

7. Environmental Policy

7.1. Administrative Organization

During the era of the former Soviet Republic, the State Committee for Environmental Protection and Natural Resources was in charge of environmental administration in Kazakhstan. In 1991, the administrative role was transferred to the State Committee of the Kazakh SSR for Ecology and Environmental Management and in 1994, the Ministry of Ecology and Bio-Resources was established. As part of the reorganization of government ministries in March 1997, the Hydrological and Meteorological Administration Bureau, which had been an independent agency until then, was integrated with the Ministry of Ecology and Bio-Resources. Moreover, in another reorganization of ministries implemented in October 1997, administration related to geology and underground resources that was conducted by the Ministry of Energy and Natural Resources (currently Ministry of Energy and Mineral Resources) was transferred to the Ministry of Ecology and Bio-resources which its name was also changed to Ministry of Natural Resources and Environmental Protection. Along with this event, the name of Ministry of Energy and Natural Resources was changed to Ministry of Energy and Industry.

In November 1999, it was decided that the Ministry of Natural Resources and Environmental Protection would handle the administrative affairs regarding water resources development and biodiversity protection with the transfer of the Water Resources Committee and the Forest, Fishery and Hunting Committee from the Ministry of Agriculture. Moreover, in accordance with the Presidential Decree issued on the 13th of December 2000, the Geology and Underground Resource Protection Committee was transferred to the Ministry of Energy and Industry from the Ministry of Natural Resources and Environmental Protection, which therefore changed its name to the Ministry of Environmental Protection². The functions and duties prescribed in the ordinance for establishing the ministry and organization of the Ministry of Environmental Protection are as follows.

Functions

- Planning environmental protection policies
- Preparing bills and drafting the revision of laws regarding environmental protection
- Obliging all management entities to comply with environmental protection standards and supervising them
- Maintaining state control systems in the area of environmental protection and formulating the plan to improve the system
- Studying economic approaches in environmental protection within the scope of authority
- Participating in international cooperation in the area of environmental protection
- Spreading environmental education and developing information on environmental protection

² Changes of name of the Ministry of Environmental Protection and Ministry of Energy and Mineral Resources can be summarized as follows: Ministry of Ecology and Bio-resources / Ministry of Energy and Natural Resources (March 1997), Ministry of Natural Resources and Environmental Protection / Ministry of Energy and Industry (October 1997), Ministry of Environmental Protection / Ministry of Energy and Mineral Resources (December 2000).

Duties

- Planning environmental protection policies and implementing environmental protection programs
- Permitting and approving the emission of environmental pollutants from businesses and the amount of emission
 - Permitting and approving the emission of environmental pollutants and the amount of emission
- Supervising and guiding environmental protection measures, and also imposing administrative punishments
 - Permitting and approving the transportation, storage and landfill disposal of wastes
 - Permitting and approving the usage, storage and transportation of chemical substances such as agrichemicals and chemical fertilizers
 - Formulating the standard for calculating charges regarding the emission of pollutants
 - Protecting animals and plants, and also establishing nature conservation areas
 - Monitoring the import and export of threatened animals and plants
- Organizing coordination among governmental agencies concerning environmental protection and nature conservation
- Conducting meteorological and hydrological observation
- Implementing environmental monitoring
- Conducting the assessment of the current environment and reporting it to the government
- Developing the procedure for environmental impact assessment, examining environmental impact assessment notes, and also permitting and approving the business of such assessment

Organization

- The minister is appointed and dismissed by the president.
- The president appoints and dismisses the vice minister by recommendation of the minister.
- The minister has to obtain government approval for the organization of the Ministry of Environmental Protection and the number of ministry staff.
- The minister appoints and dismisses the staff of the Ministry of Environmental Protection, the heads of related organizations, and the management officials of the regional territorial division of environmental protection.
- The related organizations of the Ministry of Environmental Protection are Kazhydromet, Aviation Weather Service, and Environmental Protection Information Center. These organizations are approved to carry out their own economic activities.

