 N 1240 "On reorganization of state branch establishment "Kazakh scientific and research institute of environmental and climate

monitoring " Republican public enterprise "Kazhydromet" Ministry of environmental protection of the Republic of Kazakhstan " (RACGof the RK, 2003, N 46, article 509).

7. The present resolution entries into force from day of signature.

Prime-Minister of RK

2.2. Organizational chart

The Ministry of environmental protection had been founded by the President of RK Decree with number 1449 from September 29, 2004 «On measures on further state management perfect system of RK».

Position of the Ministry of environmental protection of RK had been confirmed from October 28, 2004 No. 1113 «The Ministry of environmental protection of RK issues»

There are about 150 specialists in Central personnel of the ministry in 5 subdivisions.

Structure of the Ministry of environmental protection includes the following:

1. **Department of strategic planning and analysis**
2. **Department of ecologic expertise and nature management regulation**
3. **Department of normative-and-legal providing and international co-operation**
4. **Department of financial-and-organizational jobs**
5. **Committee on environmental protection control of the Ministry of environmental protection of RK**

Also several republican state enterprises (RSE):

6. **RSE «Informational and analytical centre»**
7. **RSE «Kazaviamet»**
8. **RSE «Kazhydromet»**
9. **RSE "Kazakh scientific and research institute of ecology and climate"**
10. **Regional (municipal) territorial management of environmental protection**

Each organization department of the ministry has its regulations, confirmed by the Order of the Ministry of environmental protection.

Structure of MEP is showed in diagram 2.2. and 2.3.

Structure had been confirmed by the Order of the MEP of RK from December « 10 », 2004 No. 323

Leadership:

Minister

Samakova Aitkul Baigazievna

First Vice-Minister

Kesikbaev Sultangali Kabdenovich

Vice-Minister

Uandykov Erik Kusmanovich

Vice-Minister

Bekzhanov Zhambul Lesbekovich

Leader of personnel

Kolesov Peter Petrovich,

Advisor

Kulmanova Nailya Kadyrovna

Advisor

Zharkenov Maidan Iskendyyrovich

Assistant

Kasymbekov Ulan Zholaushyuly

Assistant on regime

Sakabaev Kuanish Kokeevich

Ministry of Environmental Protection:

DEPARTMENT OF STRATEGIC PLANNING AND ANALYSIS

Director of the department

Bekniyazov Bolat Kabykenovich

tel. (3172) 59-19-74, e-mail: b_bekniyazov@nature.kz

Deputy of the department

Abdykarimova Saltanat Zhaksylykovna

tel. (3172) 59-19-61, e-mail: s_abdikarimova@nature.kz

Ecological assessment and planning division

Strategic planning subdivision

Ecological and economy assessment subdivision

Summary and analytical subdivision

Ecological monitoring and scientific and informational providing division

Head of the division

Bazarbaev Sapar Kanatbaevich tel. (3172) 59-19-52,
e-mail: s_bazarbaev@nature.kz

Ecological monitoring subdivision

Scientific accompany and informational subdivision

DEPARTMENT OF ECOLOGICAL EXPERTISE AND REGULATION OF NATURE USE

Director of the Department

Urmanova Indira Bektimirovna

tel. (3172) 59-19-63

Deputy of the director

Kospanov Abai Sambetovich

tel. (3172) 59-19-66, e-mail: a_kospanov@nature.kz

Ecological expertise Division

Head of the division

Mongarova Evgeniya Mihailovna

tel. (3172) 59-19-32 , e-mail: monogarova@nature.kz

Manufacturing projects expertise subdivision

Strategic ecological assessment subdivision

Ecological and expert activity coordination subdivision

Nature management regulation division

Head of the division

Bekeev Adletbek Tolendievich

Ecological audit and licensing subdivision

DEPARTMENT OF NORMATIVE AND LEGAL PROVIDING AND INTERNATIONAL CO-OPERATION

Director of the Department

Bragin Alexadr Gennadievich

tel./fax (3172) 59-19-39, e-mail: a_bragin@nature.kz

Deputy of the director

Ibraeva Elvira Baltabekovna

tel. (3172) 59-19-59, e-mail: ibraeva@nature.kz

Normative-and-legal providing division

Legal providing subdivision

Normative-and-methodical subdivision

International co-operation division

Division head's deputy

Aitkenov Ernur Mysyrovich

International agreements realization subdivision
International projects subdivision

DEPARTMENT OF ORGANIZATIONAL-AND-FINANCIAL ACTIVITY

Director of the department
Seitov Galymzhan Karakanovich
tel. (3172) 59-19-54 e-mail: g_seitov@nature.kz
Director's deputy

Sheriyazdanova Zhanar Yarhanovna
tel. (3172) 59-19-76, e-mail: shery@nature.kz

Budget planning and work with public enterprises subdivision
Public custom and internal control subdivision
Accounting subdivision

Organizational-and-personnel division

Personnel department and application of official language subdivision
Documentation providing subdivision

COMMITTEE OF ENVIRONMENTAL CONTROL OF THE MINISTRY OF ENVIRONMENTAL PROTECTION OF RK

Chairman
Suleimenov Nessipolla Zeinulovich
Chairman's deputy

Eleushov Bek-Bulat Saduahasovich

Division of efficient inspection response

Head of the division

Abishev Beibut Alimbaevich
tel. (3172) 59-19-51

Ambient air protection control and radiation situation subdivision

Interior protection, surface and groundwater control subdivision

Biological and land resources protection, waste and consumption residue control subdivision

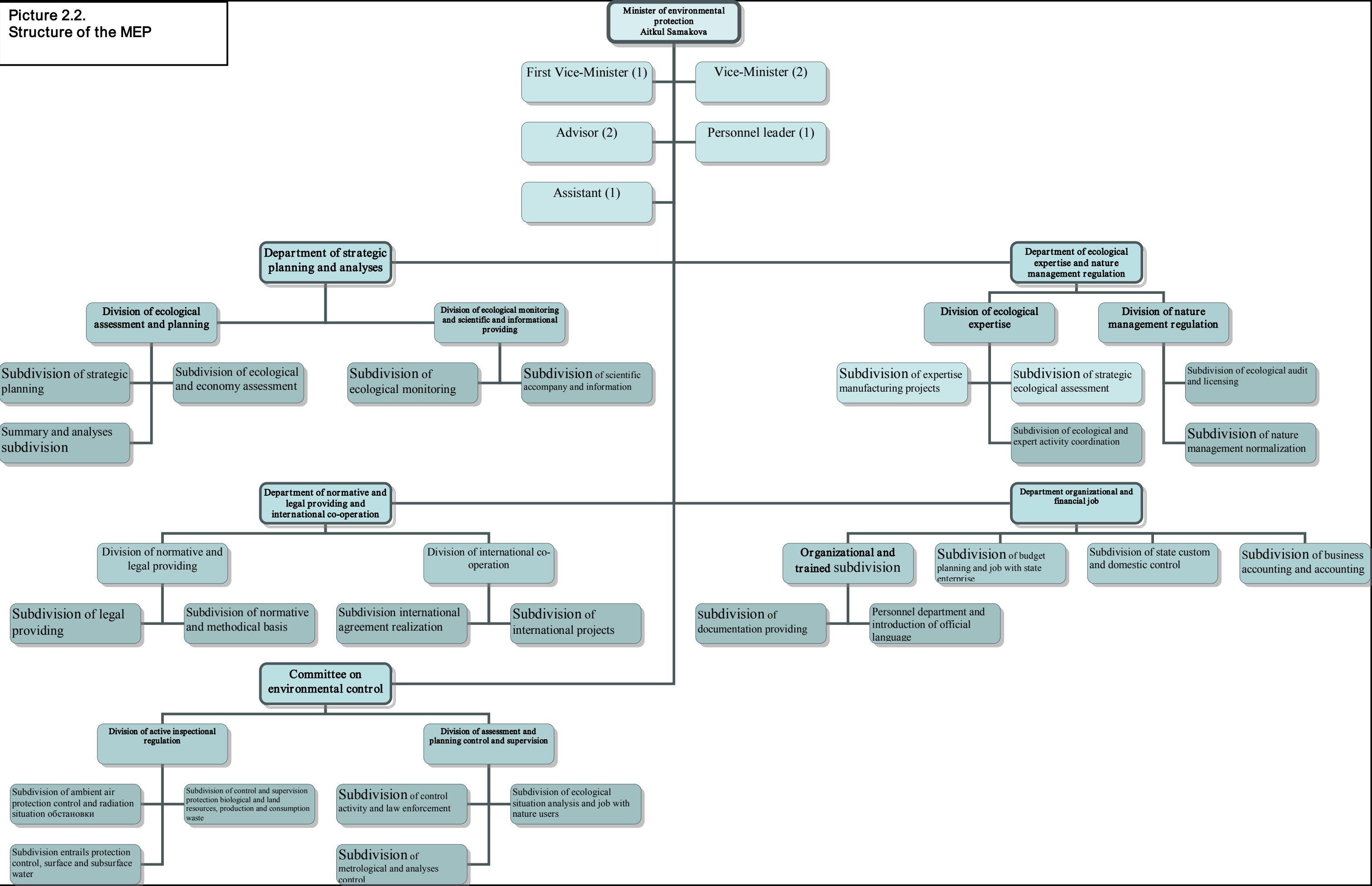
Control-and-supervision assessment and planning activity division

Head of the division

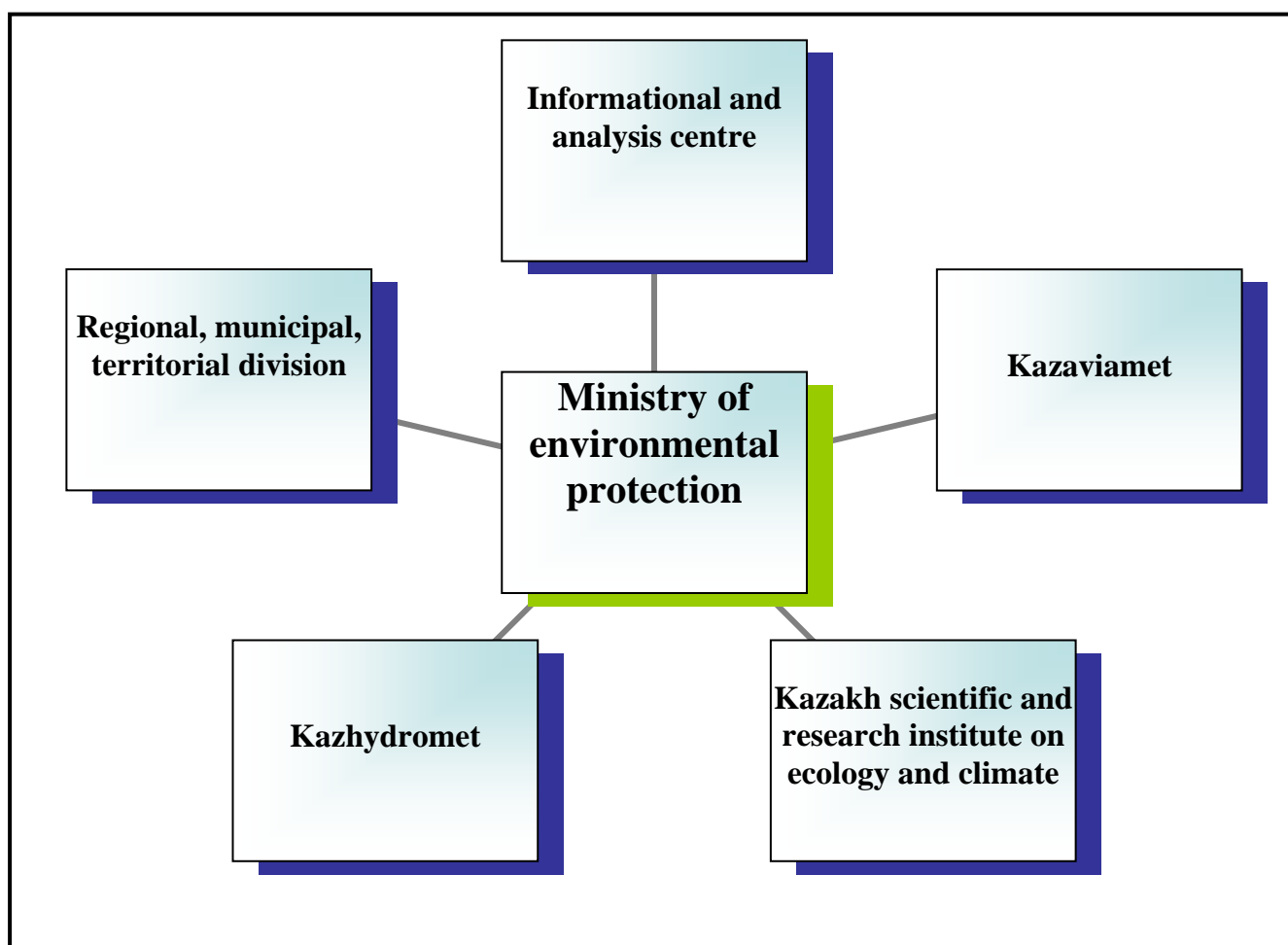
Zhamalova Vera Zhaksanovna

Planning control activity and law enforcement subdivision
Environmental situation and work with nature users analysis subdivision
Metrological-and-analytical control subdivision

Picture 2.2.
Structure of the MEP



Republican state enterprises and Territorial divisions of MEP under the MEP's supervision. Picture 2.3.



2.3. Functions and duties of the departments of Ministry

2.3.1. Basic tasks and functions of the Department of strategic planning and analysis

Basic tasks of the departments are the following:

1. elaboration of priorities and state policy strategy development in environmental protection sphere and sustainable development;
2. state management perfect system in environmental protection sphere in compliance with principles of sustainable development;
3. strategic ecological planning, concordance and construction of ecological assessment of republican, branch and regional plans and programs in environmental protection sphere and its' coordination;
4. economical mechanisms perfect in environmental protection sphere and nature management, nature-conservatives measures implementation control and determination its' economical effectiveness;
5. foundation of Uniform system monitoring of environmental protection and nature resources and prediction of influence on environment;
6. realizing of environmental protection monitoring control and prediction of influence on it, methodical leadership on hydro meteorological and aviameteorological services

- activities on issues, including in Department's competence in compliance with the present Regulations;
7. providing of informational and analysis job issues in environmental protection sphere, including in Department's competence;
 8. creation and uniform information system control in environmental protection sphere;
 9. systematization and definition priority directions of scientific researchers of ecology, scientific achievements consolidation and front experience;
 10. basic directions system elaboration continuous environmental education, methodical assistance in preparation of specialists and scientific personnel ;
 11. work with community, state and nongovernmental organizations in environment improvement sphere, organization of holding of propaganda environmentally favorable development.

In accordance with the basic tasks department carries out the following functions:

1. forming and realization program documents development (conceptions, strategies, plans development and others) and plans on its' realization, other action plans of the Government of RK on environmental protection issues and its implementation control;
2. analysis and development of suggestion on definition priorities and primary directions of public policy in environment and sustainable development sphere;
3. realizing of instruction on Uniform informational monitoring and prediction influence on environment system;
4. participation in preparation of public and branch programs on issues, fixed by Department;
5. realizing of suggestions development for including in strategic and indicate plans, public, branch programs and action plans of Government, controls its implementation;
6. realizing assessment and co-ordinate projects of public, branch and regional programs and plans;
7. participation in preparation suggestions on perfection of legislation in environment sphere;
8. development of suggestions on economic mechanisms nature management perfection;
9. carrying out elaboration of social and economic development of ecological indicators;
10. carrying out analysis on outgoing for environmental pollution, realizing of basic rates concordance for environmental pollution;
11. organization and control work within the jurisdiction of Ministry republic and public enterprises «Kazhydromet» and «Kazaviamet», «Informational and analysis Centre on environment»;
12. monitoring and analysis hydro meteorological situation organization;
13. analysis of monitoring results of environment and carrying out assessment of environmental situation, tends and its changes;
14. elaboration of normative and methodical documentations, programs in environment sphere, nature resources, standard rules of organization manufacturing monitoring as well;
15. participation in elaboration of budget programs on Department's issues;
16. work coordination on creation of Uniform informational environment system;
17. carrying out analysis informational data and on its basis it prepares national report on environment and sustainable development;
18. elaboration of programs scientific researches in environmental sphere;
19. realizing of preparation summary and analytical inquires to the Government of the RK and other public bodies on environmental activity issues;
20. organization informational and propaganda activity among population, meetings of Ministry's leadership with community;
21. realizing interaction with public and other organizations in environmental sphere;

22. realizing of administrative budget programs, fixed by Department;
23. conducting of analysis and data systematization on scientific achievements, leading experience, and innovations in environmental sphere;
24. organization and coordination work of scientific and technical Council of Ministers;
25. participation in international co-operation, realizing preparation and realization of international agreements, conventions and agreements within the their competition ;
26. carrying out of suggestions and coordination organization activity of department Ministry on realization of basic directions public policy in environmental sphere and sustainable development.

2.3.2. Primary functions and duties of the department of Ecological Expertise and nature management Adjustments

Department activity's aim is implementation of public ecological expertise, environmental design license and regulation, environmentally dangerous types of economical activity and environmental auditing activity and licensure on special nature management.

Present directions department's activity is allowed to take preventive actions on prevention of unfavorable environmental situations, carrying out maintenance requirements of legislation control in environmental sphere at assumption of legislation, normative and technical statements, normative and legal statements, programs, agreements, contracts, projects of planned economical activity at the stage of its realization decisions on previous.

