Non-commercial joint-stock company
«Kazakh National Agrarian Research University»

AGREED
Head of the RSU "Balkash-Alakol basin Inspection"
_____ R.Imanbet
«____»_____2023 y.

APPROVED
Chairman of the Board-Rector
_____ A.Kurishbaev
«05»_____04_____2023 y.

EDUCATIONAL PROGRAM

«8D08603 - Water resources management using IT-technologies»

Degree awarded: Doctor of Philosophy, PhD under the educational programme
«8D08603 - Water resources management using IT-technologies»
(scientific-pedagogical direction)

Almaty, 2023 y.

Approved at the meeting of the Department «Water resources and melioration»
Protocol № 8, «20» 03 2023 y.
Head of the department _____ Ye.Zhaparkulova

Considered at meetings Academic Committee of the Faculty
of «Water, Land and Forest Resources»
Protocol № 7 « 28 » 03 2023 y.
Chairman of the AC of the faculty _____ L.Makhmudova

Reviewed by the Educational Methodological Council of the University and recommended to the Academic Council
Protocol № 3 «28» 03 2023 y.
Chairman of the EMC of the University _____ A. Kaiyrbaeva

The educational program was approved at the meeting of the Academic Council of KazNARU
Protocol №11, «05» 04 2023 y.

Agreed with:

Dean of the Faculty	T.Kerteshev
Head of the Department	Ye.Zhaparkulova
Assoc.professor	Ye.Kaipbayev
Doctoral student	D.Duishenuly
Graduate of 2022 year	M.Arystanov
Employers: Head of the RSU "Balkash-Alakol basin Inspection"	R.Imanbet

Agreed with:

Head of the Educational Programs Design Department	Zh. Kussainova
Head of training Department	A.Koishibayev
Head of the Practice and Employment Sector	B.Yesimova
Deputy Head of the Department of Design of Educational Programs	Sh.Kapar

Application

It is intended for the training of masters in the modular educational program "8D08603- Water resources management using IT-technologies" in NAO "Kazakh national agrarian research university»

Regulations

«On Education» The Law of the Republic of Kazakhstan dated 27 July, 2007 No. 319-III;
Order of the Minister of Science and Higher Education of the Republic of Kazakhstan dated July 20, 2022 №2;

Classifier of training programs for personnel with higher and post-graduate education. Order of the Minister of Education and Science of the Republic of Kazakhstan of October 13, 2018 No. 569;

Standard Rules for the activities of educational organizations implementing educational programs of higher and (or) postgraduate education. Order of the Minister of Education and Science of the Republic of Kazakhstan of October 30, 2018 No. 595;

Rules of the organization of the educational process on credit technology of training. Order of the Minister of Education and Science of the Republic of Kazakhstan dated 12.10.2018 No. 563;

Algorithm of inclusion and exclusion of educational programs in the Register of educational programs of higher and postgraduate education. Order of the Minister of Education and Science of the Republic of Kazakhstan No. 665 dated December 4, 2018;

Order No. 106 of the Minister of Science and Higher Education of the Republic of Kazakhstan dated October 12, 2022. Rules for keeping the register of educational programs, implemented by the organizations of higher and (or) postgraduate education, as well as the grounds for inclusion in the register of educational programs and exclusion from it.

Professional standard: "Water supply, wastewater disposal and protection of water resources" Appendix № 6 to the order of the Deputy Chairman of the Board of the National Chamber of Entrepreneurs of the Republic of Kazakhstan "Atameken" dated 11.12.2018, № 263.

Professional standard: "Hydraulic reclamation" Appendix № 7 to the order of the Deputy Chairman of the Board of the National Chamber of Entrepreneurs of the Republic of Kazakhstan "Atameken" from 26.12.2019 № 339.

Professional standard: "Construction of dams and dikes" Appendix № 9 to the order of the Deputy Chairman of the Board of the National Chamber of Entrepreneurs of the Republic of Kazakhstan "Atameken" from 26.12.2019 № 262.