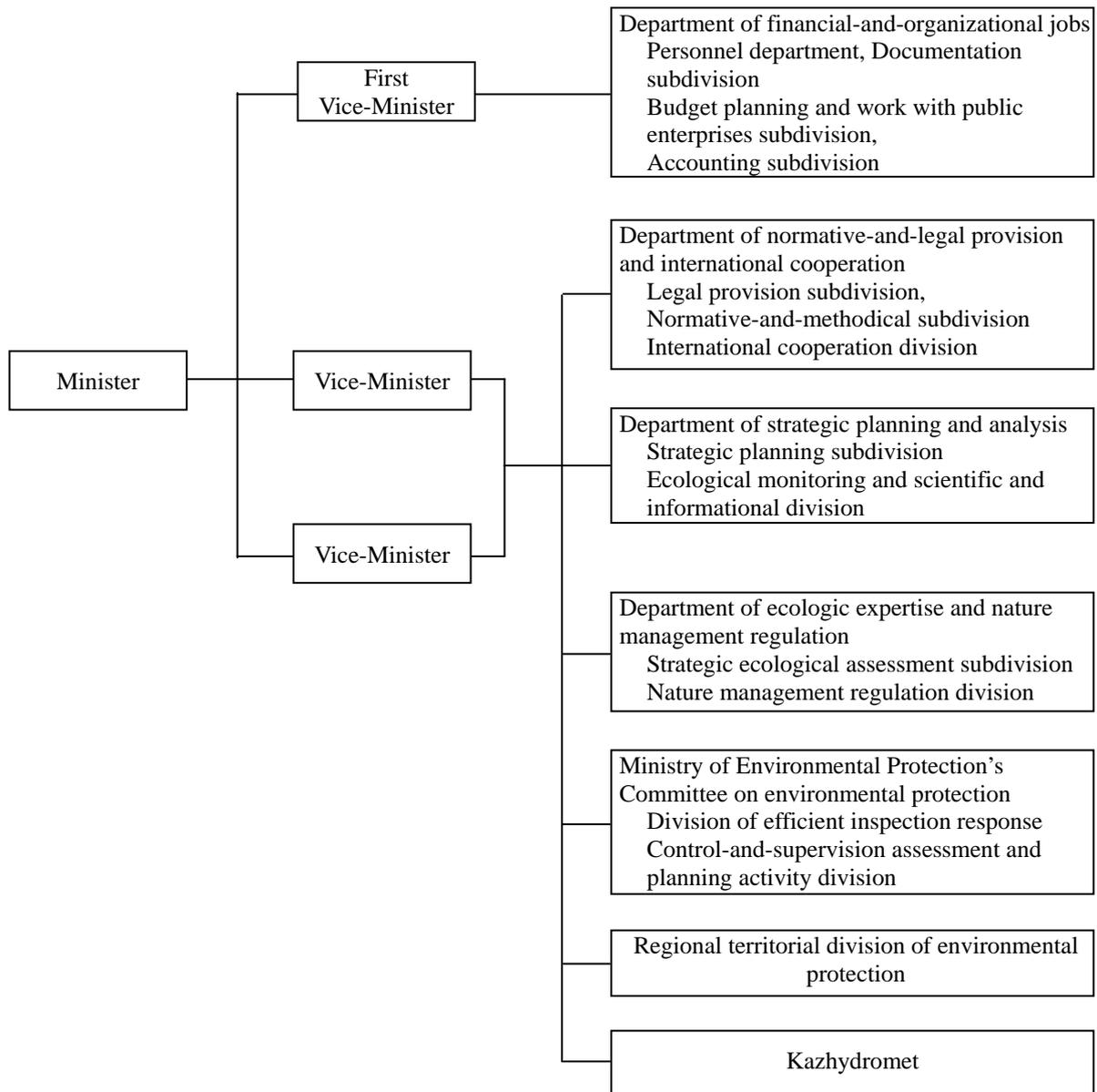


Figure 7.1 Organizational Figure of the Ministry of Environmental Protection

The divisions of environmental protection of each Oblast, Almaty City, and Astana City belong to the Ministry of Environmental Protection and conduct the following duties concerning the Oblast or City where they are located: planning environmental protection programs, recognizing the current environmental situation, applying the designation of environmentally protected area, examining the environmental impact assessment notes prepared by businesses or the government, and conducting on-site inspections in plants. A division of environmental protection usually has an organization as shown in Figure 7.2, though there are a few differences among Oblasts and Cities.