Primary tasks of department are:

- 1) organization and conducting public environmental expertise in compliance with requirements of active legislation of RK;
- 2) organization, perfection, carrying out and coordination of environmental audit and licensed activity and in environmental sphere;
- 3) organization, coordination, regulation and carrying out permissive activity on nature management.

Department carries out the following functions:

- 1) providing organization and conducting public environmental expertise and carrying out coordination of ecological and expert activity;
- 2) interaction with ecological and expert bodies of other states and international organizations for the purpose of conducting consultations, organization of joint expertise, interchange experience, scientific and methodical elaboration, involving of foreign specialists and organizations to the work in environmental expertise and assessment influence on environment;
- 3) assertion personal staff of on conducting public environmental expertise preplanned, pre project and project documentation, involving for the part-time servants activity in it;
- 4) organization directive and methodical documentation development on conducting of assessment influence on environment and environmental expertise, including its conducting order;
- 5) coordination scientific researches on assessment influence problems on environment in environmental expertise sphere;
- 6) perfection and coordination of ecological and expert activity and carrying out methodical instruction on conducting of environmental expertise issues;
- 7) adjustment ecological normative and requirements to the economic and other activity;
- 8) granting a license in environmental sphere and adjustment decisions on granting a license on goods export and import and other types of activity;

- 9) participation in forming of legal license mechanism, preparation suggestions to taking legislative documents and normative documents on license issues in environmental sphere;
- 10) perfection mechanism of ecological auditing activity;
- 11) carrying out granting, stock-taking and annulment of licenses to nature management;
- 12) carrying out development of limits and quota on environmental pollution;
- 13) presentation interests of RK in international organizations, participation in preparation and project realization of international treaties and agreements within its competence;
- 14) participation within its competence in planning of arrangements on environment and nature resources, development program documents (conceptions, strategies, programs and plan for development);
- 15) participation in coordination of economic mechanism of nature management within its competence;
- 16) participation in concordance monitoring programs of environment within its competence;
- 17) participation in preparation and development of normative documents, ecological requirements, measurement data and standards in environmental and nature management sphere within its competence;
- 18) participation in realization budget programs within its competence;
- 19) carrying out Ministry leadership's commissions, including on consideration of letters and statements on issues, incoming in department's competence and the rest of citizens;
- 20) interaction with public associations in environmental sphere within its competence;
- 21) carrying out control and coordination appropriate ministries services, departments and organizations in providing part of implementation of requirements environmental regulations and rules on development preplanned, pre project and project documentation, at granting a license and license concordance;
- 22) receiving information and other materials necessary for conducting of public environmental expertise from ministries, public committees and other central and local executing agency and bodies;
- 23) carrying out methodical leadership activity of regional, municipal, territorial management of environment on issues, including in department's competence, assessment outcomes its activity and submit suggestions on its improvement to the ministry's leadership;
- 24) carrying out other functions, laid on it by the legislation.

2.3.3. Primary functions and duties of the department normative and legal providing and international co-operation

The main tasks of the department are the following:

- 1) realization legal reform in environmental sphere;
- 2) legislation perfection on providing of environmental safety;
- 3) providing conformity approving normative and legal document and other legal documents functioning legislation of RK;
- 4) international co-operation development;
- 5) providing preparation, summary and realization of international agreements of RK;
- 6) providing systematization and application of scientific and research-and-well-founded measurement data and standards of environmental safety.

In compliance with basic tasks of the Department implements the following functions:

- 1) realizing draft works, participation in development of normative and legal documents projects of the Government of RK, Ministries and international agreements;
- 2) conducting of legal expertise law, other normative and legal documents and international agreements (consents, conventions, other, memorandum and others), coming for concordance from other public bodies-formers;
- 3) organization and conducting intra-departmental legal expertise on requirements conformity of normative and legal document project legislation, international agreements and consents, developing by organization department of the Ministry as well;
- 4) within its competence normative and legal cooperation at realizing of public custom issue of environmental expertise decision, license and permissions for nature management;
- 5) organization work check-up on legal training in territorial bodies of Ministry, assistance in practical work in this area;
- 6) calculation and keeping custody systematization of standard and legal acts with current technology use;
- 7) development of environmental norms and standards, environmental requirements to economic and other activity, providing of control on its application;
- 8) analysis and planning of international cooperation, participation in conference and meetings;
- 9) analysis of necessary participation of Kazakhstan in international conventions and other agreements, participation in its harmonization, unification and realization;
- 10) basing of nature-conservative measures of international significance and organization project development and its realization;
- 11) planning, organization and control of development standard and legal acts, relating to environmental protection issues and rational nature management, international cooperation;
- 12) coordination activity organization department of Ministry on international cooperation by appropriate measurements and documents;
- 13) organization of international conferences, meetings, symposium and workshops for the purpose of Kazakhstan's participation in international cooperation in environmental protection area;
- 14) coordination of organization activity on regional cooperation for Central Asia, other international programs and projects;
- 15) analysis and use of international donor organizations involving practice for preparation and financing of projects.

2.3.4. Primary functions and duties of the Department on organizational-and-financial work

Basic tasks of Department are the following:

- 1) rational planning for the purpose of effective use of budget means;
- 2) providing authentic and well-founded data of accounting;
- 3) purposeful use of budget means control and observance of requirements of budget legislation;
- 4) organization personnel work of Central machinery and territorial bodies of Ministry in compliance with the Law of RK «On public service»;
- 5) inculcation of paper work in the Kazakh language in compliance with the Law of RK «On languages in RK»;
- 6) paper work system perfection and its implementation control.

In accordance with established legislation procedure department implements the following functions:

- 1) budget call forming of Ministry for predictable and planned period;
- 2) in accordance with established procedure confirmation of budget programs, financial plans;
- 3) staff scheduling of central machinery and territorial bodies of ministry;
- 4) planning of financial plans on liability and outgoings application of its changes;
- 5) providing of Central machinery finance, territorial bodies and departmental republican public enterprises of ministry;
- 6) implementation of development standard acts, regulating use of republican budget means order, appropriated for Ministry;
- 7) carrying out of audit and implementation of republican budget control in Central machinery, territorial bodies and departmental republican public enterprises of Ministry;
- 8) carrying out accounting conducting and submit accounting to authorized bodies;
- 9) coordination of organization department's activity of Ministry on implementation public custom on realization of budget programs;
- 10) carrying out of process public goods custom, works and services for providing of ministry's activity;
- 11) coordination and organization of work on information system of environmental protection creation;
- 12) carrying out of consideration and development work order of Ministry, standard and legal acts, regulating publican means budget use order, appropriated for ministry, paper work and documents circulation as well, personnel work and secrecy maintenance;
- 13) organization of Ministry's functions implementation departmental bodies of public management by public enterprises;
- 14) providing of conduct paper work and schedule time control of commissions on official documents;
- 15) carrying out of conduct paper work in official language in Ministry system control;
- 16) organization of personnel work in ministry system;
- 17) organization of economic service of Central machinery of Ministry;
- 18) organization of senior specialist activity, submitting to Minister, on public secret protection according to Instructions on regime secrecy providing, confirmed by the Resolution of the Government of RK from March 14, 2000 № 300-16 page.
- 19) realization of preparation standard and legal acts projects in accordance with established legislation procedure;
- 20) carrying out of governmental and directive documents.

2.3.5. Primary functions and duties of Department on organizational and financial work

Committee on environmental control of the Ministry of environmental protection of RK is specially authorized public organ, carrying out public control and control-and-supervision functions in environmental area and nature recourses. Main task of Committee is creation of ecologically safe environment.

Decisions of Committee, decided within its competence, are obligatory for implementation by all public bodies, enterprises and organizations, officials and citizens.

The main functions of Committee

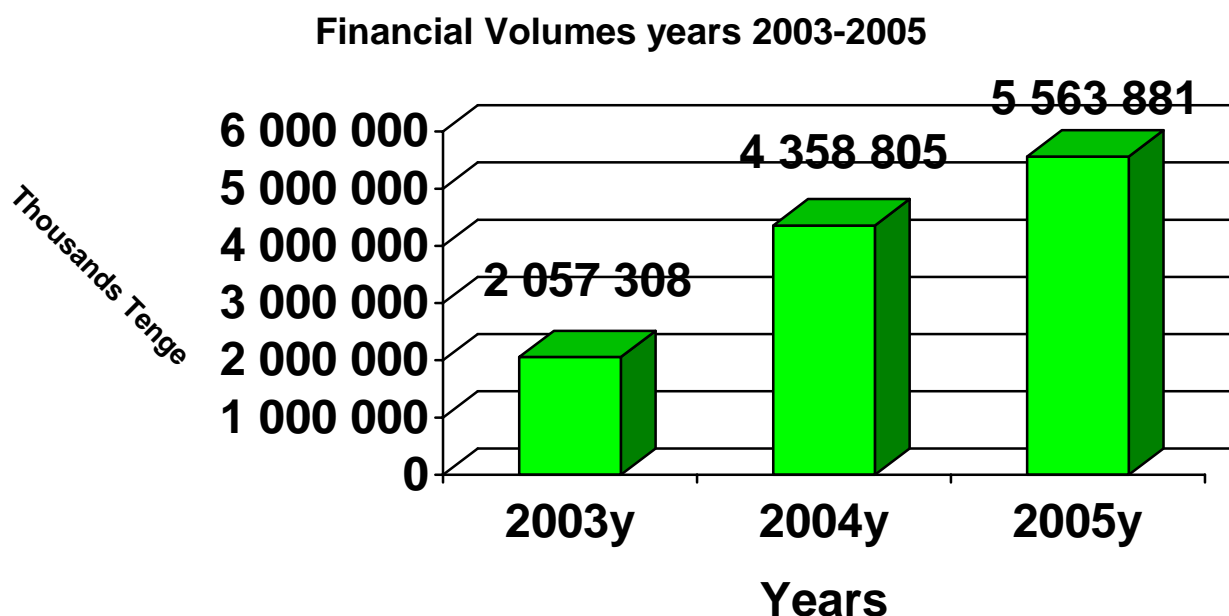
In accordance with established legislation procedure Committee implement functions in realization of public policy control sphere:

- 1) observance and implementation environmental protection legislation by public bodies, managing by subjects irrespective of property form; perfection system and effective methods of control and enforcement activity inculcation;
- 2) realization of public control in environmental protection and nature recourses area:
 - i) observance of environmental requirements during conduct public cadastres and nature recourses registration;
 - ii) carrying out environmental requirements on ambient air protection, emission norms from stationary and movable pollution sources, limits during action conduct on artificially atmosphere change;
 - iii) conduct established norms and rules on production, use, keeping, transport, utilization, sterilization and burial of plants protection means, chemical fertilizers and other chemical and biological substances, industrial, domestic and other waste as well;
 - iv) carrying out of production environmental programs by analytical services of enterprises and departments;
 - v) observance of environmental requirements in protection, reproduction and use area of animal and plant planet, keeping objects public natural-and-reserved fund;
 - vi) observance of environmental requirements to economic and other activity, influencing on land condition negatively;
 - vii) providing destroyed land reclamation, restoration its fertility and other useful land quality and timely involving it in economic revolution;
 - viii) taking down, keeping and use fruitful layer ground during conduct work, relating to land degradation ;
 - ix) providing environmental requirements during distribution and putting into operation of new and re constructible buildings, constructions and other installations;
 - x) putting into condition fit for further use of acres, releasing as excavation of recoverable reserves of minerals or other destroying process and works in compliance with end use;
 - xi) implementation of environmental requirements during use, keeping, transport, distribution production and consumption waste, transport toxic materials as well, including biological, dangerous waste and chemical means;
 - xii) conditions implementation, established by permissions on waste, harmful substances disposal and distribution production and consumption waste;
 - xiii) observance regime control area establishment, having waste stationary sources, harmful substances forming production and consumption waste;
 - xiv) observance limits (norms) and rules water consumption and drainage system, water use regime, order and conditions sewage disposal as well;
 - xv) observance environmental requirements on rational use and water protection from pollution, obstruction and exhaustion;
 - xvi) observance requirements established by legislation, rules and regulations on bosom protection, implementation contract conditions at all use of underground resources stages on environmental issues;
 - xvii) observance rules on liquidation and installation temporary closing-down of use bosom;
 - xviii) bosom use in compliance with environmental requirements and measurement data, guarding bosom from manifestation dangerous man-caused process during transportation, extraction, construction and exploitation buried structures, not concerned with extraction as well;
 - xix) observance project decisions on environmental protection issues during extraction and processing mineral;

- xx) prevention interior pollution during conduct operation on use of underground resources, especially during underground oil storing, gas, or other substances and materials, harmful substances burial and waste, waste discharge;
 - xxi) implementation project decisions on prevention installation pollution off environmental radioactive substances and conditions of action permissions;
 - xxii) observation technology orders of second working construction before emission radioactive nuclide disposal in environment;
 - xxiii) providing environmental requirements during warehousing and factory and domestic waste distribution with a view of prevention its accumulation in the place of columbine and groundwater deposition;
- 3) functions providing public policy realization:
- i) coordination Central and local authority bodies activity, implementing functions of public control on environmental issues;
 - ii) interaction with public associations on observance of legislation in environmental protection area;
 - iii) providing outcomes assessment of control-and-supervision and law enforcement activity;
 - iv) realization of analytical laboratory works in environmental protection area.

2.4. Budget in the past 3 years (2003, 2004, 2005 years)

Budget of ministry grows steadily, on diagram 2.4. Ministry's financing volume is shown.



Basic articles of expenses were:

2.4.1. Basic articles of expenses in 2003 were:

General budget made up 2 067 308 thousand tenge (2 milliard 57 mln 308 thousand) in 2003

1. "Increase qualification and personnel retraining" to 2003 year - 1, 353 thousand tenge (one mln three hundred and fifty three thousand tenge).

2. "Conduct of environmental monitoring and environmental protection" to 2003 year - 136.200 thousand tenge (one hundred and six mln two hundred tenge).
3. "Environmental research, standards development and norms in environmental protection area" to 2003 year - 40,000 thousand tenge (four mln tenge).
4. "Conduct of hydrometeorological monitoring" to 2003 year - 467, 145 thousand tenge (four hundred and sixty seven mln one hundred and forty five thousand tenge).
5. "Technical reequipment of hydrometeorological control service" to 2003 year - 43 000 thousand tenge (forty three mln tenge).
6. "Environmental situation monitoring territory of RK, exposed to rocket-and-cosmic activity influence" to 2003 year - 40, 000 thousand tenge (forty mln tenge).
7. "Rehabilitation project long-fallow land Shetskii area Karaganda region" to 2003 year - 12,320 thousand tenge (twelve mln three hundred and twenty thousand tenge).
8. "Forming of environmental post in special economic zone «Morport Aktau" to 2003 year – 40, 100 thousand tenge (forty mln thousand tenge).
9. "Material and technical providing of Ministry of environmental protection of RK" to 2003 year – 1, 210 thousand tenge (one mln two hundred and ten thousand tenge).
10. "Material and technical providing of environmental protection monitoring and people health centre of Kyzylorda city" to 2003 year - 4,300 thousand tenge (four mln three hundred thousand tenge).
11. "Station building of biological water treatment in Kyzylorda city" to 2003 year – 500, 000 thousand tenge (five hundred mln tenge).
12. "Purposeful transfer Pavlodar region to budget for continuous demercuration works in «Pavlodar chemical factory" to 2003 year - 242, 000 thousand tenge (two hundred and forty two mln tenge).
13. "Purposeful of investment transfer Eastern Kazakhstan region to budget for biological water treatment construction in Semipalatinsk city" to 2003 year – 500, 000 thousand tenge (five hundred mln tenge).
14. "Accompaniment information database "Public cadastres of nature resources" to 2003 year – 39, 680 thousand tenge (thirty nine mln six hundred and eighty mln tenge).

2.4.2. Basic articles of expenses in 2004 were:

General budget made up 4 358 805 tenge in 2004

1. "Providing activity of authority organ in environmental protection area" to 2004 year - Cost: 1042470 thousand tenge (one mlrd forty two mln four hundred and seventy thousand tenge).
2. "Conduct of public environmental expertise" to 2004 year - Cost: 10000 thousand tenge (ten mln tenge).

3. "Scientific research in environmental protection area" to 2004 year- Cost: 171175 thousand tenge (one hundred and seventy one mln one hundred and seventy five thousand tenge).
4. "Construction and reconstruction of environmental protection works" to 2004 year - Cost: 618000 thousand tenge (six hundred and eighteen mln tenge).
5. "Rehabilitation of environmental protection works" to 2004 year - Cost: 62196 thousand tenge (sixty two mln one hundred and ninety six thousand tenge).
6. "Conduct of hydrometeorological monitoring" to 2004 year - Cost: 1032627 thousand tenge (one mlrd thirty two mln six hundred and twenty seven thousand tenge).
7. "Forming and development of information system of environmental protection" to 2004 year – Cost: 41048 thousand tenge (forty one mln forty eight thousand tenge).
8. Holding environmental situation observations" to 2004 year - Cost: 522399 thousand tenge (five hundred and twenty two mln three hundred and ninety nine thousand tenge).
9. " Purposeful of investment transfer for regional budget, budget of Astana and Almaty city for environmental protection" to 2004 year - Cost: 858890 thousand tenge (eight hundred and fifty eight mln eight hundred and ninety thousand tenge).