Professional standard "Operation of water supply and sanitation systems" Annex № 21 to the order of the Deputy Chairman of the Board of the National Chamber of Entrepreneurs of the Republic of Kazakhstan "Atameken" from 26.12.2019 № 262.

Professional standard: "Pasture watering" Appendix No. 3 to the order of the Deputy Chairman of the Board of the National Chamber of Entrepreneurs of the Republic of Kazakhstan" Atameken No. 26.12.2019.

Professional standard: "Design and operation of water supply and drainage networks" Annex № 6 to the order of the Deputy Chairman of the Board of the National Chamber of Entrepreneurs of the Republic of Kazakhstan "Atameken" from 26.12.2019 № 263

Professional standard: "Design and operation of reservoirs of seasonal regulation" Annex № 7 to the order of the Deputy Chairman of the Board of the National Chamber of Entrepreneurs of the Republic of Kazakhstan "Atameken" from 26.12.2019 № 339.

Professional standard "Design and operation of river water intake structures" Appendix № 8 to the order of the Deputy Chairman of the Board of the National Chamber of Entrepreneurs of the Republic of Kazakhstan "Atameken" from 26.12.2019 № 263.

Professional standard: "Design and operation of collector-drainage network for hydromelioration systems" Appendix № 5 to the order of the Deputy Chairman of the Board of the National Chamber of Entrepreneurs of the Republic of Kazakhstan "Atameken" from 26.12.2019 № 263.

1. Passport of the educational program

Code and classification of the field of education	8D08 Agriculture and bioresources
Code and classification of training areas	8D086 Water resources and water use
Code and name of educational program	«8D08603 –Water Resources Management Using IT – Technologies»
Type of educational program	the current educational program
The purpose of the educational program	Training of doctors of Philosophy (PhD) in the field of water resources management and water use using IT technologies, who have fundamental educational, methodological and research training and are able to apply the acquired knowledge in scientific, practical and pedagogical activities
Level according to (I S C E)	8
Level according to NQF	8
Level according to SQF	8
The number of applications for licenses for the training	KZ42LAA00006720 of March 25, 2016 (the application Number No. 011 05 Jul 2019)
The period of validity of accreditation	Certificate №2020 KE 0285 KAZSEE 23.12.2020 -22.12.2025
Degree awarded	Doctor of Philosophy, PhD under the educational programme «8D08603 - Water resources management using IT-technologies»
Learning outcome	Table 2
List of qualifications and positions	Hydraulic engineer - 8 levels of qualification for ORK engineer hydrologist - 8 qualification levels for QWR; Design Engineer - 8 skill levels for QWR;
Professional field of activity	Universities, industrial laboratories, centers, research institutes; research and production, water management, agricultural, environmental, design, administrative institutions, departments, departments of ecology and environmental management under local, regional and republican management structures
Field and object of professional activity	Sphere of professional activity Natural objects in the form of geographic components of geosystems of various levels: surface and groundwater, natural and man-made complexes, anthropogenic landscapes, settlements, energy, health, recreational, historical, cultural and scientific objects. Objects of professional activity - water management and hydropower systems, complexes, enterprises; - hydraulic structures for various purposes: spillways, water outlets, water intakes, hydroelectric power stations, pumping stations, fish protection structures; - reclaimed land; - research, design and engineering organizations.
Functions of professional activity	Scientific-pedagogical, research, design, production and technical organizational and management activities in various agricultural and water enterprises and organizations.
Types of professional activity	Teaching and research activities in the system of higher

	and postgraduate education and science, management activities in enterprises and institutions in the field of water management.
Be competent:	- in the field of scientific and educational activities in the context of rapid updating and growth of information flows; -in conducting theoretical and experimental research; - in the formulation and solution of theoretical and applied problems in scientific research; - in conducting professional and comprehensive analysis of problems in the relevant field; -in matters of interpersonal communication and human resource management; - in matters of university training specialists; - in the examination of scientific projects and research; - in ensuring continuous professional growth.