There are 36 staff in the division of environmental protection of Astana city. The environmental economy subdivision conducts the planning of environmental policies. The monitoring subdivision reports the environmental situation in Astana City to the government. The report is based on the environmental monitoring information provided by the Astana

Hydro-meteorological Station of Kazhydromet, which conducts environmental monitoring as an affiliated agency of the Ministry of Environmental Protection. The environmental impact assessment office examines environmental impact assessment notes regarding the projects implemented by businesses or the government. The environmental control subdivision conducts on-site inspections in plants and inspects whether the plant is observing the stipulated emission criteria. The inspection includes the confirmation of the results of environmental measurements implemented by the plant itself and the testing of samples obtained by the division's analysis expert, who accompanies the inspector. When it is found that the plant does not comply with the emission criteria, a written warning is issued or a lawsuit is filed. The frequency of on-site inspections is once a year for large-scale corporations and less often for medium and small sized companies.

The environmental protection division is operated on the budgets of the government and city government. Pollution charges paid by the plants represent 70 percent of the funds for the budget of the city government. The budget from the government is allocated to the environmental protection program extending across two or more oblasts.

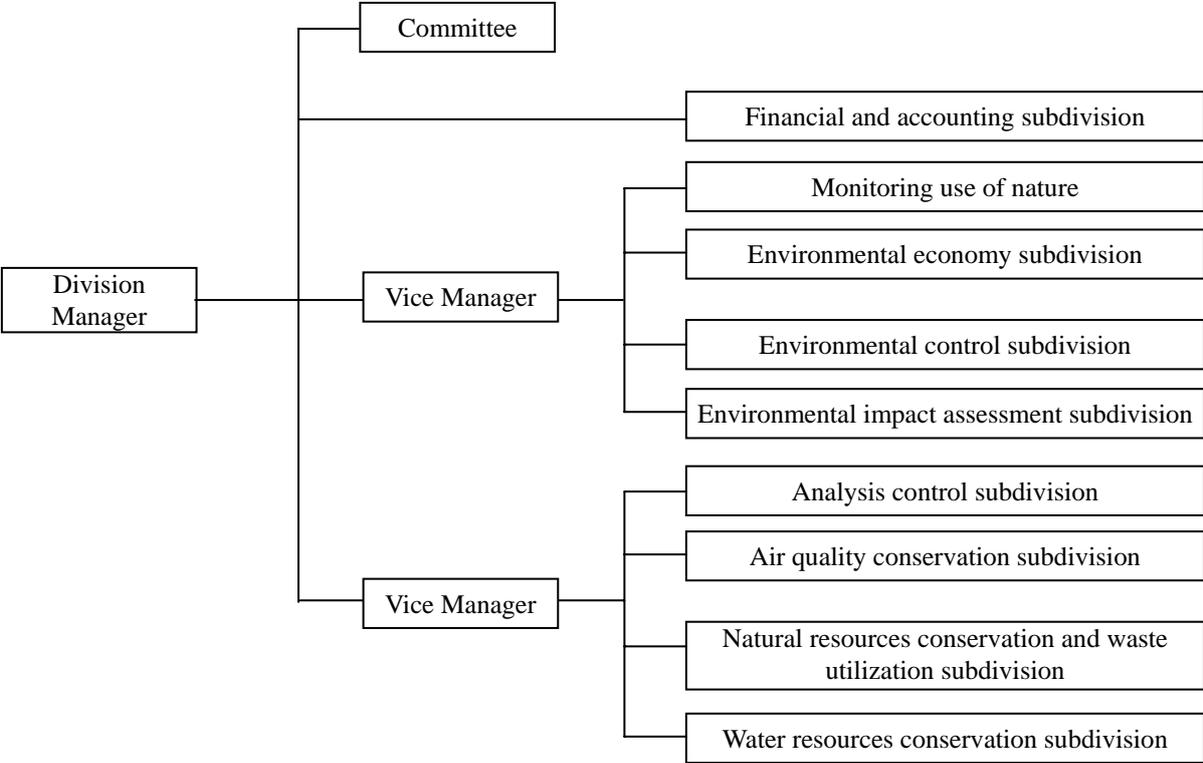


Figure 7.2 General organization chart of an environmental protection division of an oblast (city)

The government bodies engaged in environmental administration other than the Ministry of Environmental Protection are the Epidemic Prevention and Sanitation Center of the Ministry of Health, which sets environmental quality standards, the Ministry of Agriculture, which controls the quality of irrigation water, and the Ministry of Education and Science, which implements environmental education according to the environmental education policy developed by the Ministry of Environmental Protection.