2.4.3. Basic articles of expenses in 2005

General budget: 5 563 881 tenge

1. "Providing activity of authorized organ in environmental protection area" to 2005 year - Cost: 1606279 thousand tenge (one mlrd six hundred and six mln two hundred and seventy nine thousand tenge).
- 2 "Holding of public environmental expertise of strategic, transboundary and environmental dangerous constructions" to 2005 year - Cost: 10951 thousand tenge (ten mln nine hundred and fifty one thousand tenge).
3. "Scientific research in environmental protection area" to 2005 year - Cost: 250000 thousand tenge (two hundred and fifty thousand tenge).
- 4 "Construction and reconstruction works of environmental protection" to 2005 year - Cost: 676730 thousand tenge (six hundred and seventy six mln seven hundred and three thousand tenge).
- 5 "Rehabilitation of environmental protection works" to 2005 year - Cost: 164314 thousand tenge (one hundred and sixty four mln three hundred and fourteen thousand tenge).
- 6 "Holding of hydrometeorological monitoring" to 2005 year Cost: 1471271 thousand tenge (one mlrd four hundred and seventy one mln two hundred and seventy one thousand tenge).
- 7 "Forming and development of information system of environmental protection" to 2005 year - Cost: 41000 000 thousand tenge (forty one mln tenge).
- 8 "Holding of environmental situation control" to 2005 year - Cost: 489979 thousand tenge (four hundred and eighty nine mln nine hundred seventy nine thousand tenge).

9 "Purposeful transfer on development of regional budget, budget of Astana and Almaty city for construction and reconstruction works of environmental protection" to 2005 year - Cost: 853357 thousand tenge (eight hundred and fifty three mln three hundred and fifty seven thousand tenge).

3. LOCAL GOVERNMENTS

3.1. Functions of local governments and Responsibility in environmental protection issues

In compliance with article 10 of the Law of RK «On environmental protection, the local executive bodies competence includes (Akimats):

realizing of the public control in environmental protection area and regulation nature management in its competence;

organization of development and realization of programs on environmental protection and nature management in appropriated territory, environmental expertise, construction and reconstruction works on environmental protection;

confirmation of amount of payment for environmental pollution, preparation of conclusions on construction and reconstruction enterprises and other work constructions prohibition, which have negative environmental expertise decisions, stopping economic and other activity in case environmental requirements and taking appropriate measurements;

decision making or making a suggestion to superior body on works protection of environment, which have special environmental, scientific and culture value, and on organization of especially guarded nature territory; realization of other authorities in compliance with law.

According to Resolution of Akims departments of nature recourses and nature management regulation have been formed in Akimats, which in its competence occupies environmental protection issues.

At present functions of the department of nature recourses and nature management regulation include preparation of conclusion of public environmental expertise, with the exception of 3 activities: (1) strategic works, (2) transboundary and (3) ecologically dangerous types of economic activity. Territorial subdivision on environmental protection occupies with 3 mentioned activities.

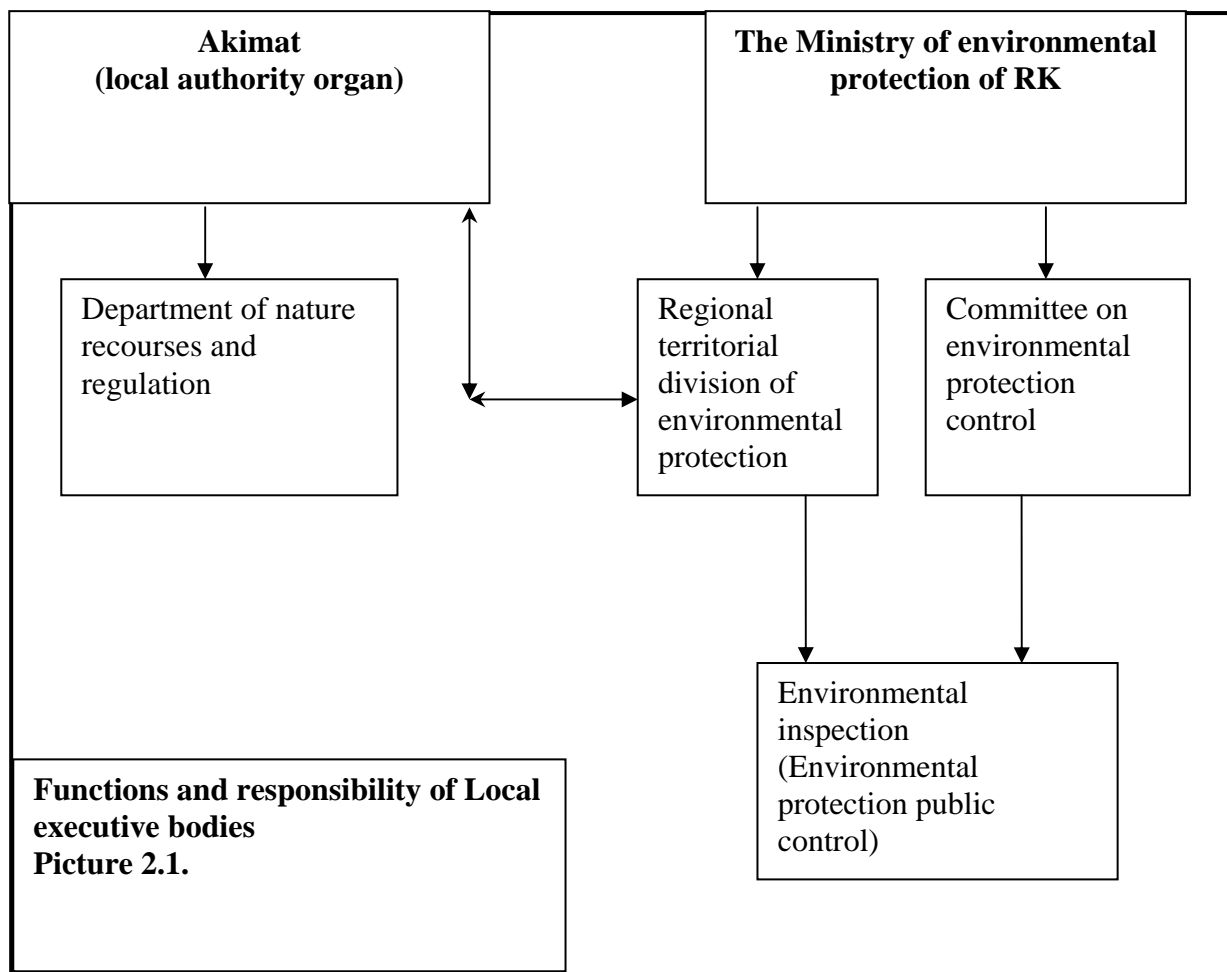
Functions of regional territorial division of environmental protection include public environmental protection control and Committee on environmental protection control, as central organ of MEP. Territorial administration of environmental protection consists of environmental inspection. Inspection implements public control and control-and-supervision functions in environmental protection and nature recourses area, interaction with other public bodies, carrying out control functions on environmental protection issues.

Main tasks of inspection are:

- 1) in its competence organization and realization public control in environmental protection and nature recourses area;

- 2) realizing observation and implementation of environmental protection legislation public control by public bodies, managing subjects, irrespective of property form;
- 3) perfection forms and methods of control and law enforcement activity

Functions and responsibility of the Local executive bodies are shown in picture 2.1.



3.2. Procedure for Inspection

Environmental inspection of region (capital, cities of the republican importance) (further - Inspection) is part of territorial administration of environmental protection and during implementation of functions are under the head of territorial administration of environmental protection and Committee on environmental control command in its competence.

Inspection's activity follows Constitution, legislative and other standard legal acts, orders, regulations of the Ministry of environmental protection and Committee on environmental control, present regulation as well.

Inspection implements public control and control-and-supervision functions of environmental protection and nature recourses, interaction with other public bodies, implementing control functions on environmental protection issues.

Decisions of officials of environmental inspection, taken within the limits of their authorities, obligatory for implementation by all juridical persons, officials and citizens irrespective of property form, can be appealed in subordination order.

Inspection is formed in compliance with structure and staff number of territorial organ, confirmed by ministry of environmental protection.

Basic tasks of inspection are:

Organization and realization of control in environmental protection and nature recourses in its competence;

Realization of observation and implementation of environmental legislation public control by public organ, managing by subjects, irrespective of property form;

Form and methods perfection of control and law enforcement activity.

4. ENVIRONMENTAL LAWS

4.1. Analysis of Legislation of the Republic of Kazakhstan regulating issues on emissions of pollutants into the ambient air

“Environmental Safety Concept of the Republic of Kazakhstan” was adopted by the Enactment of the President of the Republic of Kazakhstan on November 27, 2004. This document stipulates conceptual positions and long term plans of Kazakhstan for environmental safety issues. Climate change as the worldwide problem and as the potential threat for the environment is set up in this Concept.

As well the Concept supposes to hold thorough investigation of the Kyoto Protocol to the UN Convention on Climate Change (UNFCCC) with the follow up its ratification. Kazakhstan ratified the UNFCCC in 1995, issued the Initial National Communication in 1998 and signed the Kyoto Protocol in 1999. The status of Kazakhstan¹ related to these issues was identified on the seventh Conference of Parties in Marrakech. After ratification of the Kyoto Protocol the task in the Concept includes the development of a program of reducing GHG emissions in the Republic of Kazakhstan up to 2015 by detailed actions and projects. In other words, the program will contain a list of activities, documents to be adopted and actions addressed to implementation of commitments under the Kyoto Protocol.

At present regulative issues of emissions into atmosphere in the Republic of Kazakhstan are settled by the Law of the Republic of Kazakhstan “On Protection of the Ambient Air”.

It should be noted that the Law does not select greenhouse gases as the subject of regulation in the separate institution and does not take into account the features in regulation related to the provisions and mechanisms of the Kyoto Protocol.

This Law identifies fundamentals of the ambient air protection in the Republic of Kazakhstan.

¹ In accordance with Article 4, paragraph 2 (g) Kazakhstan had notified the Depositary on the 23rd of March 2000 that it intends to be bound by Article 4, paragraph 2 (a) and (b) of the Convention. As a result of negotiations with countries of the 77 Group and China, in 2001, at the COP-7, in Morocco, a decision¹ on the status of the Republic of Kazakhstan has been taken in frames of the international negotiation process on global climate. The Conference further noted that the Depositary had informed the other signatories and Parties of that notification, and that, upon ratification of the Kyoto Protocol by Kazakhstan and its entry into force, Kazakhstan becomes a Party included in Annex I for the purposes of this Protocol in accordance with Article 1, paragraph 7 of the Protocol. The Conference of the Parties recognized that Kazakhstan will continue to be a Party not included in Annex I for purposes of the Convention due to <http://unfccc.int/resource/docs/2001/sbi/109.pdf>.

The Law sets the following basic terms of references of the Government:

- forming an economic incentive system and introducing a mechanism of emissions reduction contaminating the ambient air;
- establishing a levy procedure and approval of a payment rate for contamination of the ambient air;
- approving a procedure of licenses issue to emit hazardous substances (contaminants) into the ambient air and harmful physical impacts to the ambient air;
- determining a procedure of licenses issue to emit hazardous substances (contaminants) into the ambient air at operating of transport and other mobile vehicles;
- setting a procedure of organization and conducting the governmental control in the ambient air protection;
- determining a procedure of information supply and recording the governmental statistics in the field of the ambient air protection;

As well this Law sets the terms of references for the central executive body:

- organizing the state monitoring of the ambient air and providing its implementation;
- organizing an application of economic incentive mechanisms to reduce emissions of hazardous substances (contaminants) into the ambient air;
- establishing a procedure of development and approval of hygienic and ecological standards of the ambient air quality, the maximum permissible levels of physical impacts to the ambient air and other environmental standards aimed to protect the ambient air;
- establishing a procedure of the state record of sources emitting hazardous substances (contaminants) into the ambient air and harmful physical impacts to it;
- establishing a procedure of development and approval of specific standards of emissions as well as lists of objects (cadastres) in respect of which they are being developed;
- establishing a procedure to conduct an inventory of hazardous substances emissions into the ambient air, harmful physical impacts to the ambient air and their sources;
- determining a list of contaminants, a list of harmful physical impacts to the ambient air subject to the state registration and measurement, fixed on the basis of data under the outcomes of the inventory of hazardous substances emissions into the ambient air, harmful physical impacts to the ambient air and their sources.

In accordance with the abovementioned terms of references for the governmental bodies, by nowadays the following legal acts have been adopted:

Rules on agreement and approval of standards on maximum permissible emissions (MPE) and maximum permissible discharges (MPD) approved by the Order of the RK Ministry of Natural Recourses and Environmental Protection dated March 21, No. 83;

Methodology to determine fees for contamination of the environment approved by the Minister for Ecology and Bioresources of the Republic of Kazakhstan dated August 9, 1994;

Rules on organizing and conducting the state control in the field of the ambient air protection approved by the Decree of the RK Government dated August 14, 2003 No. 815;

Rules on organizing the production control in the field of environmental protection approved by the Order of the Minister of Natural Resources and Environmental Protection dated March 11, 2001 No. 50 (registered in the Ministry of Justice 20.04.2001 No. 1472);

The Decree of the Government of the Republic of Kazakhstan “On approval of lists of formats on the state and departmental statistical statements of the Republic of Kazakhstan” dated January 5, 2004 No. 2;

Rules on organizing and maintaining the Unified state monitoring system of the environment and natural resources approved by the Decree of the Government of the Republic of Kazakhstan dated 27, 2001 No. 885;

Rules on assessing impacts under designing of economic and other activity to the environment when developing pre-planned, pre-project and project documentation approved by the Order of the Minister for the environmental protection of the Republic of Kazakhstan 28, 2004 No. 68 (registered in the MJ on March 31, 2004 No. 2779);

List of ecologically dangerous types of economic activity and Rules on their obligatory state licensing approved by the Decree of the Government dated January 8, 2004 No. 19.

Administrative and criminal responsibilities of the legislation breach in the field of the environmental protection are envisaged in the RK Code on administrative infringements (articles 40-249) and the Criminal Code (articles 277, 282).

Then let's review the completeness of realization of terms of references by comparing them due to adopted and acting legal acts.

As stated above the Government is authorized to form the system of economic incentives and introduce a mechanism to reduce emissions. Here the Law is restricted by the common norm and does not fix specific rights of the Government on economic incentives to reduce emissions to the ambient air. So far a special act of the RK Government on economic incentives to reduce emissions to the ambient air is not adopted.

This norm establishes incentives in the frames of detailed rights of the Government envisaged in the laws. Consequently, it's necessary to examine other legislative acts establishing authorization of the Government for economic incentives. Thus, the Law of the Republic of Kazakhstan “On investments” envisages investment preferences such as investment tax preferences and exemption from customs duty.

Economic incentives are granted to the priority activities which are determined according to the list adopted by the Government and corresponding to fixed volume of investments.

Such list is identified by the Decree of the Government of the Republic of Kazakhstan dated May 8, 2003 No. 436 «On some issues of realization of the Law of the Republic of Kazakhstan “On investments”.

At the same time this Law does not contain norms of the direct incentive of emissions reduction into the ambient air;

As to establish a levy procedure and approval of a payment rate for contamination of the ambient air the Government of the RK adopted the Rules on levy on contamination of the environment dated December 1, 1998 No. 1213. Also this issue is regulated by articles 461, 462 of the Code of the Republic Kazakhstan “On taxes and other obligatory fees to the

budget” according to them the rates are established annually by local authorities on the basis of calculations made by the authorized body in the field of environmental protection;

As to approve a procedure of licenses issue to emit hazardous substances (contaminants) into the ambient air and harmful physical impacts to the ambient air the Government of the Republic of Kazakhstan adopted the List of ecologically dangerous types of economic activity and Rules of their obligatory state licensing dated January 8, 2004 which identified the activity connected with emissions into atmosphere of hazardous substances (contaminants) bringing harmful impact to the environment with the excess of specific standards for stationery sources of emissions, technological processes and equipment. Moreover, this Decree adopted qualification requirements for such activity, which includes the obligatory ecological insurance;

As to set a procedure of organization and conducting the governmental control in the ambient air protection the Government of RK adopted the Rules on organization and conducting the state control in the field of the ambient air protection dated August 14, 2003 No. 815. According to the fixed procedure the state control can be done by the central executive body of the Republic of Kazakhstan in the field of environmental protection, its territorial branches and local executive authorities;

As to determine a procedure of information supply and recording the governmental statistics in the field of the ambient air protection on January 5, 2004 No. 2 the Government adopted the formats of the state and departmental statistical statements. In accordance with this Decree the report on the ambient air protection should be submitted by enterprises having stationary sources of contamination of ambient air under the format established by the authorized body on statistics. Therefore, enterprises fill in information in the statistical report as it is required by the content of the format adopted by the state body on statistics. Also the Government adopted the Rules of organization and conducting of the Unified state system of monitoring of the environment and natural resources dated June 27, 2001 No. 885. The aim of this system is information supply for adoption of management and economic decisions and control over use of natural resources, public awareness on the status of the environment to the health of population. The main function of this System is collection and registration of all ecological information, maintenance of informational databank and cadastres of on the environment and natural resources. Specially authorized state agencies and their territorial branches fulfill organization and maintenance of subsystems’ operation and information supply of the Unified State System of Monitoring of the Environment and Natural Resources (USSM of E&NR). Obligations to submit annual reports of the industrial monitoring of the environment from the influence of emissions (discharges) of contaminants and disposed wastes, calculations of standard volumes of emissions are fixed by the Rules of permits issue for contamination of the environment adopted by the Decree of the Government of the Republic of Kazakhstan dated September 6, 2001 No. 1154. At the same time it should be noted that the Government has insufficiently determined the mechanism to submit information (frequency is limited by a year, information is submitted by entities which received a permit for special nature management and etc.). Coordination of the state agencies’ work to monitor the environment and natural resources, as indicated above in the Decree, is under responsibility of the Central executive body and its territorial branches. The Unified document as the Guidelines on the Unified state system of monitoring of the environment and natural resources is not adopted by the Central executive body.