2. Learning outcomes for EP

Codes	**Learning outcomes**
LO1	Demonstrate a systematic understanding of modern scientific achievements, mastering the skills and methodology of scientific concepts of world science. Critically analyze, reasonably choose and effectively use modern methods of scientific research. Demonstrate the ability to generate new ideas when solving research and practical problems, including in interdisciplinary fields based on a holistic systematic scientific worldview.
LO2	Demonstrate the ability to think, design, implement and adapt the research process with a scientific and practical approach in the field of forecasting and modeling processes using geoinformation technologies.
LO3	Demonstrate the ability to correctly statistically interpret hydrological information. Critically analyze and evaluate hydrological hazards and risks in river basins during research and design developments. Critically analyze and assess natural risks and the risks of hydrodynamic accidents during the operation of hydraulic engineering facilities. Demonstrate the ability to design with their own original research to prevent potential hazards at water management facilities.
LO4	Critically analyze and evaluate the modern system of water resources management, offer modern technologies and methods of environmentally sound balanced use of water resources. Demonstrate the ability to synthesize new and complex ideas in solving complex problems in water resources management, including issues of intersectoral interaction of all forms of water use and all types of water resources.
LO5	Demonstrate the ability to contribute with their own original research to the expansion of the boundaries of the scientific field in the field of forecasting the magnitude of damage from irrigation reservoirs in the basins of transboundary rivers.
LO6	Critically analyze and evaluate the state of natural and man-made objects to justify the decisions taken when designing objects of environmental management and water use. To assess economic and socio-environmental damage in nature management, to communicate their knowledge and achievements to colleagues, the scientific community and the general public.
LO7	Demonstrate the ability to generate new ideas, substantiate the relevance and prospects of using renewable energy sources for water supply. Analyze and recommend the advanced achievements of world science.
LO8	Critically assess the current state of agricultural water supply and pasture irrigation and offer effective water-lifting installations. Demonstrate the ability to use pumping equipment in the system of agricultural and pasture water supply with the integrated use of water resources and advanced achievements of science and technology in the branches of the agro-industrial complex of the Republic of Kazakhstan.
LO9	Demonstrate the ability to critically assess the current state of the integrated use of water resources, the formation of the structure of water management complexes, the impact of the construction of hydraulic engineering facilities on the environment.
LO10	Evaluate, analyze monitoring data and digital content and, based on it, automate the design of hydraulic structures using IT technologies and contribute with their own original research and ideas to the expansion of the boundaries of the scientific field.
LO11	Demonstrate a systematic understanding of the design of water intake structures of hydroelectric power plants and reservoirs for complex purposes and mastering modern calculation methods.
LO12	To evaluate modern methods of organization and technology of construction works of water facilities and recommend advanced scientific achievements.