7.2. Environmental Policies

(1) Environmental Protection Strategy

The Kazakhstan Constitution, which was established in 1995, stipulates “It is the national objective to maintain a desirable environment for people’s lives and health.” Also, the “Kazakhstan 2030 Strategy,” established as the national master plan in April 1996, sets the objective of “national development in harmony with environment.” The Ministry of Natural Resources and Environmental Protection (currently the Ministry of Environmental Protection) formulated the environmental protection strategy shown in Table 7.1, which was approved by the President in 1998. This strategy was developed by the “National Environment Center for Sustainable Development of Kazakhstan,” which was created to bolster the above national development policy with support from the UNDP. The environmental protection strategy divides its activity period into four stages: 1998 to 2000, 2001 to 2010, 2011 to 2020, and 2021 to 2030, and provides targets and activities for each stage. However, as there is no track record in evaluating and revising the activities up to 2000, the UNDP terminated its support to the “National Environment Center for Sustainable Development of Kazakhstan” and this matter is no longer discussed within the ministry.

(2) Concept of Environmental Safety in Kazakhstan

The “Concept of Environmental Safety of the Republic of Kazakhstan for 2004-2015,” a new medium-term strategy, was issued as Presidential Decree No. 1241 in December 2003. The progress of environmental pollution has slowed in comparison with the early 1990s because the environmental assessment system as well as the administrative affairs including permission, control, and inspection has been improved due to the environmental protection measures implemented after independence. However, not all of the past environmental problems have been solved, and the emergence of further environmental problems with the future development of the economy is of concern. Therefore, the above Concept was determined with an eye to the millennium development goals. Although the Concept has a program to achieve goals by solving problems in three stages, it may become a dead issue halfway without specific implementation programs and budgetary backups, just like the environmental protection strategy.

First stage (2004 - 2007)	Formulating the action plans to reduce and stabilize the pollution level
Second stage (2008 - 2010)	Stabilizing the environmental indices and tightening environmental criteria for utilizing resources
Third stage (2011 - 2015)	Improving the environmental qualities and realizing environmentally sound and sustainable social development

- Reducing human activities that originate climate change and ozone layer destruction
- Conserving biodiversity and preventing desertification as well as land deterioration
- Improving environments of disaster areas, military space stations, and nuclear test sites

- Preventing pollution of the continental shelf of the Caspian Sea
- Preventing depletion of water resources
- Dealing with pollution from the past, air pollution, radioactive pollution, microbial pollution, and chemical pollution (including cross-border pollution), and also preventing further occurrence of these pollutions
- Reducing accumulated volume of industrial and household wastes
- Preventing emergency situations caused by natural disasters and human-generated disasters

The solution of the issues presented is accomplished by the following methods.

- Improving and systematizing laws, economic systems to utilize resources, national environmental management, and environment monitoring of Kazakhstan
- Making the permission system for resource utilization and environmental assessment more appropriate
- Promoting scientific research, environmental statistics, environmental education, environmental publicity, and residents' participation in the environmental protection field
- Expanding international cooperation

(3) Medium-term Environmental Protection Program

Based on the above mentioned Concept, the Ministry of Environmental Protection planned the medium-term program in the first stage (2004 to 2007). The purpose in the first stage is to study the methods for “the reduction and stabilization of environmental pollution level,” and the following agendas are raised.

a. Optimizing the management system for environmental quality

- Improving legal infrastructure
- Formulating project programs in the government and local governments
- Reorganizing public organizations to conduct environmental protection suitable to economic development
- Improving environmental management systems by governments, businesses, and people
- Enhancing the environmental monitoring system
- Establishing a system to scientifically secure nature conservation work
- Developing a mechanism for cooperation among organizations
- Improving the economic system
- Strengthening the social collaborative relationship
- Improving the environmental education system
- Promoting international cooperation

- b. Reducing environmental pollution from daily life and other activities, and enhancing nature conservation education
- Reducing impact of human activities on ozone layer and climate
 - Conserving biodiversity
 - Reducing pollution in rocket ranges and military exercise ranges
 - Predicting pollution in continental shelf and coastal area of the Caspian Sea
 - Predicting depletion of water resources and air pollution
 - Reducing and reusing general wastes as well as industrial wastes
 - Investigating relation between environmental pollution conditions and morbidity