Thus, the authority of the Government to set a procedure of submitting information and maintenance of the state statistics in the field of the ambient air protection is used incompletely in order to regulate effectively this issue and the standards of the law have not obtained the further realization.

Due to the obligations adopted under the article 4 of the UN Framework Convention on Climate Change the Republic of Kazakhstan develops, regularly updates, publishes and submits to the Conference of Parties the National cadastres of anthropogenic emissions from sources and sinks of all greenhouse gases using the methodology adopted by the Conference of Parties. The Republic of Kazakhstan has adopted a number of legal acts mentioned above that comprise the basis for full forming of legislation and in case of their further development will provide realization of the named provisions of the Convention. The procedure to adopt legal acts, the procedure to interact and coordinate the activity of specially authorized bodies to maintain the state registration and the state cadastres are determined by the Decree of the Government of the Republic of Kazakhstan dated March 12, 2004 No. 311 «On approval of the List of specially authorized bodies implementing functions of the environment protection, management of nature and the state control in this field and Rules on organization of these activities». According to this Decree the coordination of specially authorized bodies' activities can be implemented by developing legal acts that would be approved by joint orders for different fields of nature use (recommendation).

According to authorization of the Central executive body:

As to organize the state monitoring of the ambient air and provide its implementation the Order of the Minister for the environment protection of the Republic of Kazakhstan dated February 28, 2004 No. 68 was approved. Registered in the Ministry of Justice dated March 31, 2004 No. 2779 "On approval of the Instructions to assess impacts of intended economic and other activities to the environment when developing pre planned, pre projected and projected documentation". This document on intended economic activity considers elaboration of proposals how to organize monitoring and control over the ambient air for further submitting to authorized bodies.

As well the joint order of the Minister for Energy, Industry and Trade of the Republic of Kazakhstan dated July 9, 1999 No. 187 and of the Minister for Natural Resources and Environmental Protection dated July 9, 1999 No. 182 "On approval of the Rules to meet norms of ecological safety when designing and conducting oil operations in the water area and coastal zones of seas and inner reservoirs of the Republic of Kazakhstan" is adopted. This document sets commissions, functions and procedures on interaction of central and local executive bodies. In accordance with this Order and operator submits results of monitoring to the adequate state body.

Also indirect requirements for industrial monitoring, that is collection of information by an entity itself are mentioned in the Rules on organization of industrial control in the field of the environment approved by the Order of the Minister for the Natural Resources and Environment Protection of the Republic of Kazakhstan dated March 11, 2001 No. 50. However, it should be noted that the Rules don't contain standards for setting procedures for entities how to submit information regarding the results of monitoring to the state environmental bodies;

As to organize the application of mechanisms on economic incentives to reduce emissions of hazardous substances (contaminants) into the ambient air the analysis of legislation showed that none legal acts of the Republic of Kazakhstan envisage any economic incentives and correspondingly the legislative basis is lacking for adopting special legal acts specifying a mechanism and organization of economic incentives mechanisms to reduce emissions of hazardous substances into the ambient air;

As to fix the procedure on development and approval of hygiene and ecological quality standards for the ambient air, maximum permissible levels of physical impacts to the ambient air and other ecological standards aimed to protection of the ambient air it should be marked that the legal act regulating this issue is approved by the Order of the Minister for health of the Republic of Kazakhstan dated August 18, 2004 No. 629 «On approval of sanitary and epidemiological rules and standards on epidemiology and hygiene». In this case the authority is realized and it is envisaged in the article 7 of the Law of the Republic of Kazakhstan dated December 4, 2002 No. 361 «On sanitary and epidemiological prosperity of population». Also there exists the Decree of the Cabinet of Ministers of the Republic of Kazakhstan dated January 24, 1992 No. 70 «On procedure to develop quality standards for the environment in the Republic of Kazakhstan» adopted due to the lapsed Law of the Kazakh SSR «On protection of the environment nature in the Kazakh SSR».

Any legal acts of the central executive bodies in the field of environment protection concerning the procedure of developing and approving hygiene and ecological quality standards for the ambient air are not adopted.

- As to establish the procedure on the state registration of sources of emissions of hazardous substances (contaminants) into ambient air and harmful physical impacts to it the conducted analysis showed that the legal basis for adopting a document for this issue exists. The authority of the Central executive body in the field of the environment to approve a corresponding legal act is permitted by the article 7 of the Law of the Republic of Kazakhstan «On protection of the ambient air». However, the Central executive environmental body is not realizing this standard of the Law;

- As to establish the procedure of developing and approving specific standards of emissions as well as the list of objects (cadastres) in respect of which they are being developed.

The procedure for developing and approving specific standards of emissions is identified by the Order of the Minister for Natural Resources and Environmental Protection of the Republic of Kazakhstan dated March 21, 2002 N 83 «On approval of the Rules for agreeing and approving standards of maximum permissible emissions (MPE) and maximum permissible discharges (MPD)». According to this Order all organizations – nature users should follow this procedure for developing and approving standards of maximum permissible emissions and maximum permissible discharges. The Order does not contain distinct criteria regarding an activity of organizations to which this procedure extends by this Order;

- the authority of the central executive body in the field of the environment to **establish a procedure for conducting inventory of hazardous substances emissions into the ambient air, harmful physical impacts to the ambient air and their sources** is envisaged in the article 20 of the Law of the Republic of Kazakhstan «On protection of the ambient air». The central executive body has not adopted the legal act regulating these issues.

Thus, plenty of provisions of the Law of the Republic of Kazakhstan have not been realized on the subordinate legislation level.

Recommendations to improve the current legislation on the basis of analysis of legal acts of the Republic of Kazakhstan referring to issues on regulation of the Kyoto Protocol.

In case the Republic of Kazakhstan ratifies the Kyoto Protocol and obtains a number of obligations aimed to provide their implementation there will appear the need to improve the current legislation as a whole.

Implementation of provisions under the article 2 of the Kyoto Protocol supposes:

According to item 1), envisaging increase the effectiveness of energy use in corresponding sectors of the economy – perfection of normative – technical acts (standards) for toughening

technical requirements towards corresponding equipments, fuel etc., legal acts in the field of antimonopoly legislation in particular compilation of expenses when agreeing and approving tariffs;

According to item 3), envisaging incentive of sustainable forms of agriculture – perfection of tax legislation, legislation on investments and other legislation connected with formation of economic incentives;

According to item 4) envisaging reduction or elimination of market disproportion, fiscal incentives, exemptions from taxes and subsidies, contradicting the aim of the Convention – improvement of tax and customs legislation.

According to the article 5) of the Kyoto Protocol it is necessary to establish a national system for assessing anthropogenic emissions from sources. And national methodologies for assessment of anthropogenic emissions should be developed based on the methodology of the Conference of Parties. In this regard, according to the envisaged authority by the Law of the Republic of Kazakhstan “On protection of the ambient air” the Central executive environmental body should adopt a corresponding document taking into account provisions of the methodology of the Conference of Parties.

The article 7 of the Kyoto Protocol envisages the necessity to maintain an annual cadastre of anthropogenic emissions and submit annually National communications to the Conference of Parties for registering cadastres and assigned amounts (AA). The authority of the central executive body concerning cadastres is defined in the Law “On protection of the ambient air”. It is required to develop a departmental document determining maintenance of the national cadastre including the procedure on compilation of information on programs in sectors of the economy indicated in the article 10 of the Kyoto Protocol.

Also it is necessary to mark that earlier a draft Rules on sequence of preparation, agreement and approval of projects for reducing greenhouse gases emissions reduction in the Republic of Kazakhstan has been developed. This document meets the requirements defined by the Kyoto Protocol, corresponding to derived documents adopted by bodies and contains procedures and requirements for projects necessary inside the country.

This Rule was approved by the Ministry of the Environment Protection. It is also agreed with Interagency Commission created by the Decree of the Government of the Republic of Kazakhstan dated April 17, 2000 No. 590, which is the advisory body under the Government of the Republic for the Kyoto Protocol issues. As a whole the Government has not elaborated its position as for the ratification of the Kyoto Protocol. In this regard the level and form of adoption of the Rules are not determined. Taking into account the above mentioned this document anticipates the procedure of the overall consideration in the state bodies and further review.

As for the ratification of the Kyoto Protocol and adopting corresponding subordinate legal acts providing realization of the Kyoto Protocol provisions I suppose that it is useful to renew the activity of the above mentioned Commission with participation of stakeholders from the state agencies.

The analysis of legislation in relation to the Kyoto Protocol

As it was noted before, the Law of the Republic of Kazakhstan on Atmospheric Air Protection provides legal, economic and social basis for protection of atmospheric air, including as related to control and coordination of emissions into atmospheric air. The Law specifies competence of the Government, including with respect to creation of an economic incentives and implementation of market mechanisms; introduction of a GHG emissions reduction mechanism; establishment of procedure for setting rates of atmospheric air pollution payments, approval of procedure for issuance of licenses for controlled substances into the atmosphere; approval of procedure for organization and conduct of state control in the area of atmospheric air protection; establishment of procedures for reporting and state statistics in the area of atmospheric air protection (Article 6 of the Law).

Besides, Article 7 of the Kyoto Protocol to the UN Framework Convention on Climate Change (hereinafter – the Kyoto Protocol) provides for specific authorities of the central executive body in the area of environmental protection, including introduction of technology-based emission standards, licensing of emissions into atmospheric air, development of relevant legal acts, regulations and methodological documents regarding calculation of greenhouse gases emissions. This body is also responsible for monitoring of atmospheric air status (Article 21).

Additionally, it's worthy noting that many provisions of the Law still have no regulatory support.

Legal base of the Republic of Kazakhstan in this sphere includes only the above-mentioned Law; Instruction on Agreement and Approval of Standards of Maximum Permissible Emissions (MPE) and Maximum Permissible Discharges (MPD), approved by order #83-p of the Minister of Environmental Protection (dated March 21, 2002) and registered by the Ministry of Justice on May 3, 2002 (order #1843); Methodology for Calculation of Environmental Pollution Payments, approved by the Minister of Ecology and Biological Resources of the Republic of Kazakhstan on August 9, 1994.

Provisions on administrative and criminal responsibility for violation of the legislation in the area of atmospheric air protection are stated in the Code of Administrative Violations of the Republic of Kazakhstan (articles 240-249) and Criminal Code of the RK (articles 277, 282).

Thus, Kazakhstan's legislation does include provisions regulating emissions into atmospheric air. But many of these provisions are of reference character and they are not supported by adequate regulations. The existing Instruction on Approval of Emission Standards includes only general provisions, not giving information on specific character of the mechanism for emission standard setting, regulation and control.

If the Republic of Kazakhstan ratifies the Kyoto Protocol, our country will take a number of obligations that will entail the necessity to improve the existing legislation in the area of atmospheric air protection.

On ways to regulate emissions

Thus, according to Article 2 of the Kyoto Protocol, each Party shall also implement policies aimed at:

- 1) enhancement of energy efficiency in relevant sectors of national economy;
- 2) enhancement and protection of sinks and reservoirs of greenhouse gases;
- 3) promotion of sustainable forms of agriculture;
- 4) progressive reduction or phasing out of market imperfections, fiscal incentives, tax and duty exemptions and subsidies that run counter to the objectives of the Convention;
- 5) measures to limit emissions of greenhouse gases in the transport sector and in the production, transport and distribution of energy, etc.

Additionally, according to Article 10 of the Kyoto Protocol, each Party shall formulate national or regional programs, concerning the energy, transport and industry sectors, as well as agriculture, forestry and waste management and aimed at reduction of anthropogenic emissions.

In our opinion, for Kazakhstan it means adoption of certain regulations, including those aimed at taking measures stimulating legal entities and physical persons for emission reductions; introduction of corresponding corrections to sectoral economical development programs of Kazakhstan (for industry, agriculture, energy, transport); compiling

inventory of existing international treaties and agreements and Kazakhstan legislations in the area of taxation with the objective to eliminate or reduce exemptions from taxes and subsidies, running counter with the goals of the Kyoto Protocol; establishing measures aimed to ensure favorable conditions for development of private sector through promotion of their use of environmentally sound technologies and access to them.

Additionally, certain procedures for approval of technological projects in the sectors, emitting greenhouse gases, must be adopted at the national level, following the recommendations developed by the Conference of the Parties.

On functions of national bodies regulating emissions

Article 5 of the Kyoto Protocol provides for creation of a national system for the estimation of anthropogenic emissions by sources. This estimation system is already stipulated for in the Law of the Republic of Kazakhstan on Atmospheric Air Protection, and relevant authorities are given to competent central, territorial and local executive bodies.

According to this Article, guidelines for such national systems shall be developed based on the methodologies developed by the Conference of the Parties.

Under Article 7 of the Kyoto Protocol, each Party shall keep its annual inventory of anthropogenic emissions and submit annual national communications to the Conference of the Parties in order to consider emission inventory and assigned amounts. At the same time, according to Article 10 of the Kyoto Protocol, annual communications shall include information on intersectoral programs, which contain measures to reduce greenhouse gases and introduce environmentally sound technologies.

Under Article 12, paragraph 5 of the Kyoto Protocol, emission reductions shall be certified. The Law on Atmospheric Air Protection provides for certification of emissions. However, according to the above-mentioned paragraph of Article 12, in case of voluntary participation by the Party, certification on the territory of the country can be carried out by operational entities to be designated by the Conference of the Parties.

The Kyoto Protocol provides for the opportunity to sell and buy certified emission reductions (Article 3 of the Protocol), that's why in case Kazakhstan ratifies it, the Law will require adequate additions and a competent body responsible for sale and purchase of certified emission reductions will be needed.

On activity of the Conference of the Parties on the territory of Parties

If the Kyoto Protocol is ratified, Kazakhstan is to take obligations, including those related to ensuring access of the Conference of the Parties to control and coordination of emissions on the whole territory of Kazakhstan, and to acknowledgment of the decisions that could be made by the Conference of the Parties by means of amendments, according to Article 18 of the Kyoto Protocol.

The Conference of the Parties elaborates methodologies for national estimation of emissions, rules and guidelines for verification, reporting and accountability for emission trading, as stated in Article 17 of the Kyoto Protocol.

Under Article 3, each Party shall provide to the Conference of the Parties (to its Subsidiary Body) data to enable an estimate to be made of its changes in carbon stocks.

In accordance with paragraphs 7 and 8 of Article 12, the Conference of the Parties can carry out independent audit and verification of project activities in the country, including with the objective of

ensuring that a share of the proceeds from project activities is used to cover administrative expenses as well as to assist developing country Parties.

On liability of countries in case of non-compliance with the Protocol

Under paragraph 5 of Article 4 of the Kyoto Protocol, in the event of failure by the Party to achieve its total combined level of emission reductions together with another Party, with which it reached an agreement to fulfill their commitments resulting from trade in certified units jointly, every Party of this agreement shall be responsible for its own level of emissions set out in the agreement.

Following Article 18 of the Kyoto Protocol, the Conference of the Parties shall elaborate procedures and mechanisms to determine and to address cases of non-compliance with the provisions of the Protocol and develop an indicative list of consequences. These decisions of the Conference of the Parties entail binding consequences and shall be adopted by means of an amendment to the Protocol.

In our opinion, the latter can be classified as a restriction in perspective, when the country in advance undertakes obligations to comply with the provisions related to liability for non-compliance with the Protocol's provisions, which will be adopted in the future.

On financial obligations

In accordance with Article 11, paragraphs 2 and 3, of the Kyoto Protocol, the developed countries, included in Annex I or II, shall provide financial resources for developing countries. Following section 1.1 of the material «KAZAKHSTAN: CO2 EMISSIONS FORECASTING AND REGULATION MECHANISMS FOR REDUCING GREENHOUSE GASES» (page 8); prepared by the Climate Change Coordination Center, and the Kyoto Protocol, Annex 1 of the Kyoto Protocol includes developed countries and countries with economy in transition (East-European countries, Russia and Ukraine).

The above-mentioned material also states that in accordance with Resolution 7 of the Conference of the Parties held in Morocco, if Kazakhstan ratifies the Protocol and the Protocol enters into force, Kazakhstan can be included in the list of Annex I countries.

However, status of the countries with economy in transition is not identified in the Kyoto Protocol, that's why it's not clear how the provisions of Article 11 of the Protocol will be applied to such countries, namely to Kazakhstan.

Besides, according to Article 10, paragraph c) of the Protocol, developed environmentally sound technologies, know-how and programs that are publicly owned or in the public domain, shall be transferred to developing countries.

On the procedures of the Kyoto Protocol ratification

In accordance with Article 24 of the Kyoto Protocol, it shall be open for signature and subject to ratification, acceptance or approval be States and regional economic integration organizations. Consequently, there are three ways to express consent by States and organizations: ratification, approval and acceptance. In this context signature is a procedural requirement. On behalf of Kazakhstan, Resident Representative of Kazakhstan in the UN Arystanbekova A. signed the Kyoto Protocol on March 12, 1999.

According to Article 25 of the Kyoto Protocol, it will enter into force on the ninetieth day after the date on which not less than 55 Parties to the Framework Convention on Climate Change have deposited their instruments of ratification, acceptance, approval or accession.

Now when Russia has ratified the Protocol, it's expected that the Protocol will enter into force in February 2005.

Following the Delhi Ministerial Declaration on Climate Change and Sustainable Development, adopted at the 8th Session of the Conference of the Parties on October 23 – November 11 2002, as for October 23, 2002, 96 countries had ratified, approved or acceded to the Kyoto Protocol.