3. The content of the educational program

№	UC/OC	Discipline Code	Name of the discipline, forming competencies	inacademiccredits	Volume of credits						Distribution of credits by courses and semesters						Credits	Type of lesson 2	Form of control
					inacademichours	Auditoriums			Extracurricular		1 course		2 course		3 course				
						Lectures	Practice	Laboratoryclasses	Other (practice)	IWSL	1 semester	2 c semester	1 semester	2 semester	1 semester	2 semester			
1		**Theoretical classess**		**45**	**1350**														
1.1	**CS**	**Core subjects cycle**		**20**	**600**	**15**	**85**	**100**	**50**	**350**									
		Module 1. Methodology of research works																	
1.1.1	UC	MSR 8201	Methods of scientific research	5	150	15	35		25	75	5						6	6	exam
1.1.2	UC	AW 8202	Academic writing	5	150		50		25	75	5						2	23	exam
1.1.3		TP 8203	Teaching practice	10	300			100		200		10					2	6,10	dif.credit
1.2	**MS**	**Major subjects cycle**		**15**	**450**	**45**	**105**		**75**	**225**									
		Module 2. Оценка и проблемы использования водных ресурсов		**5**	**150**	**15**	**35**		**25**	**75**									
1.2.1	OC	AHHRRB 8301	Assessment of hydrological hazards and risks in river basins	5	150	15	35		25	75	5						2	6	exam
1.2.2	OC	TWRP 8302	Transboundary water resource problems																
		Module 3. Agricultural supply and water treatment of pastures		**10**	**300**	**30**	**70**		**50**	**150**									
1.2.3	OC	REA 8303	Renewable energy for agriculture	5	150	15	35		25	75	5						2	6	exam
1.2.4	OC	MWMS 8304	Modern water management system																
1.2.5	OC	ACSAWSGA 8305	Assessment of the current state of agricultural water supply to grazing areas	5	150	15	35		25	75	5						2	6	exam

1.2.6	OC	MPPEDAW SIP 8306	Modern pumping power equipment and devices for agricultural water supply and irrigation of pastures																
Educational trajectory №2 " Hydrotechnical structures of industry and complex purpose»																			
		Module 4. Оценка и комплексное использование водных ресурсов		**5**	**150**	**15**	**35**		**25**	**75**									
1.2.7	OC	AHHRRB 8201	Assessment of hydrological hazards and risks in river basins	5	150	15	35		25	75	5						2	6	exam
1.2.8	OC	MSIUWR 8307	Modern system of integrated use of water resources																
		Module 5. Стратегическое планирование и сбалансированное использование водных ресурсов		**10**	**300**	**30**	**70**		**50**	**150**									
1.2.9	OC	SPWUWC 8308	Strategic planning of water use and water conservation	5	150	15	35		25	75	5						2	6	exam
1.2.10	OC	ERBUWR 8309	Environmental rationale for balanced use of water resources																
1.2.11	OC	MMCCR 8310	Modern methods of calculating complex reservoirs	5	150	15	35		25	75		5					2	6	exam
1.2.12	OC	AICHFE 8311	Assessment of the impact of the construction of hydraulic facilities on the environment																
1.2.13		RP 8312	Research practice	10	300			100		200		10					2	6	dif.credit
2	**DRW**	**Research work by a doctoral candidate**		**123**	**3690**														
2.1			Research work of a doctoral candidate, including internships and doctoral thesis	123	3690			1230		2460	5	10	30	30	30	18	2	6	dif.credit
4	**FA**	**Final assessment**		**12**	**360**														
4.1			Writing and defending doctoral thesis	12	360			360								12	2	6	
			Total	**180**	**5400**	**60**	**190**	**1790**	**125**	**3235**	**30**	**30**	**30**	**30**	**30**	**30**			

[1]**Note:**

№	Department
1	Agronomy, breeding and biotechnology
2	Soil science, agrochemistry and ecology
3	Horticulture, plant protection and quarantine
4	Forestry, Hunting and Fisheries
5	Land resources and cadastre
6	Water resources and land reclamation
7	Agricultural machinery and mechanical engineering
8	"Machine Use" named after I.V.Sakharov
9	Energy saving and automation
10	IT technology and automation
11	Obstetrics, surgery and reproductive biotechnology
12	Biological safety
13	Clinical veterinary medicine
14	Microbiology, virology and immunology
15	Veterinary Sanitary Expertise and Hygiene
16	"Physiology, morphology and biochemistry" named after N.U. Bazanova
17	Accounting, auditing and finance
18	"Management and organisation of agribusiness" named after H.D. Churin
19	Law
20	Zooengineering
21	Food technology and safety
22	Social disciplines
23	Kazakh and Russian languages
24	Foreign languages
25	Physical education and sports
26	Military Department