Table 7.1 Environmental conservation targets to 2030

Priority	Final target	Target (1998 - 2000)	Target (2001 - 2010)	Target (2011 - 2020)	Target (2021 - 2030)
	Developing desirable environment for people's lives	Preventing progress of environmental pollution	Stabilizing environmental conditions	Improving environment	Developing desirable environment for people's lives
1	<u>Conserving healthy environment</u> <ul style="list-style-type: none"> Improving environment to ensure environment suitable to people's health and life Improving polluted environment Establishing sustainable economic assist system in order for implementation of environmental protection program supported by resource users, public funds, and international aid 	<u>Establishing administration of efficient natural resources development and environmental protection</u> <ul style="list-style-type: none"> Establishing appropriate administrative organization Adding environmental protection clauses to laws on mineral resources development Allocating appropriate budget to environmental protection programs including foreign aid 	<u>Adding environmental protection clauses to various laws</u> <ul style="list-style-type: none"> Adding environmental protection clauses to laws on mineral resources development Ratifying international treaties concerning environmental protection 	<u>Raising legal structure for environmental protection to global standard level</u> <ul style="list-style-type: none"> Investigating fitness in sectors of communication, traffic, fuel and urban development for environmental protection demand 	<u>Developing desirable environment for people's lives and establishing much higher level of environment</u> <ul style="list-style-type: none"> Introducing environment-protection technology and energy-saving technology Developing preferential treatment measures for introduction of environment-protection technology and energy-saving technology Realizing appropriate geographical distribution of plants and animals
2	<u>Developing natural resources efficiently</u> <ul style="list-style-type: none"> Monitoring current environmental conditions, and also supervising and guiding resources users Developing resources efficiently, and also reproducing and conserving resources Introducing resource saving technology 	<u>Developing reasonable infrastructure of natural resources development</u> <ul style="list-style-type: none"> Segmenting environmental fields Creating resource register Conducting environmental impact assessment and environmental inspection on economic activities Introducing resource saving technology Developing network among specially protected areas Designating hunting and fishing zones Researching recycling of resources 	<u>Appropriate natural resources development</u> <ul style="list-style-type: none"> Segmenting environmental protection fields Formulating environmental protection programs in each segmented area Formulating development plans in consideration of environments in segmented areas 	<u>Shifting from existing technology to environment-protection technology</u> <ul style="list-style-type: none"> Establishing legal system and economic assistance system necessary to promote introduction of environment-protection technology and energy-saving technology Providing environment-protection technology to businesses 	<u>Developing resources appropriately</u> <ul style="list-style-type: none"> Utilizing economical means to conserve environment efficiently Utilizing natural resources within appropriate limits
3	<u>Protecting wild animals and plants</u> <ul style="list-style-type: none"> Monitoring, developing resources efficiently, and also reproducing and conserving resources Establishing local network for nature conservation 	<u>Environmental education</u> <ul style="list-style-type: none"> Formulating environmental education policy and program Enlightening on and popularizing environmental protection and efficient resource utilization 	<u>Recycling wastes</u> <ul style="list-style-type: none"> Strengthening capacity to recycle wastes Introducing preferential treatment system for recycling wastes 	<u>Improving environment</u> <ul style="list-style-type: none"> Recovering ecosystem and landscape Revitalizing animals and plants 	
4	<u>Environmental education</u> <ul style="list-style-type: none"> Implementing education regarding environmental protection and resource conservation Enlightening people on environmental issues 	<u>Activating civil activities concerning environmental protection and resource recycling</u> <ul style="list-style-type: none"> Promoting citizen's participation in activities of environmental protection and resource recycling 	<u>Environmental education</u> <ul style="list-style-type: none"> Enlightening on and popularizing environmental protection and efficient resource utilization Developing legal system for environmental protection education Establishing environmental protection education system of four stages 		

Source: The Environment and Natural Resources, Strategic Plan up to 2030, Ministry of Natural Resources and Environment Protection

7.3. Budget of the Ministry of Environmental Protection

The budget of the Ministry of Environmental Protection in FY2005 was 5,564 million tenge which was 5.6 times the 994 million tenge in FY2002. This increase was due to the fund distributed to Provincial Environmental Protection Divisions being included into the budget of the Ministry. Thirty percent of the budget of the Ministry of Environmental Protection is allocated to the Kazhydromet, which is the agency implementing hydrological and meteorological observations as well as environmental monitoring. Table 7.2 shows the composition of the budget in 2005.