For Kazakhstan, who signed the Protocol, accession is not acceptable as a form of consent, as accession is designed for countries that haven't initially participated in signing the relevant international agreement (according to the Vienna Convention on International Agreements dated 1969).

At the same time, taking into consideration the above-listed obligations to be undertaken by Kazakhstan, and based on the ways of consent proposed in the Kyoto Protocol, ratification is the most acceptable (according to Article 11, paragraphs 1, 4, 5, of the President's Decree On the Procedures of Concluding, Complying with and Denouncing International Treaties, dated December 12, 1995, having power of a law).

If the Kyoto Protocol has not entered into force by the moment Kazakhstan ratifies the Kyoto Protocol, Kazakhstan shall undertake obligations to comply with the Protocol in accordance with Article 4 of the Constitution of the Republic of Kazakhstan and Vienna Convention on International Agreements. In this case any sanctions or other limitations for non-compliance with the Kyoto Protocol can be used against our country only after the Protocol enters into force.

The Kyoto Protocol must be ratified in accordance with the procedure, set forth by the President's Decree "On the Procedures of Concluding, Complying with and Denouncing International Treaties", dated December 12, 1995, having power of a law.

It should be noted that ratification, acceptance and approval of the Kyoto Protocol is not permissible with the reservations provided for in Article 26 of the Protocol.

On the procedures of withdrawal from the Kyoto Protocol

Any Party may withdraw from the Kyoto Protocol only after it has entered into force. For the withdrawal a Party must give a written notification to the Depositary one year prior to the withdrawal or on such later date as may be specified in the notification of withdrawal (Article 27 of the Kyoto Protocol).

Recommendations

Ratification of the Kyoto Protocol assumes a number of legislative and sub-legislative acts to be adopted. Project realization mechanisms in the Kyoto Protocol require identification of the ownership to carbon credits. In other words it is necessary to identify right of property of subjects of a carbon market (range of the state property, an organization, an operator of the market etc.) that should be set by a legislative act – special law. Besides, the Kyoto Protocol requires information collection, implementation of additional control functions, monitoring of emissions and so on) which are possible to be implemented by strengthening authority of state bodies. In this case such authority and regulation of relations should be reflected in the Law of the Republic of Kazakhstan "On protection of the ambient air" and correspondingly in Regulations on state agencies.

The Protocol envisages standards exempting equipment, goods, services imported within the projects being realized in accordance with the Protocol, from customs and taxes. In order

to provide realization of these standards it is necessary to bring to conformity with legal acts of authorized state agencies in the field of taxation and customs regulation.

As well it is required to develop and approve Rules on organization of the carbon market (the Government Ordinance), regulating interrelations of its subjects.

List of legal acts analyzed see below.

List of legal acts for the issues of protection of the ambient air.

1. The Order of the RK Ministry of Natural Resources and Environmental Protection dated March 21, No. 83 approves " Rules on agreement and approval of standards on maximum permissible emissions (MPE) and maximum permissible discharges (MPD);
2. The Decree of the RK Government dated August 14, 2003 No. 815 on "Rules on organizing and conducting the state control in the field of the ambient air protection";
3. The Order of the Minister for Natural Resources and Environmental Protection dated March 11, 2001 No. 50 on " Rules on organizing the production control in the field of environmental protection";
4. The Decree of the Government of the Republic of Kazakhstan dated January 5, 2004 No. 2 on "On approval of lists of formats on the state and departmental statistical statements of the Republic of Kazakhstan";
5. The Order of the Minister for the Environmental Protection of the Republic of Kazakhstan dated January 28, 2004 No. 68 on " Rules on assessing impacts under designing of economic and other activity to the environment when developing pre-planned, pre-project and project documentation";
6. The Decree of the Government dated January 8, 2004 No. 19 on "On approval of the List of ecologically dangerous types of economic activity and Rules on their obligatory state licensing";
7. The Law of the Republic of Kazakhstan dated January 8, 2003 # 373 "On investments";
8. The Decree of the Government of the Republic of Kazakhstan dated May 8, 2003 No. 436 on "On some issues of realization of the Law of the Republic of Kazakhstan "On investments";
9. The Decree of the Republic of Kazakhstan dated December 1, 1998 No. 1213 on " On approval of the Rules on levy on contamination of the environment";
10. The Decree of the Government of the Republic of Kazakhstan dated September 6, 2001 No. 1154 on "On approval of the Rules of permits issue for contaminating the environment";
11. The Decree of the Government of the Republic of Kazakhstan dated March 12, 2004 No. 311 «On approval of the List of specially authorized bodies implementing functions of the environment protection, management of nature and the state control in this field and Rules on organization of these activities";
12. The joint order of the Minister for Energy, Industry and Trade of the Republic of Kazakhstan dated July 9, 1999 No. 187 and of the Minister for Natural Resources and Environmental Protection dated July 9, 1999 No. 182 "On approval of the Rules to meet norms of ecological safety when designing and conducting oil operations in the water area and coastal zones of seas and inner reservoirs of the Republic of Kazakhstan";
13. The Order of the Minister for Health of the Republic of Kazakhstan dated August 18, 2004 No. 629 «On approval of sanitary and epidemiological rules and standards on epidemiology and hygiene»;
14. The Decree of the Cabinet of Ministers of the Republic of Kazakhstan dated January 24, 1992 No. 70 «On procedure to develop quality standards for the environment in the Republic of Kazakhstan»;

15. The Law of the Republic of Kazakhstan dated March 11, 2002 # 302 "On protection of the ambient air".

4.2. Signed or ratified international conventions and protocols

No.	Title of convention and agreement	On the basis of document on which Convention is considered to be ratified and date of ratification
1	The World meteorological organization Convention.	The Resolution of Supreme soviet of RK from 18.12.1992. Resolution of Ministry from 13.04.1993 It was ratified 13.04.1993.
2	International Convention on oil pollution damage civil commitment.	The Resolution of Ministry of RK from 04.03.1994 It was ratified 05.06.1994.
3	The Convention on security of living organisms in sea.	The Resolution of Ministry of RK from 04.03.1994. It was ratified 07.06.1994
4	The Convention on biodiversity.	The Resolution of Ministry of RK No. 918, from 19.08.94. It was ratified 06.09.1994.
5	The Convention on protection of World culture and nature heritage.	Joining and ratification 29.07.1994.
6	The United Nations Framework Convention on Climate Change.	The Decree of President of RK. It was ratified 17.05.95.
7	The United Nations Convention to Combat Desertification.	The Resolution of Senate 28.06.97. The Law of RK, July 7, 1997 No. 149-13 RK. It was ratified 9.07.97.
8	The Vienna Convention on ozone layer protection.	The Law of RK, October 30, 1997.
9	The Montreal Protocol on Substances that Deplete the Ozone Layer.	The Law of RK, October 30, 1997.
10	London amendment to Montreal Protocol on Substances that Deplete the Ozone Layer.	The Law of RK, May 23, 2001.
11	Agreement to Energy Charter and Protocol to Energy Charter on power effectiveness and appropriate ecological aspects	The Decree of President from 18.10.1995.
12	The Convention on International trade of Endangered Species of Wild Fauna and Flora	The Law of President from April 6, 1999. It was ratified April 19, 2000.

13	The Convention on prohibition of military or other hostile use of means of influence on environment	The Resolution of Supreme soviet of RK from 20.02.1995 from 13.04.1993.
14	Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters.	The Law of RK on ratification 3RK No. 92-II from 23.10.2000
15	Convention on Environmental Impact Assessment in a Transboundary Context;	The Law of RK on joining 3RK No. 86-II from 21.10.2000
16	Convention on the Transboundary Effects of Industrial Accidents	The Law of RK on joining 3RK No. 91-II from 23.10.2000
17	Convention on the Protection and Use of Transboundary Watercourses and International Lakes;	The Law of RK on joining 3RK No. 94-II from 23.10.2000
18	Convention on Long-Range Transboundary Air Pollution	The Law of RK on joining 3RK No. 89-II from 23.10.2000
19	Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposall.	The Law of RK on joining 3RK No. 389 from 10.02.2003

4.3. Environmental standards

Environmental pollution charge (further - charge) imposing from bodies and personals for activity realizing in territory of RK in special nature management order (further –nature users).

Charge is imposed from nature users, carrying out the following types of influence on environment:

- Contaminants emission of stationary and movable sources in atmosphere;
- Contaminants emission in water body;
- Distribution of industrial and consumption waste.

Charge rates are fixed by local representative bodies, but not lower than environmental pollution charge.

Basic rates are under the annual indexation taking into account of annual rate of Inflation.

Bush correction factors for contaminants emission in atmosphere from stationary and movable sources, contaminants waste in water body are under the annual reconsideration.

4.4. Emission standards

Normative projects of maximum permitted emissions and maximum permitted discharges in environment are considered by environmental protection bodies of RK in compliance with

functioning legislation on environmental expertise (further – Normative projects MPE and MPD) for active enterprises, during its technological conditions changes as well.

Nature user carries providing of concordance and confirmation of project normative MPE and MPD, its reconsideration.

Necessity of reconsideration formed norms of maximum permitted emissions and waste can be appeared before termination of action:

- 1) Environmental and hydrological situation changes in region, water body;
- 2) Appearance of new or refinement operation factors of environmental pollution source;
- 3) Privatization structural and subdivisions, marked from enterprises in as independent objects.

Projects of standards submitting to consideration MPE and MPD must be contained statement (covering letter), explanatory note, assumption outcomes of maximum permitted emissions and maximum permitted discharges.

Terms of project norms of MPE and MPD consideration must not be exceed term, formed for holding state environmental expertise.

Discord of permissions, appearing during projects of standards MPE and MPD consideration is carried in compliance with active legislation of RK.

Permission on emission and contaminant discharges issued to organizations on the basic of adjusted, normative project MPE and MPD.

Normative projects of MPE and MPD are confirmed to terms formed normative documents of RK.

During determination quantity charges for emission and contaminant in atmosphere and water body counted in compliance with determination of charges for environmental pollution Method confirmed by the Ministry of ecology and bioresources of RK dated August 9,1994, registered in the Ministry of justice of RK, January 16,1996 N 142.

4.5. Law enforcement mechanism

4.5.1. Procedure for EIA (Environmental Impact Assessment)

Procedure for EIA is obligatory for realizing object lines on all planned structures. EIA is holding by organization which realizes construction or consulting firms, which have appropriate license for realizing EIA.

Instruction on realizing of influence planned economic and other activity on environment during development preplanned, pre project and project documentation assessment is in the attachment.

4.5.2. Environmental inspection system

(see 3.2.)

5. ENVIRONMENTAL POLICY AND PROGRAMS

5.1. Long-term policy

Foundations of public policy in environmental protection area were laid in the Conception on environmental security approved the Decree by President of RK, April 30, 1996 where environmental priorities of transition, in particular environmental problems of privatization, issues on necessity of environmental legislation foundation, public control and expertise, economic mechanisms of nature management, environmental monitoring are considered.

As a result of tasks implementation of the Conception, rate of environmental pollution rates was reduced greatly in comparison with 90 years due to enhance of public control in environmental protection area and obligatory environmental expertise introduction. However, state status with environmentally vulnerable territory and environmental challenges are still existed.

In new Conception approved by the Decree of President of RK from December 3, 2003, decision ways are proposed. Some of them: providing forward development of scientific research on important challenges of environmental security and sustainable nature management, including basic ones; leading uniform system environmental situation monitoring; environmental division into districts and special mapping of territory of RK.

World experience shows that basis of successful decision of environmental problems and prevention environmental disasters are introduction of environmental principles of social-and-economic system of any state.

The Conception on environmental security was developed started from priorities the Strategy of "Kazakhstan - 2030" in compliance with strategic development plan of RK till 2010 and from account of basic agenda regulations for XXI century and principles of Rio de Janeiro declaration on environment and development of 1992, decisions of the World summit on sustainable development in Johannesburg as well (2002).

Providing optimal level of environmental security with achievement of normative indices of environmental situation proposes phased realization regulations of the present Conception.

First phase (2004 - 2007 years) – reduce of environmental pollution level and development of action plan for its stabilization.

Second phase (2008 - 2010 years) – stabilization of environmental quality indices of environment and perfection of environmental requirements to nature management.

Third phase (2011 – 2015 years) – improvement of environmental quality and achievement of favorable level environmentally sustainable development of society.

The objective of public policy in environmental security is providing of nature systems protectability, vital interests of society and individual rights from aggression, appearing as a result of anthropogenic and nature influences on environment.

5.2. Mid-term policy

Information on realized activities in 2004 -2005 years and planned activities for 2006 is in Activities plan for 2004-2006 on the Conception realization of environmental security of RK for 2004-2015

5.3. Annual programs and budgets in 2002, 2003, 2004

(See 2.4)

6. ENVIRONMENTAL SITUATIONS

6.1. Nature including forest preservation, desertification prevention, biodiversity and natural disasters

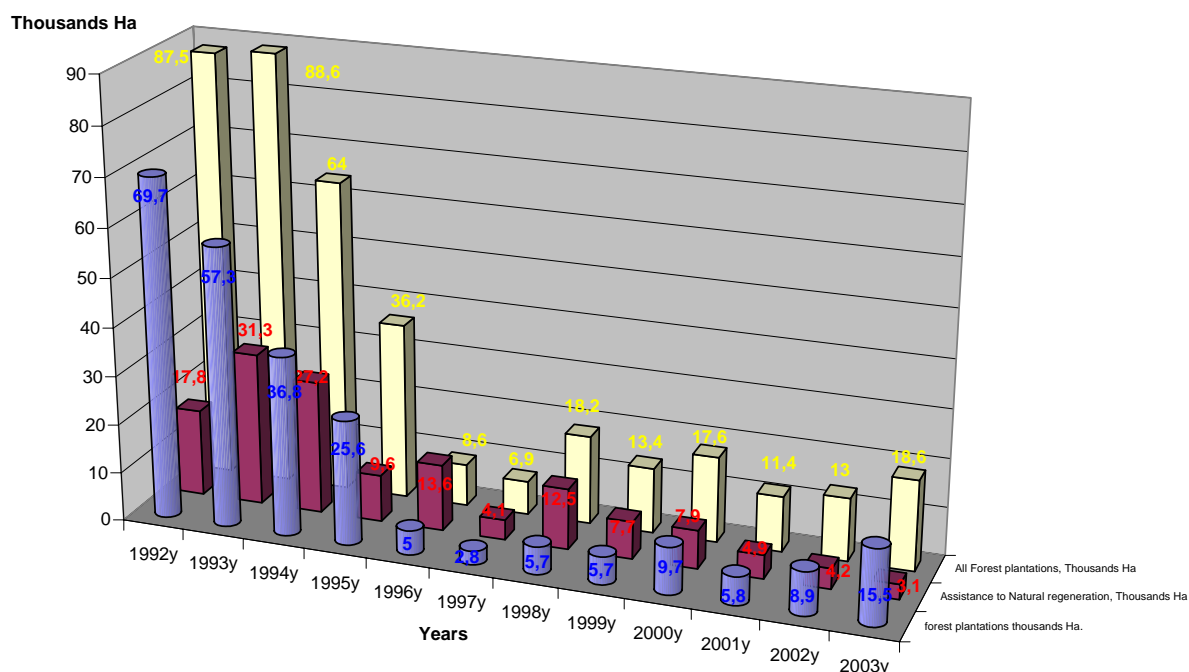
Flora variety in Kazakhstan varies on composition and quantity of types. There are more than 6000 types of high vascular plants, about 5000 - mushrooms, 485 - lichens, more than 2000 - algae in Kazakhstan. The most whole inventory types of mushrooms and high plants were exposed. Among the plants 14 % types are endemics. In the Red book of Kazakhstan 404 types of high and low plants had been included.

Forest of Kazakhstan taking into consideration saxaul forests and bushes are 4,6 % (11,5 mln. ha), without it – 2,3 % (5,75 mln. ha). Conifers forests takes about 1,8 mln. ha. Forest of Kazakhstan plays soil protection and water protection role.

Last 10 years almost to 0,16 mln. ha, or 20 %, area of band pineries were reduced in Western Kazakhstan. For regulation these problems the Resolution of RK had been adopted dated April 23, 2004 No. 460 «On prohibition chipping the main use in conifers and saxaul plantings in state forestry fund area and measures on its preservation».

If annual volume of forestry reconstruction works last years of last century over republic consists about 80 thousand ha, and in 1997 volume of forest reconstruction were reduced in 8 times and nowadays its situation is in the same situation (pic.1).

Pic. 1. Volumes of Reforestation in Kazakhstan



Nowadays by the Resolution of RK dated May 14, 2004 No. 542 Program «Forests of Kazakhstan» - 2004-2006 years had been confirmed. As a result of realization of this program forestry preservation is provided, improvement of forestry preservation from fire, its protection from pests and sicknesses, improvement of quality and composition and sanitary condition of forests.

By the Resolution of RK dated April 10, 2002 No. 408 list of rare types of animals – 40 types of mammals, 57 types of birds, 10 types of reptiles, 19 types of water animals had been confirmed. By the Resolution of RK dated June 19, 1998 No. 573 list of invertebrate types of animals had been confirmed for including them in the Red book. Total: 96 types.