4. Map of competence

Codes	Module	Educational competence	Learning outcomes
MC1	**Module 1. Methodology of research works**	Organization and implementation of scientific research and pedagogical activities	PO1, PO4, PO6
		Professional Competences	**Learning Outcomes**
MC2	**Module 2.** Environmental assessment and water issues	Be competent in water environmental assessment and problem analysis	PO1, PO4, PO6
MC3	**Module 3.** Agricultural supply and water treatment of pastures	Be competent in matters Research and design methods for agricultural supply and water treatment of pastures	PO2, PO7, PO9, PO5
MC4	**Module 4.** Environmental Management and Design Study	Ability to conduct environmental management and design research	PO3, PO10, PO12
MC5	**Module 5.** Study of design methods for construction of hydraulic structures	Be competent in matters Studies and methods of design of construction of hydraulic structures, applications Advanced foreign and Domestic experience	PO6, PO8, PO11, PO12

5. Summary table, reflecting the amount of credits disbursed in the context of the modules of the educational program

Training course	Semester	The number of studied disciplines		The number of academic credits						Total hours	Number	
		UC	OC	Theoretical training	Pedagogical practice	Research practice	Scientific Research of a doctoral student	Final attestation	Total		Exam	Dif. exam
I	**1**	2	3	25			5		30	900	5	1
	2	-	-		10	10	10		30	900		3
II	**3**	-	-				30		30	900		1
	4	-	-				30		30	900		1
III	**5**	-	-				30		30	900		1
	6	-	-				18	12	30	900		1
Total		**2**	**3**	**25**	**10**	**10**	**123**	**12**	**180**	**5400**	**5**	**8**

Annex 1

Information about disciplines

№	Name of the discipline	Short description of the discipline	Number of credits	Formed competencies (codes)
		Core subjects cycle / University component		
1	Methods of scientific research	The discipline provides doctoral students with professional training in the field of methodology and methodology of scientific research, which allows them to work successfully in the chosen branch of water management, the development of methodological culture necessary for the organization and implementation of scientific research and pedagogical activities in the field of water management	5	LO 1, LO10
2	Academic writing	This course forms the skills of doctoral students to create written and oral academic texts, correct compilation of bibliographic descriptions, and principles of communication in the scientific environment. The discipline deals with scientific discourse, citation rules and plagiarism, information databases and data sets, international databases of scientific citation (Web of science, SCOPUS), and the Russian scientific citation database (RSCI).	5	LO1, LO 2
		Major subjects cycle / optional component		
3	Assessment of hydrological hazards and risks in river basins	The course is devoted to the coverage of water threats, general aspects of the monitoring program, analysis of the current state and prospects of ensuring the safety of hydraulic structures of the Republic of Kazakhstan on the basis of monitoring the safety of water management structures and protection of the territory from harmful effects of waters. On the basis of accident risk analysis and determination of the amount of probable damage in case of accidents at hydraulic structures, determination of measures to reduce the risk of accidents and protect the underlying territory. The HV safety monitoring system consists of three components: sub-systems for protection of the territory from harmful impact of water environment (floods), sub-systems for monitoring the safety of water facilities, sub-systems for prevention and elimination of natural and man-made situations	5	MC 1 LO 3, LO5
4	Transboundary water resource problems	The course focuses on experience in the use of water resources of transboundary rivers, the legal framework for regulating the management of water resources of transboundary rivers. Experience with transboundary river water resources in South America. Experience with transboundary river water resources in the Middle East. Experience with transboundary river water	5	MC 1 LO 4, LO5