Table 7.2 Budget of the Ministry of Environmental Protection

Unit: million tenge			
Year	2003	2004	2005
Amount (Provincial budget)	2,067	2,957 (1,042)	3,944 (1,620)
Year-on-year	+107%	+43%	+33%
Items of expenditure (Budget)	<ul style="list-style-type: none"> • Budget for the Kazhydromet (600) • Renovation of the sewage disposal facilities of Kzyl-Orda City (500) • Continued countermeasure project against mercury contamination by chemical plants in Pavlodar Oblast (242) • Renovation of the sewage disposal facilities of Semipalatinsk City in East Kazakhstan Oblast (500) 	<ul style="list-style-type: none"> • Budget for the Kazhydromet (1,565) • Construction and continued construction of environmental protection facilities (600) • Additional budgetary appropriation to Cities of Astana and Almaty (859) • Academic research on environmental protection (107) 	<ul style="list-style-type: none"> • Budget for the Kazhydromet (1,471) • Construction and continued construction of environmental protection facilities (677) • Additional budgetary appropriation to Cities of Astana and Almaty (853) • Academic research on environmental protection (250) • Renovation of environmental protection facilities (164)

Source: "Survey: Issue of Environmental Protection in Republic of Kazakhstan"

The environmental protection projects are implemented by using the budgets of the Ministry of Environmental Protection and each oblast as well as the environment charges paid by businesses in accordance with the amount of pollutants they discharge as described in Chapter 7.5. As shown in Table 7.3, 91% of the total fund for the environmental program in 2001 was environmental charge, while the fund from the budget of the Ministry of Environmental Protection was 3%.

Table 7.3 Composition of fund for environmental program in 2001

Source of fund	Amount (million tenge)	Component ratio
Budget of the Ministry of Environmental Protection	1.1	2%
Budget of Provincial Governments	2.1	4%
Environmental charge	44.3	94%
Total	47.5	100%

Source: Data of the Ministry of Environmental Protection in 2001

As the environmental charge is paid to the oblast where the payee is conducting business, an oblast that has no industry has insufficient budget for implementing substantial environmental protection programs. Atyrau Oblast, which is the heartland of the oil industry, has the largest amount of environmental charges, with 43% of total charges. Therefore, the Environmental Protection Division of Atyrau Oblast can obtain sufficient budget for substantial environmental measures, including the procurement of Western-made analytical equipment. Table 7.4 indicates the fund of the environmental program (total amount of Provincial budget and the environmental charge) in each Oblast in 2001.

Table 7.4 Fund for environmental program in each oblast in 2001

Unit: thousand tenge

Oblast	Amount	%
Atyrau Oblast	17,269	36.2
Mangghystau Oblast	5,055	10.6
Karaganda Oblast	4,386	9.2
East Kazakhstan Oblast	3,028	6.4
West Kazakhstan Oblast	2,468	5.2
Pavlodar Oblast	2,059	4.3
Aktyubinsk Oblast	1,116	2.4
South Kazakhstan Oblast	9,490	20.0
Almaty City	704	1.5
Zhambyl Oblast	541	1.1
Almaty Oblast	324	0.7
Kostanay Oblast	307	0.7
Kzyl-Orda Oblast	308	0.7
Akmola Oblast	220	0.5
North Kazakhstan Oblast	147	0.3
Astana City	116	0.2
Total	47,538	100

Source: Data of the Ministry of Environmental Protection in 2001

Besides the environmental protection programs of the Ministry of Environmental Protection, the Forest and Hunting Committee of the Ministry of Agriculture secures a budget to conserve forests.

7.4. Emission Criteria

In Kazakhstan, there is no emission criteria imposed equally to all plants. The Maximum Permissible Concentration (MPC) is determined for each pollution source. The MPC of pollutant in flue gas is determined for each pollution source to make the concentration of every pollutant in the air two meters above the ground one thousand meters away from the boundary of the site of the pollution source (plant), called the health protection area, fall within the environmental quality standard. The concentration in the health protection area is calculated using the diffusion simulation model developed in the era of the former Soviet Union. Also, the MPC of wastewater is determined to make the concentration of pollutant at the point where 80% or more of the discharged wastewater mixes with the surrounding waters (usually 500 meters downstream of a drain outlet) fall within the environmental water quality. Reviews of MPCs of flue gas and wastewater are performed every five years and three years

respectively. When a plant cannot maintain the MPC due to an increase in the scale of its facilities, the plant may apply for a permit so that it can reach the environmental quality standards within a five year scheme. The Provincial Division of Environmental Protection examines and approves MPC.