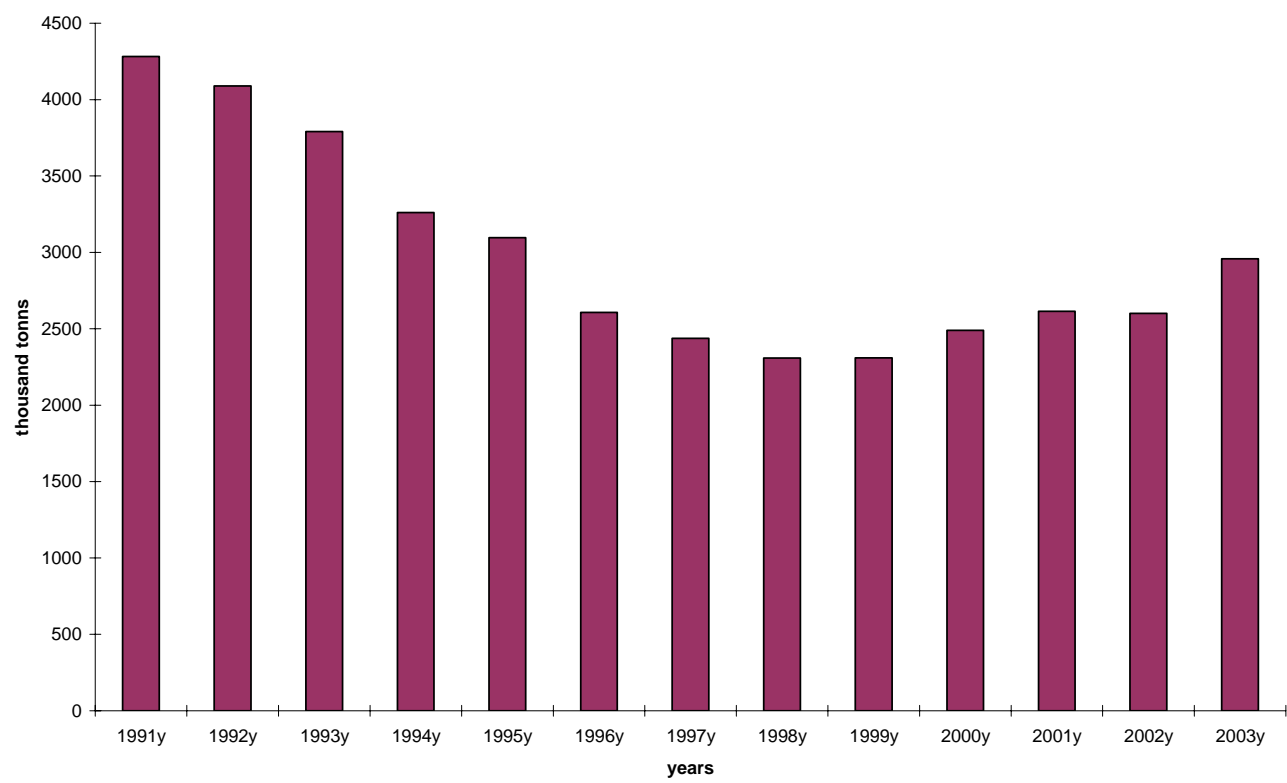
It is very important for Kazakhstan to develop the methods of active impact on characteristic of mudflows, and it is necessary to approve scientifically of prevention of lakes forming methods, water complexes.

As Almaty city is situated in seismic dangerous zone, it is very important to conduct researchers and assessment on dangerous geological processes in piedmont areas for activities development on prevention of earthquakes.

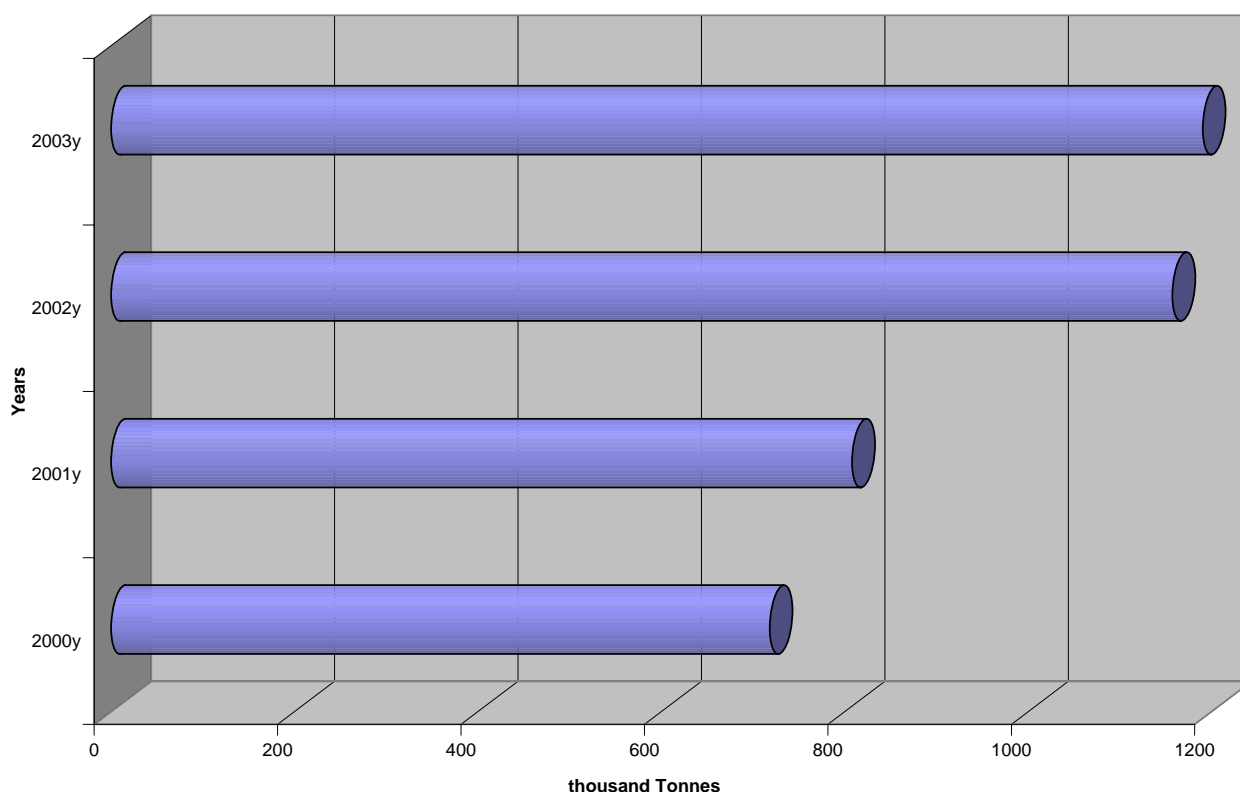
6.2. Ambient air

Pollution situations of ambient air observations are being conducted in 19 towns of Kazakhstan. The most level of pollution is fixed in Ridder, Shymkent, Ust-Kamenogorsk, Karaganda and Almaty cities. Sometimes maximum polluted substances concentrate exceed in 10-20 times (for example, in Balkhash, Ust-Kamenogorsk on dioxide sulfure).

Pic. 2. Emissions from the stationary sources.



Pic. 3. Dynamic of emissions from Auto transport.



Emission from removal sources in cities has tendency of exceeding of number of auto transport. Especially negatively impact of exploitable transport.

Activities on ambient air protection are directed on consideration of enterprises emission and payments contributions for environmental pollution by stationary and removal sources. However, there are no effective of harmful substances emission reduction, as cost of «environmental payments» of enterprises is included in product cost (heating, energy, services).

Mechanism of environmental payments use does not suggests cleaning technology implementation in industry and support of environmentally cleaning houses and circles.

About 5 million people of Kazakhstan live in polluted ambient air conditions and 2 mln. – in high level pollution conditions.

6.3 Water Resources

Surface Water Quality

Water quality in almost all Kazakhstan's water objects remains unsatisfactory, in spite of decreases in production and volumes of wastewater discharge. The principal pollutants occur in wastewater from chemical industries, petroleum processing, and machine building industries and non-ferrous metallurgy. The main damage to the environment, and in particular to water reservoirs, is caused by polluted wastewater discharged without prior treatment.

One of the hydrological features of Kazakhstan is that it has flow transit and dispersal zones, as well as delta zones of major river basins (Syrdarya, Irtys, Ural and Irtysh rivers).

As the flow of practically all Kazakhstan's rivers is regulated, the regime of flow formation on river sections below water reservoirs is altered significantly. As a result of the impact of the rivers and the areas of catchments and intensive water consumption, there are changes to the hydrological regime and water quality in the transit and dispersal zones. This mutual impact is characterized by intensive water intake from the rivers for industrial and irrigation purposes and discharge back into the rivers of wastes containing salt, chemicals and other pollutants.

Described below are the characteristics of surface water quality in the main water objects of Kazakhstan, based on data provided by RSE Kazhydromet Environment Pollution Monitoring Center / 57,70,71/.

Aral-Syrdarya Basin

The level of nitrite pollution of the surface water of the basin remains high. In 2001 nitrites exceeded the maximum permissible concentration (MFC) by in 46% of tested samples, and the maximum level of pollution reached 27 MFCs.

The chemical composition of the Syrdarya River forms within the Republic of Uzbekistan. The water enters Kazakhstan (Kokbulak border post) with an average content of nitrite nitrogen of about 4 MFCs. Maximum concentration- 16 MFCs, the average content of copper reaches 4 MFCs, phenols -3 MFCs, sulfates - 6.5 MFCs. The maximum level of pollution is observed in spring when the content of pollutants reaches: copper and nitrites 3 MFCs, sulfates - 7 MFCs, phenols - 6 MFCs, petroleum products - 4 MFCs. The water of the Syrdarya Water Reservoir is polluted mainly with sulfates, nitrites, phenol and copper.

The main tributaries of the Syrdarya River are also significantly polluted. The Keles River is characterized by a value of WPI (Water Pollution Index) corresponding to quality class 3, i.e. 'moderate pollution'. The principal pollutants are sulfates, copper, phenols, the content of which varies from 2 to 11 MFCs, The Arys River is polluted moderately (sulfates, copper, phenols and nitrites). The level of pollution of the Badam River is characterized by a WPI value of quality class 3, with the average concentration of sulfates, copper, phenols, nitrites and petroleum products exceeding MFC by 2-5 times.

Irtys Basin

The level of heavy metal pollution of the surface water of the basin remains high. In 2001 levels of copper exceeded MFC in 99.6% of samples, zinc in 57% of samples, with the content of zinc and copper exceeding 10 MFCs. The water quality class is level 4, i.e. the water is 'highly polluted'.

Water Pollution Index in the area of the village of Buran is 1.02, quality class is 3 - "moderately polluted" water. Down river in the city of Ust-Kamenogorsk the level of pollution due to wastewater discharges from the East Kazakhstan industrial complex increases significantly. The gate "0.5 km below TMC" located below the junction of the Irtys River and the Ulba River is the most polluted. In addition to the polluted Ulba River, the quality of surface water in this area is affected by wastewater from the treatment facilities of the right bank of the Irtys.

The quality of the surface water of the Irtys between the villages of Glubokoye and Predgornoye is affected by two right tributaries: the Glubochanka River and the Krasnoyarka

River. These waters are polluted by discharges from the Belousovsk, Irtysh and Berezovsk mines and transit waters from the above-situated sources of pollution in Ust-Kamenogorsk. The average annual concentration of copper and zinc in these rivers amounts to 40-50 MFCs, with maximum concentrations often exceeding 100 MFCs.

In the end gate of the village of Borovskoye, the pollution index for the Irtysh River equals 1.14, corresponding to "moderate pollution".

Ural-Caspian Basin

The principal pollutants of the surface waters of the basin are boron and organic substances. The content of nitrites, phenols and copper is 80%, 49% and 22% respectively in the selected samples.

The water of the Ural River is polluted on the territory of the Russian Federation. Within Kazakhstan, wastewater discharges into the riverbed are not observed.

The Ilek River remains the most polluted water body in the basin. The content of boron and chromium in the river is caused by the tailing ponds of the former Alga chemical plant and AZKhS JSC, via ground water. In the gate of Alga "0.5 km below ground water discharge" the content of boron in the water varies from 35 to 129 MFCs. Within the city of Aktobe the content of boron equals 13.8 MFCs, phenols -1 MFCs, nitrite nitrogen - 1.2 MFCs, chromium - 6.9 MFCs. The quality class of water in the Ilek River changes from 4 - "polluted water" to 6 - "very polluted water".

Balkhash-Alakol Basin

The principal pollutants of the surface water of the basin of the Hi River are petroleum products, the content of which in 83% of tested samples exceeded MFC (on the average 2.5 MFCs). According to the pollution index the basin is characterized as moderately polluted.

The chemical composition of the Hi River in Kazakhstan is created by pollutants from the People's Republic of China and the polluted surface flow and washout from agricultural lands adjacent to the basin. Within the area of the Dubun berth the concentration of copper reached 21.4 MFCs (maximum value -181 MFCs), the content of phenols, zinc and petroleum products in the water was 1 -3 MFCs. In this area the water of the river is estimated as 'dirty'. Down river the concentration of copper is a little lower. In the gate below the Kapshagai Hydropower Station the quality of water hardly changes and corresponds to class 4 on the WPI, i.e. "polluted water".

The principal pollutants of Balkhash Lake are heavy metals: copper and zinc, and petroleum products, phenols and fluorides. The content of copper exceeded MFC in all samples selected in Maly Sary-Shagan Bay and Bertys Bay.

Nura-Sarysu Basin

The area of the basin is characterized by a low level of water supply. Due to regulation of the lower part of the flow, it forms based on wastewater discharge from industrial enterprises.

The major polluted tributary of the Nura is the Sherabainura River. The rivers of this basin are characterized by nitrite pollution. The number of samples in which the content

of nitrites exceeds MFC comprises 56%, nitrogen ammonia and copper - 50%, phenols and petroleum products - 67%, fluorides - 80%, zinc - 58%.

The quality of water in the basin is estimated to correspond to WPI class 4 - "polluted water"

Ishim and Tobol-Torgai Basin

In comparison with other basins, the level of pollution of the surface waters of the basins of the rivers Ishim and Tobol is significantly lower, and water quality class corresponds to "moderate pollution".

Data given in Table 5.3 shows that recently in the territory of Kazakhstan WPI of the surface waters within the areas impacted by cities and industrial centers has in general decreased. However, increased WPI for some rivers (Krasnoyarka River, Ishim River and others) is observed.

Based on monitoring of the surface waters of Kazakhstan conducted by the subdivisions of RSE Kazhydromet in the 1st quarter of 2003, the most polluted is the basin of the Irtysh River. The most polluted rivers of the East Kazakhstan Oblast are: Breksa, Tikhaya, Glubochanka and Krasnoyarka. The content of nitrogen ammonia exceeds MFC by 2.29 times, copper- 3.1-25.7 times; zinc -17.5-40.1 MFC, petroleum products - up to 2.4 times and manganese - up to 8.6 MFC.

Table 5,3 Levels of Pollution of the Surface Water in Cities and Industrial Centers of Kazakhstan

Name of control station	WPI*		
	1997	2000	2001
<i>Ural River, the city of Uralsk</i>	2.96	1.28	1.76
<i>Ilek River, the city of Aktobe</i>	7.38	4.19	4.00
<i>Ilek River, the city of Alga</i>	4.86	5.81	4.98
<i>Syrdarya River, the city of Kyzylorda</i>		1.70	1.26
<i>Badam River, the city of Shymkent</i>	2.68	2.20	2.98
<i>Shardary Water Reservoir</i>	2.93	1.94	1,40
<i>Talas River, the city of Taraz</i>	1.38	0.88	1.24
<i>Malaya Almatinka River, the city of Almaty</i>	2.90	1.68	.2.44
<i>Bolshaya Alraatinka River, the city of Almaty</i>	1.95	0.81	1.78
<i>Balkhash Lake, Tarangalyk Bay</i>	2.38	3.70	3.96 .
<i>Balkhash Lake, M. Sary-Shagan Bay</i>	2.56	4.83	4.52
<i>Samarkand Water Reservoir</i>	3.35	2.64	•2.65.
<i>Nura River, the city of Temirtau</i>	4.38	4.12	2.90
<i>Sherubamura River - Estuary</i>	3.94	10.45	3.53
<i>Kara-Kengir River, the city of Zhezkazgan</i>		5.95	6.42
<i>Kengir Water Reservoir</i>		4.50	3.39

Name of control station	WPI*		
	1997	2000	2001
<i>Irtys River, the city of Ust-Kamenogorsk</i>	1.43	1.57	1.54
<i>Irtys River, the city of Pavlodar</i>		1.51	1.02
<i>Irtys River, the city of Aksu</i>		1.17	1.14
<i>Bukhtarma River, the city of Zyryanovsk</i>	1.47	1.57	1.77
<i>Ulba River, Tishinsky Mine</i>	8.64	4.67	4.92
<i>Ulba River, the city of Ust-Kamenogorsk</i>	3.36	1.98	1.97
<i>Tikhaya River, the city of Leninogorsk</i>	9.46	5.80	5.00
<i>Breksa River, the city of Leninogorsk</i>	12.60	4.18	6.72
<i>Krasnoyarka River, the village of Predgornove</i>	3.33	7.60	7.13
<i>Ulba River, the city of Shemonaikha</i>	1.49	1.36	1.36
<i>Ishim River, the city of Astana</i>	1.32	1.22	1.51
<i>Ishim River, the city of Petropavlovsk</i>	1.46	0.60	0.36
<i>Tobol River, the city of Kostanai</i>	0.49	2.17	0.79

*WPI - Water Pollution Index; Please see Technical Note

Source: State Water Cadastre of the Republic of Kazakhstan. Annual data on surface water quality. 1999- 2001. Almaty

Ground Water Quality

Based on data of the ground water monitoring service, about 700 potential sources of pollution have been discovered within the Republic /60/. These are industrial enterprises, solid and liquid wastes storages, stock breeding complexes, tailing ponds of industrial and agricultural facilities, irrigated farm lands, treated industrial wastes, urban agglomerations, oil fields and oil refineries, etc. Based on audit data, only 477 enterprises of the Republic had 762 industrial wastes collectors. However, not all enterprises with such collectors were covered by the audit. Unfortunately, more recently there has been no opportunity to make a comprehensive description of the amount of discharge and waste and the qualitative and quantitative composition of pollutants. Nevertheless it has been established that 241 enterprises in the Republic are polluters of surface waters, and at 158 sites pollution has been detected by regular observation, and on 83 sites by single samples.