		resources in Europe. Experience with transboundary river water resources in Central Asia. Principles of Water Management of Transboundary Rivers Principles of Water Management of Transboundary Rivers from the perspective of the Sustainable Development Convention.		
5	Modern water management system	The course is devoted to lighting of modern water resources management system, new criteria of river network classification, advantages and disadvantages, calculation of intraannual distribution of runoff, determination of guaranteed return provision by analytical method, calculation of long-term component of reservoir capacity by graphoanalytic method, methods of forecast of environmental safety and stability of natural environment, calculation of operation mode of reservoir of long-term runoff control according to the improved method of A.D.Savarensk..	5	MC 2 LO 1, LO4
6	Renewable energy for agriculture	The course is devoted to the use of solar, wind and water energy for power generation, water lifting from underground water sources (wells and mine wells) and open water sources (watercourses) in large, medium and small enterprises and peasant (farm) farms of the agricultural complex of Kazakhstan.	5	MC 2 LO 1, LO4, LO7
7	Assessment of the current state of agricultural water supply to grazing areas	The current state of agricultural water supply and water supply. Water consumption. Determination of estimated costs. Schedules of water consumption. Water supply network. Network trace. Hydraulic calculation of water supply network. Types of transportation. Intake facility. Treatment facility. Basic concepts of industrial water supply.	5	MC 2 LO 2, LO7, LO8
8	Modern pumping power equipment and devices for agricultural water supply and irrigation of pastures	The course is devoted to the choice of means of mechanization of pasture water supply, an analysis of the sources of pasture irrigation is made. Water – lifting and power units for mine wells, mobile water-lifting installations, pasture wind lifts are selected. The calculation of water-lifting-power units for tubular wells (wells) is carried out, an analysis of measures for the operation, maintenance and repair of water-lifting-power units is made	5	MC 2 LO 2, LO7, LO8
9	Modern system of integrated use of water resources	Discipline makes it possible to form a knowledge system in the field of integrated water resources use. Formation of the structure of water management complexes. Complex hydraulic nodes and control modes of their operation during operation, protection of water resources from pollution, requirements of participants of the water management complex to the regime and to water quality.	5	MC 3 LO 4, LO6, LO9
10	Strategic planning of	When creating and planning water use in the	5	MC 3 P LO 2,

	water use and water conservation	system of basin management aimed at fulfilling strategic tasks, consider the main principle of transition to integrated water resources management and the basis of rational water use, saving irrigation water, increasing the efficiency of irrigation water use, improving the productivity of water and land use, etc.		LO4, LO6, LO7
11	Environmental rationale for balanced use of water resources	The course is devoted to the analysis of methods of assessment and forecasting of environmental safety and sustainability of the natural environment, Criteria of pollution of the natural environment. Integrated assessment of environmental pollution. Environment. Procedure for determining the amount of damage caused to the natural environment	5	MC1 LO 3, LO4, LO6, LO9
12	Assessment of the impact of the construction of hydraulic facilities on the environment	Discipline allows to form a knowledge system on assessment of impact of construction of hydraulic facilities on the environment, change of hydrological regime of open water sources, increase of groundwater level and mineralization of groundwater, salinization of soils, change on biodiversity of adjacent territory, assessment of their impact in case of long-term exploitation on natural resources	5	MC 4 LO 3, LO9, LO11, LO12
13	Modern methods of calculating complex reservoirs	Discipline makes it possible to form a system of knowledge on modern methods of calculation of reservoirs of complex purpose, complex hydraulic nodes and control of their operation modes during operation, protection of water resources from pollution, determination of guaranteed availability of return by analytical method, existing method of determination of guaranteed availability of return,. Calculation of multi-year component of reservoir capacity by graphoanalytic method, methods of calculation of multi-year flow control.	5	MC 4 LO 10, LO11, LO12
	Writing and defending a doctoral dissertation		**12**	
	TOTAL		**180**	