7.5. Environmental Levy

Based on the system of “Fees for the Use of Natural Resources” stipulated in Article 28 of the Environmental Protection Law, a pollution source pays the environmental charge according to the volume of pollutant emitted. Although the calculation method of the levy is provided by the Ministry of Environmental Protection, the Division of Environmental Protection in each oblast determines the unit value of the charge for an individual pollutant and collects the charge as well. The environmental levy is in principle spent on the following environmental protection programs implemented by the provincial governments. The specific applications of the levy are determined by provincial governors.

- Remediation of environmental pollution
- Introduction and improvement of environmental protection facilities
- Development of environmental protection technology
- Development of environmental protection system
- Environmental impact assessment
- Relief of health hazard caused by deteriorated environment
- Environmental education, etc.
- Improvements in technology and equipment of environmental protection business

A fine is imposed on the amount of emission exceeding MPC based on the proportion of excessive amount. An environmental charge or levy is not equivalent to tax but considered as part of the cost of business activities and thus, a company has an obligation to pay the amount even if its corporate performance incurs a loss.

A company or plant that discharges pollutant has to pay a fee in accordance with the amount of discharged pollutant. The minimum rate of the charge on each pollutant is prescribed by the Ministry of Environmental Protection. An assembly of each oblast determines the rate of increase. Seventy percent of charges collected are allocated to the provincial governments and thirty percent to the government. Although in the beginning the allocation to the government was included in the budget of the Ministry of Environmental Protection, it has become general revenue of the government.

7.6. Environmental Laws

In April 1996, the basic policy for environmental protection was established based on Article 31 of the Constitution adopted in 1995, “The state shall set an objective to protect the environment favorable for the life and health of the person” and Paragraph 2 of that Article, “Officials shall be held accountable for the concealment of facts and circumstances endangering the life and health of the people in accordance with law.” This basic policy for environmental protection regulates sustainable economic development, improvement of people’s lives, internal politics necessary to prevent natural disasters and environmental pollution, basic policy on diplomacy, legal and economical means, and the direction for activities.

In accordance with the basic policy for environmental protection, the Environmental Protection Law was enacted in July 1997. The Environmental Protection Law stipulates people's rights regarding environmental protection and efficient use of natural resources, duties and powers of the state and local authority, environmental regulations and surveillances, economic means for implementing measures, and information disclosures. However, the enforcement ordinance and regulations for the implementation which complement the enforcement of the Law are not employed. Moreover, not all of the systems for the institutions stipulated in the Environmental Protection Law are enforced. For example, although Article 33 of the Environmental Protection Law rules on environmental insurance, which provides compensation for the loss of human life or physical harm caused by environmental pollution, no such insurance system is actually used.

In the wake of the Environmental Protection Law, the Environmental Impact Assessment Law (1997), the Special Nature Conservation Zone Law (1997), the Air Quality Conservation Law (March 2002), the Land Code (2003), the Water Code (2003), and the Forest Code (2003) were enacted. Prior to the enactment of the Environmental Protection Law, the Law Concerning Protection, Capture and Breeding of Wild Animals (1993) was adopted and "the Decree of the President of the Republic of Kazakhstan on the Preservation and Maintenance of Topsoil (1996)" was issued.

Various laws other than the Environmental Protection Law, such as the Civil Law, the Presidential Decree on the Procedure of Lawsuits against Local Governments by Citizens, the Law on Governmental Organization, the Criminal Law, the Law on Investment by Foreigners, and the Law on Public Health Sanitation include clauses concerning environmental protection.

It is an issue for drafting laws related to the environment to develop specialists on laws, regulations, and the enforcement of laws. At the formulation of legislative bills, the opinions of specialists in environmental fields are not reflected at all. Consequently, defects in a law become apparent at the stage of enforcement. Therefore, difficulties are encountered in the stable enforcement of a law.