The principal sources of pollution in the Republic are industrial and agricultural facilities, and to a lesser extent, utilities.

The highest number of polluted sites and areas were revealed in Almaty Oblast (40), Karaganda Oblast (33), and East Kazakhstan Oblast (22). Of the areas with polluted ground water, the majority (over 200), are characterized by higher salinity, water hardness, plus concentration of sulfates and chlorides exceeding MFC. Some 75 sites are characterized by the presence of nitrogen compounds in the ground water, 59 with heavy metals, 41 with phenols and 28 with organic compounds.

According to the degree of hazard caused by pollutants, ground water pollution at 127 sites can be described as dangerous and at 63 sites as moderately dangerous. There are 48 sites with highly dangerous groundwater pollution levels, while these levels are described as 'extremely' dangerous at three sites.

Throughout the country there are 272 water intakes in zones of ground water pollution, 92 of which are part of the regular observation network. Ground water pollution at other water intake sites was established by random observation. In most cases ground water pollution at water intake sites is connected with economic activities, and at 44 intakes it is determined by natural factors. 143 water intakes are characterized by high salinity of ground water, hardness, content of chlorides and sulfates. In a number of intakes ground waters are polluted by heavy metals (Aktobe Oblast - 12 water intakes, East Kazakhstan - 15 water intakes, Kostanai Oblast - 17 water intakes). The maximum number of water intakes in zones of ground water pollution is in Karaganda Oblast - 77, East Kazakhstan Oblast - 28, North Kazakhstan Oblast - 25. At 180 water intakes where single observations revealed ground water pollution a regular observation network was required.

Water Resources Monitoring and Control in Kazakhstan

State management of hydro-meteorological and environmental monitoring in the Republic of Kazakhstan is conducted by RSE Kazhydromet.

A network of hydrologic observation stations is designed to collect data on the condition of water bodies and water resources of the Republic of Kazakhstan. The placement of hydrologic observation stations is based on the principle of obtaining accurate parameters of the regime - level and annual flow. The number and density of observation stations are determined by natural-climatic conditions and needs of the economy.

Regular hydrological observations on the surface water facilities of the republic of Kazakhstan are conducted at 3 hydro-meteorological stations, 180 level stations, 23 lake stations and 3 marine stations. Rivers longer than 100 km are sufficiently covered by observation. Recently there has been a decline in the number of stations on rivers of lengths from 10 to 100 km. Operating hydro-meteorological stations are located mainly at the elevations up to 2,000 m, with some located higher.

Water quality observations are made based on hydro-chemical and hydro-biological parameters in 53 water bodies, 101 surface water control stations and 142 gates.

Water sample analyses are conducted in the network laboratories of the Environment Pollution Monitoring Center of Kazhydromet in accordance with approved methods.

The significant reduction in observation stations on water bodies requires the optimization of the surface water resources monitoring network. The priority task is restoration and organization of the network of hydrological observations on cross-border water bodies.

Groundwater monitoring in the Republic of Kazakhstan is conducted by the Committee for Geology and Subsoil Protection of the Ministry of Energy and Mineral Resources. The main concern is ground and low-pressure ground waters in the zone of active water exchange and waters of feasible aquifers.

On the territory of Kazakhstan there are 6,838 observation stations of State Ground Water Monitoring, including 3,152 observation stations related to the regional network, 3,621 related to the local network and 65 wells relating to the proprietary network. The existing observation stations, their location and equipment can not fully monitor and account for the current hydro-

ecological situation in Kazakhstan and the extent of manmade impacts. The observation network is unevenly dispersed and in many cases is concentrated in more developed areas, while the major oil and gas provinces and regions of ecological disaster remain unstudied.

One key specific feature of Kazakhstan's groundwater regime is the decreasing average multi-year value of pre-spring and spring maximum water levels. In most ground water reservoirs, after stabilization of the water level, resulted from decreased water intake, there has been a decrease in water levels caused by low water years. Changes in the salinity and chemical composition of ground waters are not reported.

6.4. Land Degradation

The territory of the Republic of Kazakhstan occupies 2724, 9 thousand kilometers². The main using land resources of RK is systematized as land of agriculture importance, consisting 31,9 % of all available land. Regular and estuary irrigation are realized only on 15 % of all land of agriculture importance.

Table 5.4 – Distribution of Available Land by Land Category, Thousands Ha

(Source: Kazakh agency on management of Lands Sources)

Titles of land category	Year			Changes (+, -)	
	1991	2002	2003	2003 to 1991	2003 to 2002
Land of agricultural importance	218375,8	86218,8	83336,6	-135039,2	-2882,2
Land of settlement	3747,2	20505,2	20472,4	+16724,8	-33,2
including:					
cities and countries	2053,5	1963,1	1941,7	-111,8	-21,4
Country settlements	1693,7	18542,1	18530,7	+16836,6	-11,8
Land of industry, transport, connection, defense and other nonagricultural importance	18796,8	2334,9	2359,5	-16437,3	+24,6
Land especially guarded nature territory, земли sanitary, recreational and historical-and-cultural importance	775,1	1378,1	2659,9	+1884,8	+1281,8
Land forestry fund (without Natural Preserve)	10179,2	22432,4	22363,3	+12184,1	-69,1
Land water fund	819,9	3603,9	3612,1	+2792,2	+8,2
Land reserve	18952,3	124696,5	126368,0	+107415,7	+1671,5
<i>Total of land</i>	271646,3	261169,8	261171,8	-10474,9	+1,6
including land, using in other state territory	149,8	0,9	0,9	-148,9	
Land, using by other states	993,7	11321,3	11319,7	+10326,0	-1,6
Territory of Republic	272490,2	272490,2	272490,2		

One of the complicated problems of the present is land and plant degradation problem, and desertification. More than 60 % of Kazakhstan's area is exposed to desertification. From 215,9 mln ha of agriculture grounds and rocky ground consists 42,3 mln ha (20,0 %), greasy land –

58,9 mln ha (27,3 %), removed land – 4,99 mln. ha (2,3 %), deflate – 25,6 mln ha (11,9 %). Existence of plenty of soil easy mechanical composition, high carbonate, plough-land use with breach of the soil protection technology, feeble pasture leading to development of erosion processes. From the whole area irrigation of plough-land became devastated land because of degum - low extent – 4,5, moderate extent – 5,2 and high extent – 1,5 mln. ha. For irrigate land degum land consists 0,7 mln. ha.

From 182,6 mln. ha pasture-ground degradation reached 24,1 mln. ha. The whole desertification area of pasture-ground in desert zone came to 60 %, for mountains and knolls about - 30-40 %. Pasture-ground degradation process has a tendency to increasing.

6.5 Waste Management

From 22 mlrd. of tones industry wastes, existing in Kazakhstan, 5,2 mlrd. tones are toxic substances, that contain poison substances for living organisms. Annual volume of toxic industry wastes in Kazakhstan from 2000 increased to 38 %. If in 2000 it 102,5 mln. tones, in 2002 – 137,1 mln. tones, in 2003 volume increased to 141,9 mln. tones (table 1.3.12). Most of waste volumes mineral resources industry – 55% (from the common quantity of wastes) and process industry – 39 %, and 38 % of it are metallurgical industry wastes.

Last years, in spite of volume reduction of mineral and organic fertilizers are more than 10 times, land pollution by toxic and carcinogenic substances problem is being increased. The main sources of land pollution are enterprises wastes of mining industry (78052,7 thousand tones), metallurgical industry (54043,2 thousand tones) and energy industry (8997,0 thousand tones). Development of mining industry in Kazakhstan defines land conditions change: radioactive nuclide, heavy metals and etc. As a result of work of rock production there are 4 mlrd. tones of terraces, enriched ore - more than 1,1 mlrd. tones, activity of metallurgical enterprises – 105 mln tones.

Table 5.5 – Toxic emissions production volume (mln. ton)

Year	Toxic emissions appearance	Toxic emissions use in enterprises	Toxic emissions sterilization
1997	69,4	3,2	0,6
2000	102,5	16,6	3,9
2001	130,0	23,7	1,6
2002	137,1	34,8	0,1
2003	141,9	29,1	3,7

6.6 Energy saving and Utilization of Renewable energies

December 25, 1997 in the Republic of Kazakhstan the Law on Energy saving had been adopted.

The main principles of the state policy in the energy saving sector

The main principles of the state policy in the energy saving sector are:

- priority of rising the effectiveness of using fuel and energy resources over the increase of their production of heat and electrical energy;
- priority of ensuring of safety and human health, social and everyday conditions of people's life, environmental protection at production, processing, transportation and use fuel and energy resources and (or) energy;
- state regulation implementation in the energy saving sector;
- necessity of economical support of energy saving, renewable sources of energy use stimulation;
- obligatory reliable registration of the produced and expendable fuel and energy resources;
- combination of interests of producers, suppliers and users of fuel and energy resources;
- system approach in energy saving;
- information, educational and research activity implementation in the energy saving sector.

The main directions of energy saving

The main directions of energy saving are:

- stabilization of the production and use of energy, needed for intense national economy development;
- optimization of energy production and its use regimes, its registration and control organization;
- organization of inspection of energy effectiveness of companies and institutions;
- expertise of energy saving at production, working and reconstruction of objects, technologies and equipment ;
- renewable energy sources development;
- utilization of second energy resources and wastes;
- projects implementation on introducing energy effective technique and production, up-to-date technologies;
- introducing scientific researches and new ways of management in this sphere;
- reduction of losses of fuel and energy resources at their production, transformation, transportation, storing and use;
- ensuring the accuracy, reliability and unity of measurements at registration of supplied and used energy resources;
- introducing new and improvement of the current norms and rules of the construction that provides the energy sources saving.

6.7. Greenhouse Gas Emission Reduction

Kazakhstan, which had ratified the United Nations Framework Convention on Climate Change (1995) and signed the Kyoto protocol to this convention, joins the global movement on global warming preventing, which is conditioned by the permanent increase of greenhouse gases from carbon fuel combustion.

Annually in the Republic of Kazakhstan greenhouse gases emissions sources inventory is carried out and emissions of gases with direct and indirect greenhouse effect had been calculated, and forecasts of emission of the main greenhouse gas – carbon dioxide (CO₂) had been made. Carbon dioxide (CO₂) takes the first place in Central Asia countries on

specific indicator of greenhouse gases emissions on gross natural product (GNP) unit (3, 38 kg/USA dollar).

Energy makes the most input into carbon dioxide (CO₂) emissions, and from energy carriers – coal. According to the prognosis data, the part of the coal will increase in most intense rates and to 2010 will amount to 63 %, and to 2020 – 66 % in volume of gross emissions that appear from fuel combustion. Global climate change influences on economy and environmental condition of Kazakhstan needs the constant research and development of adequate measures on its reduction.

Nowadays on state basis it had been decided to 100% utilize the associated gas by oil-producing companies. Now gas is combusted in furnaces, polluting the environment with the products of combustion. At that a lot of greenhouse gases, sulfur and nitric oxides are emitted to the atmosphere.

Also in the Republic of Kazakhstan several projects that aimed at greenhouse gases emissions are being realized. Also the projects on heating systems reconstruction and modernization in many cities are being realized, which would also lead to the heat saving and reduction of heat losses.

7. ENVIRONMENTAL MONITORING

7.1. Environmental Monitoring System

For the goals of Environmental monitoring the **Common State System of Environmental Monitoring (CSSEM)** had been adopted in Kazakhstan. The system had been approved by the governmental decree N885 dated 27 June, 2001

CSSEM is an information system with many goals, including monitoring of environment and natural resources condition, and analysis of the factual environment and natural resources state data for ecological safety, preserving, reproduction and rational use of the natural resources of the Republic of Kazakhstan.

Aims, goals, functions of the Common state system of environment monitoring

The aim of CSSEM is informational providing of administrative and economic decisions making and control over the natural resources use, population informing on environment state and influence of environmental factors on people's health.

The main goals of CSSEM are:

- 1) permanent monitoring of environment and natural resources state, and anthropogenic influence resources on them;
- 2) analysis, assessment of factual state of environment, natural resources on the whole territory of the republic and the territory of separate regions, and prognosis of its changes and influence on population's health;
- 3) preserving and accumulation of information on environment and natural resources state.

The main functions of CSSEM are:

- 1) carrying out the observations by instrumental, analytical and other methods on all parameters of environment with the periodicity, which is sufficient for their changes assessment;

- 2) collecting and registration of all ecological information, information data banks and environmental cadastres administration;
- 3) determination of the connection between characteristics of environment influence, change of pollution level and its consequences;
- 4) organization the information exchange on environment, natural resources state on regional, republic and international levels;
- 5) providing with one methodical and metrological monitoring base on environment and natural resources, which is made by central executive bodies, their territory parts, companies, institutions independently of ownership forms;
- 6) basing of carrying out the research and experimental-design works in the environment and natural resources monitoring sphere;
- 7) providing the state executive bodies, natural, juridical persons and population with information, gained in frameworks of CSSEM.

7.2. Results of Environmental Monitoring - 2003 and 2004

The observations on environment state of the Republic of Kazakhstan, carried out in 2004, allow making the following conclusions:

1. In 2004 9 cities had been considered to the polluted cities on the data of observations (Atmosphere pollution index - $API_5 \geq 5$), including those with high and very high level of air pollution (API_5 more 7) - 7 cities. The highest level of air pollution is observed ($API_5 \geq 15$) in Almaty and Shymkent.

In 16 cities of the republic middle for the year values of concentration of polluting substances at least by one admixture had exceeded the maximum permissible concentrations (MPC), and in 6 cities (Almaty, Karaganda, Ridder, Temirtau, Ust-Kamenogorsk, Shymkent) the MPC of concentrations of three and more substances were higher. The average annual concentrations of suspended matters (dust) in the range of 1,1-2,2 of MPC had been marked in 9 cities, nitrogen dioxide - 1,2- 2,0 of MPC – in 8 cities, sulphur dioxide - 1,1-1,9 of MPC - in 4 cities, formaldehyde - 1,8-5,6 of MPC - in 6 cities, freon - 1,7-3,0 of MPC in 4 cities.

The maximum one-time concentrations of polluting substances at least by one admixture had exceeded the MPC in all cities, where the observations are being carried out, at that cities the exceeding of MPC had been marked for 3 and more substances. One-time concentrations of suspended matters higher than MPC had been marked in 13 cities, nitrogen dioxide – in 19 cities, carbon oxide – in 12 cities, phenol – in 8 cities, formaldehyde - in 4 cities.

During the year 26 cases of high pollution of atmospheric air had been registered: in Balkhash city the maximum concentrations of suspended matters in atmospheric air had exceeded the possible norm in 14-16 times, sulfur dioxide - in 10-16 times, nitrogen dioxide – in 10-12 times; in Shymkent city the maximum concentrations of nitrogen dioxide had exceeded the possible norm in 10-12 times.

In comparison with 2003 the condition of atmospheric air pollution in Aktobe, Astana, Atyrau, Jekazgan, Kostanai, Pavlodar, Petropavlovsk, Semipalatinsk, Temirtau, Uralsk and Ekibastuz hadn't fundamentally changed. In Aktau, Ridder, Ust-Kamenogorsk and Glubokoye village the reduction of air pollution level had been remarked, in Almaty, Balkhash, Karaganda, Taraz and Shymkent – increase. In comparison with 2002 the level of air pollution in cities Aktobe, Aktau, Atyrau, Kostanai, Pavlodar, Uralsk and Ekibastuz hadn't significantly changed, in Zhezkazgan, Ridder, Temirtau, Ust-kamenogorsk and Glubokoye village – had decreased, in cities Almaty, Astana, Balkhash, Karaganda, Petropavlovsk, Taraz and Shymkent had increased.

2. The value of general mineralization in atmospheric precipitation had been within 9, 40 (Essyk) to 296, 33 mg/l (Atyrau). In precipitation the sulphates (30-35%), hydrogen carbonates (20-25%), chlorides (15-20%), calcium ions (20-25%) and sodium ions (5-10%) prevailed. The highest level of pollution of atmospheric precipitation is being observed in Atyrau oblast, where mineralization amounts to 296, 33 mg/l. The least level of pollution is marked in Almaty oblast – 9,40 mg/l. Precipitation acidity that fall in Kazakhstan has the character of alkaline medium and amounts to 5,93 (Ust-Kamenogorsk) – 7,50 (Atyrau).

The highest level of pollution of blanket of snow is being observed in Western-Kazakhstan and Kostanai oblasts, where mineralization accordingly amounts to 58, 59 and 47, 6 mg/l. The least mineralization level of blanket of snow had been fixed on MS Petropavlovsk of Northern-Kazakhstan oblast, where the sum of ions was 10, 16 mg/l. Almost on all of the territory of the Republic of Kazakhstan the contents of sulfates (up to 29%), chloride ions (up to 18%), hydrogen carbonates (up to 17%) and calcium ions (up to 13%) prevails in blanket of snow.

Hydrogen ion exponent of the blanket of snow is in the range of 5, 27 (Aktobe) – 6, 87 (Shymkent). The acidity of tests of the blanket of snow has the neutral and weakly alkaline character.