Annex 2

Practice bases

№	Name of companies, enterprises, organizations	Contacts Tel, e-mail
1	LLP "Institute of Geography"	Almaty, Kabanbai Batyr/Pushkina 67/99
2	GU "Kazselezashchita" of the Ministry of Emergency Situations of the Republic of Kazakhstan	Almaty, Kaldayakov str., 70, +7(727) 2912755
3	D. Kunaev TANK RSE "Kazvodkhoz"	Almaty region, ul. Melioratornaya, 1A 8 (72737) 1 80 00
4	Design Institute of PC "Kazgiprovodkhoz"	Almaty, 434 Seifullin Ave., 8 (727) 2793522
5	GKP "Almaty Su"	Almaty, 196 Zharokov str., 8 (727)2276001
6	Branch of RSE on PVC "Kazhydromet" Ministry of Energy of the Republic of Kazakhstan	Almaty, 32 Abay Ave. 8 (727)2676464
7	East Kazakhstan branch of RSE "Kazvodkhoz"	Ust-Kamenogorsk, Kazakhstan str., 99/1
8	Kyzylorda branch of RSE "Kazvodkhoz" KVR MAGiPR RK	Kyzylorda, Tole bi str., 66, 8 (7242) 233250
9	Zhambyl branch of RSE "Kazvodkhoz" KVR of the Ministry of Agriculture of the Republic of Kazakhstan	Zhambyl region, Taraz, Zhaugash Batyr str., 1a, 8 (7262) 425490
10	Turkestan branch of RSE "Kazvodkhoz" KVR MAGiPR RK	Shymkent, Mukhamed Haidar Dulati str., 5 8 (7252) 54 87 37
11	RSU Aralo-Syrdarya BVI KVR MAGiPR RK	Kyzylorda, Amangeldy str., 107, 8 (7242)235607
12	Balkhash-Alakol BVI KVR MAGiPR RK	Almaty, Abylai Khan Ave., 2, 8 (7272)453253
13	MAEKKazatomprom LLP	West Kazakhstan region, Mangystau region, Aktau 8 (7292)564208
14	" Zonal hydrogeological and reclamation center»	Almaty, Zhetysu district, 113 Baisheva Street 8 (727) 264 26 29
15	State enterprise " Kostanay Su»	Kostanay region, Kostanay, Abay street 19 8(7142)222500
16	LLP "Design Institute named after Zh. R. Dzhanekenov"	Almaty region, Taldykorgan, D. Konaev str., 20
17	LLP "Water resources-Marketing"	Shymkent, G. Ormanov str., 17, 8 (7252) 321 195
18	Panfilov production site of the Almaty branch of the RSE "Kazvodkhoz" KVR MAGiPR RK	Almaty region, Zharkent, Golovatskogo str., 290, 8 (72831) 9 40 12
19	RSE " Kazvodkhoz»KVR MAGiPR RK	Nur-Sultan, Pushkin street, 25, 8 (7172) 24 85 26
20	SCC " Taza Su-2014»	Zhambyl region, T. Ryskulov district, Kulan village, K. Asylov str., 54
21	GKP " Alakolirrigation»	Almaty region, Alakol district, Usharal, V. Toshchenko str., 19, 8 (72833) 3 52 71
22	GKP "Turkestan-Su"	Turkestan region, Turkestan, S. Erubayev str., 255, 8 (72533) 4 21 92
23	Kegens district " Department of Housing and Communal Services and	Almaty region, Kegen region, Kegen village, B. Momyshuly str., 9, 8 (7277) 721475

	housing Inspection»	
24	KGP "Ayagoz Su"	East Kazakhstan region, Ayagoz, 61 Barak batyr str., 8(7223)730301
25	«Uralvodproekt» LLP	WKO, Uralsk, ul. Hamid Churin, 119, 8 (7252) 535057
26	Kyzylorda branch of RSE “Kazalysushar»	Kyzylorda region, Kazalinsky district, Aiteke bi str., 1, 8 (724) 3851687
27	GKP " Kapshagai Su Arnasy»	Almaty region, Kapchagai, Koichumanov street, 4, 8 (72772) 4 19 48
28	KGP "Balkhash Su»	Karaganda region, Balkhash, Sabitova MKR, 18b, 8 (71036) 65490