All the determined admixtures, including the heavy metals salts in the blanket of snow, don't exceed the maximum permissible concentrations (MPC).

3. The data of monitoring of the surface waters pollution in 2004 are being treated on the basins of rivers Irtysh, Ural, Ilek, Tobol, Ishym, Nura, Ili, Talas, Shu, Syrdarya.

In all, from the quality of the observed water bodies to "clean" considered only 10 rivers, 4 lakes and 2 reservoirs, to "dirty" and "very dirty" 2 rivers, and to «extremely dirty» - 4 rivers. The most dignified class of "gently polluted" water bodies – 26 rivers, 6 reservoirs and 3 lakes. 2 rivers had been considered to the class of «polluted» water bodies.

In the list of the main polluting substances, which exceed the MPC level, are 12 ingredients, from which the most widely distributed are the nitrites, the compounds of copper and zinc, sulfates, oil products and phenols.

In comparison with 2003 the following changes of surface water are being observed:

On the Eastern-Kazakhstan rivers the water quality hadn't changed in rivers Irtysh, Bukhtarma, Ulba, Uba and Emel. The deterioration of the water quality had been noted for the rivers Breksa, Tikhaya, Glubochanka, and Krasnoyarka.

In the Western Kazakhstan the water quality in the rivers Ural and Chagan hadn't been changed, for the rivers Derkul and Ilek the one class quality improvement had been noted, and for the river Ubagan – one class quality decrease.

On the territory of the Northern and Central Kazakhstan the water quality had been one class improved for the river Sherubai-Nura and reservoir Kengirskoye (Karaganda oblast), and also for the lake Balkhash; had been one class decreased for the rivers Ak-Bulak and Sary-Bulak (Astana), and practically hadn't changed through the other water bodies.

In the Southern Kazakhstan the water state change had been noted on the river Bolshaya Almatinka (the one class improvement), for the other observed water bodies the water quality had remained on the former level.

For the same period the deterioration of water quality in the rivers influenced by settlements are being observed: Irtysh (Semipalatinsk), Ulba (Tishinskiy mine), Breksa (Ridder), Tikhaya (Ridder), Glubochanka (Belousovka and Glubokoye villages), Krasnoyarka (Predgornoye village) and Ak-Bulak (Astana). On the other water bodies observed that are influenced by the cities and industrial centres, the water quality hadn't changed or somewhat improved: rivers Ilel (Alga and Aktobe cities) and Bolshaya Almatinka (Almaty).

4. The tests selection in frameworks of monitoring of soil pollution by the heavy metals had been carried out in 10 cities of the Republic of Kazakhstan. The tests selection had been carried out in five city points in spring and autumn. The choice of points was conditioned on the more full city coverage, taking into account the loaded highways, industrial objects, and also schools and recreation zones.

The exceedings of MPC on cadmium, lead, copper and chrome had been noted on the limits of the control areas of large industrial companies and in the regions of big highways. In Zhezkazgan the contents of cadmium, lead, chrome in soil tests was in the range of 0,9-3,7 MPC, copper 1,1-36,7 MPC; in Karaganda - cadmium - 0,7-13,8 MPC, copper and chrome 0,8-2,8 MPC, lead 0,9-5,6 MPC; in Ust-Kamenogorsk – cadmium 0,4-27,0 MPC, copper 0,6-33,3 MPC, lead and chrome 0,8-10,3 MPC; in Balkhash cadmium 5,0-56,6 MPC, copper 3,8-42,4 MPC, lead 2,0-10,7 MPC, chrome 1,6-3,4 MPC; in Temirtau - cadmium 1,7-18,2 MPC, copper and lead 1,7-7,0 MPC, chrome 0,6-1,5 MPC; in Pavlodar - cadmium and chrome 0,4-2,8 MPC, copper 1,2-7,2 MPC, lead 1,2-7,2 MPC; in Ridder - cadmium 1,2-29,0 MPC, copper 1,7-44,2 MPC, lead 1,3-44,2 MPC, chrome 0,9-2,4 MPC; in Almaty - copper 2,7-6,7 MPC, lead 1,1-4,1 MPC, cadmium and zinc 0,5-1,7 MPC; in Aktobe – copper 1,6-12,3 MPC, lead 1,8-4,4 MPC, cadmium and zinc 1,0-1,7 MPC; in Shymkent – lead 3,1-28,3 MPC, copper 1,8 – 6,1 MPC, cadmium 1,1-11,0 MPC, and zinc 1,0-1,6 MPC.

5. Observations of the level of gamma radiation on site (the power of gamma radiation dose) on the territory of the Republic of Kazakhstan had been made every day in 67 meteorological offices. The average annual indications of the power of gamma radiation dose on the RK oblasts is in the range of 0,11-0,16 mk3v/h. On average through the Republic of Kazakhstan the radiation gamma background in 2004 amounted to 0,13 mk3 v/h and is in the permissible limits.

6. Control over the radiation pollution of surface atmosphere during 9 months of the year of 2004 had been carried out in 14 oblasts of Kazakhstan in 39 meteorological offices by air tests selection by horizontal plane-tables. Average daily density of radiation fallings in the surface atmosphere on the territory of the RK had varied in the range of 0, 7-1, 4 Bk/m². The average density of fallings for 9 months 2004 amounted to 1, 1 Bk/m²

8. CHALLENGES OF THE GOVERNMENT

General principles of environmental protection

Fresh water protection

Water reservoir pollution is as a result of foul surface and subsurface water and air. Dangerous thermal pollutant is returned water to water basins, served for industrial hardware cooling. In metropolises common sphere and municipal economy is water retaining. For perspective it is necessary to turn to the separate drinking and economic water delivery system. It makes for reducing expenditures for its cleaning. Nature water has property of natural purification and self-healing. Fresh water preservation – conditions building for natural

purification and self-healing of polluted water, it means that effluent discharge must not exceed natural possibilities of reservoir.

Ways of its settlement:

- within the limits of water protection zone riverside protection are placed, where ground tilling, forest felling, place live farming, conducting other activity are prohibited (place of recreation, water supply objects, fish industry, diversion and hydraulic structure is permitted)
- conducting maintenance and regime of use and riverside protection state control
- projection place, building, reconstruction and place in operation of economic and other objects, including cleaner stores, waste disposal, city and other dumps, not supplied with equipments, sewage disposal plants, preventing pollution, obstruction, making depletion water objects,
- maintenance of surface and subsurface water in condition, meeting environmental requirements, it is provided by normative settings of maximum permitted harmful influence on water objects
- new industry technology development, planning use of minimum water quantity use, that is closed technology processes introduction, which under fresh water come backs production cycle again
- search new methods of polluted and poisoned water cleaning
- strong regime of economical spending drinking water, including timely water pipe repair

Air protection

Measurement on prevention and reduction of polluting substances emissions in ambient air is aimed to protect for people and environment from harmful impact, to reduce prejudice, damaging to stocks of materials and capital equipment. For it:

- quality standards of ambient air is being set – maximum permitted momentary and long duration content of polluting substances in atmosphere, which have not unfavorable impact on man health, animal and plant planet and other environmental components
- during projecting, city and settlement construction and reconstruction executive power bodies and local government must take into consideration existing ambient air pollution level and its change forecast
- during construction, putting into operation, reconstruction and technical re equipment of enterprises, during technological innovation implementation as well , measurements on collecting, sterilization of harmful substances, polluting emissions reduction in atmosphere must be stipulated
- place, construction, reconstruction and technical re equipment of enterprises and other objects are permitted only after realization of national environmental expertise and during receipting affirmative conclusion from state supervision structure
- use of gas-treating and dust retaining plants in enterprises, excepting gas emissions in atmosphere
- resource-saving technology and wasteless industry development, which contributes to drag secondary resources and co products and brings realization nature use principles – rational use of all nature resources complex
- organization transport movement for environmental situation improvement, taking into consideration the city structure
- making of computer-basis system management for city transport, which can reduce harmful substances emissions
- turn to transport use with environmental safety motor
- improvement of transport petrol quality and alternative types of fuel
- making and enlargement of control areas
- ambient air protection control

Emissions utilization

Dumps of hard industry and domestic waste occupy substantial areas in towns. Their volume is being redoubled every 10 years. Waste stores and dumps make environmental problems; every year sizeable land territory is estranged for range (no taking into consideration plenty of unauthorized dumps). They pollute atmosphere, surface and subsurface water, ground and plant.

1. Sustainable development program on emissions utilization suggests making of normative and technological basis for uniform public policy in waste management sphere; reduction and localization of negative emissions impacts on environment, making effective technology of processing and disinfection waste; organization of dumps condition control and its monitoring and its impact on environment.

Nowadays none of the technique in operation collecting and hard domestic waste disposal is not satisfactory not on hygiene and sanitary, technical and economic showings. For settlement of sustainable development program on HDW utilization, including manifold substances of organic and mineral origin, necessary:

- everywhere put in order garbage collection with its preliminary sorting;
- garbage removal to processing station or plants, where waste is sorted;
- crumble-up, compact, press, extract from them useful substances; remains are delivered to the dumps;
- waste use as secondary raw materials (plastic waste, mackle-paper, non-ferrous metals, glass package, transport covers, fluorescent lamp, building waste etc.);
- use of manure gas plant for HDW utilization;
- study of HDW utilization methods of Germany, USA and other countries. HDW vacuum system for collection and transport was worked up in Russia,

2. Possibility for minimization industry waste on the basis of law-waste and resource-saving technology.

3. Utilization and destruction of toxic waste, being pollution source for top-soil and underground water bearing stratum.

Making of natural saving

In connection with enhancement man's impact on environment necessity of special, careful separate nature zone, vanishing animals and plants habitats protection, being on the brink of disappearance, preservation of existed natural complexes, water sources, unique nature monuments for stable functioning of Land biosphere are being grown energetically.

Next to the towns the concentration of persons on leave in forest is especially large. It suggests high anthropogenic load, consequently for unique landscape saving, it is necessary for some territory with special regime on security, separately or completely from economic circulation and for saving of ecological balance.

9. BILATERAL AND MULTILATERAL COOPERATION

List of international agreements of the Republic of Kazakhstan in environmental protection sphere			
No.	Date	Place of making of agreement	Titles of agreements
1.	February 8, 1992	Moscow	Agreement between the Governments of member countries of ISC (Independent States Community) on interaction in ecology and environmental protection sphere
2.	February 8, 1992	Moscow	Agreement between the Governments of member country of ISC on interaction in hydrometeorological sphere
3.	26 March, 1993	Kyzylorda	Agreement between the Republic Of Kazakhstan, the Republic of Kyrgyzstan, the Republic of Tajikistan, Turkmenistan and Uzbekistan on joint actions for settlement problems of Aral sea and Aral shore, environmental enhancement and providing of social-and-economic development of Aral sea.
4.	September 9, 1994	Moscow	Agreement between the Governments of member countries of ISC on goods delivery for providing of national hydrometeorological services of member countries of ISC
5.	March 27, 1995	Washington	Agreement between the Government of the Republic of Kazakhstan and the United States of America on cooperation in the framework of the Program "Global researches and observations for environment "GLOBE",
6.	March 27, 1995	Washington	Agreement between the Government of the Republic of Kazakhstan and the United States of America on cooperation in environmental protection and nature resources sphere
7.	September 20, 1995	Nukus	Nukus declaration of Central Asia states and international organizations on problems of sustainable development of Aral sea basin
8.	December 27, 1995	Jerusalem	Agreement between the Government of the Republic of Kazakhstan and the Republic of Israel on cooperation in environmental protection sphere
9.	April 5, 1996	Tashkent	Agreement between the Government of the Republic of Kazakhstan, the Republic of Kyrgyzstan and the Republic of Uzbekistan on joint works on rehabilitation of area for waste storage and dump rocks, having transboundary influence
10.	April 12, 1996	Moscow	Agreement on transboundary transport of dangerous and other wastes control, confirmed by the Resolution of the Government of RK, dated on 28 April, 1997, N 670

List of international agreements of the Republic of Kazakhstan in environmental protection sphere			
No.	Date	Place of making of agreement	Titles of agreements
11.	September 17, 1996	Tbilisi	Memorandum between the Government of the Republic of Kazakhstan and the Government of Georgia on cooperation in environmental protection sphere, entered into force from the moment of signature
12.	March 4, 1997	Ankara	Agreement between the Republic of Kazakhstan and the Government of the Turkish Republic on cooperation in environmental protection sphere. It was confirmed by the Resolution of the Government of RK, dated on 11 June, 1997, N 947. It entered into force June 23, 1997.
13.	April 8, 1997	Almaty	Agreement between the Government of the Republic of Kazakhstan and the Government of the Republic of Kyrgyzstan on cooperation in environmental protection sphere, entered into force from the date of signature.
14.	June 2, 1997	Almaty	Agreement between the Government of the Republic of Kazakhstan and the Government of the Republic of Uzbekistan on cooperation in environmental protection and rational nature use sphere, entered into force from the date of signature
15.	June 10, 1997	Almaty	Agreement between the Government of the Republic of Kazakhstan and the Government of the Republic of Azerbaijan on cooperation in environmental protection sphere, entered into force June 10, 1997
16.	October 4, 1997	Almaty	Agreement between the Government of the Republic of Kazakhstan and the Russian Federation on ecology and nature use in territory of "Baikonur" complex on the conditions of its rent by the Russian Federation , entered into force from the date of signature.
17.	October 9, 1997	Bishkek	Protocol on alteration in Agreement on interaction in hydrometeorological sphere, dated on 8 February, 1992
18.	September 11, 1998	Moscow	Agreement on informational cooperation in ecology and environmental protection sphere, confirmed by the Government of RK, dated 05.08.99, N 1104
19.	March 12, 1998	Almaty	Agreement between the Republic of Kazakhstan and the Government of Mongolia on cooperation in environmental protection sphere. It entered into force on March 12, 1998

List of international agreements of the Republic of Kazakhstan in environmental protection sphere			
No.	Date	Place of making of agreement	Titles of agreements
20.	March 17, 1998	Bishkek	Agreement between the Governments of the Republic of Kazakhstan, the Republic of Kyrgyzstan and Uzbekistan on cooperation in environmental protection and rational nature use sphere
21.	September 11, 1998	Moscow	Agreement on informational cooperation in ecology and environmental protection sphere
22.	September 11, 1998	Moscow	Agreement on fundamental principles of interaction in rational use and transboundary water bodies protection of member states of ISC
23.	September 22, 1998	Tbilisi	Agreement between the Government of the Republic of Kazakhstan and the Executive power of Georgia on cooperation in environmentally clean automated special transport and infrastructure, confirmed by the Resolution of the Government of RK, dated 15.02.99, N 123
24.	June 17, 1999	Bishkek	Agreement between the Governments of the Republic of Kazakhstan, the Republic of Kyrgyzstan, the Republic of Tajikistan and Uzbekistan on cooperation in hydrometeorological sphere
25.	January 13, 1999	Saratov	On cooperation in environmental monitoring sphere.
26.	May 12, 2000	Almaty	Contract in exchange of notes form between the Republic of Kazakhstan, European communities Committee, UNDP on alteration in Agreement on regional environmental center for Central Asia
27.	November 30, 2000	Minsk	Agreement on cooperation of member states of ISC in preparation of specialists on radio-ecology, radio-safety, radio-biology and interdisciplinary sciences. It was confirmed in compliance with the Resolution of the Government of RK, dated 23.04.02, N 464
28.	September 12, 2001	Astana	Agreement between the Governments of the Republic of Kazakhstan and China on cooperation in transboundary rivers use and protection sphere
29.	March 16, 2001	Moscow	Agreement on intergovernmental hydrometeorological net of ISC, confirmed by the Resolution of the Government of RK, dated 23.08.02 N 944
30.	March 16, 2001	Moscow	On cooperation in active influence on meteorological and other geophysical processes sphere

List of international agreements of the Republic of Kazakhstan in environmental protection sphere			
No.	Date	Place of making of agreement	Titles of agreements
31.	April 4, 2001	Vilnius	Agreement between the Ministry of nature resources and environmental protection of RK and the Ministry of environmental protection of Lithuania in environmental protection sphere
32.	October 22, 2001	Astana	AGREEMENT ON LENDING (Project "Syrdarya river channel regulation and northern part of Aral sea preservation (phase 1)") between the Republic of Kazakhstan and International Reconstruction and development Bank
33.	June, 2002	Astana	Memorandum of understanding between the Ministry of energy and mineral resources of RK, the Ministry of nature resources and environmental protection of RK, Akimat of Eastern Kazakhstan region and Japanese organization on new types of energy and industry technology development (NEDO) on Model project of effective energy use development on the gas turbine generational system basis
34.	June 26, 2003	Almaty	Agreement between the Governments of RK and the Swiss Confederation on entry of the Government of RK into the Swiss election district of Global Environmental Fund Council. Project was confirmed by the Resolution of the Government of RK, dated on 26 June, 2003 N 607
35.	September 9, 2003	Astana	Letter consent to the deputy of Prime-minister of RK on grant of the Government of Japan for the Republic of Kazakhstan: Rehabilitation of environment project of Ust-Kamenogorsk Grant N TF 051352, ratified by the Law of RK, dated on 8 January, 2004 N 517
36.	September 12, 2003	Aktau	Aktau Caspian declaration
37.	September 26, 2003	Astana	Grant agreement of Trusting Fund (Project on droughty land management) between the Republic of Kazakhstan and International Reconstruction and development Bank, acting as the Authority agency of Global environmental fund. Agreement was ratified by the Law of RK, dated on 8 January, 2004 N 518
38.	December 17, 2003	Washington	Agreement on lending (Nura river cleaning project) between the Republic of Kazakhstan and International Reconstruction and Development Bank.