Initial Environmental Examination

May 2013

UZB: Water Supply and Sanitation Services Investment Program–Tranche 4

Contents

ABBREVIATIONS

ADB	–	Asian Development Bank
EA	–	executing agency
EMP	–	environmental management plan
EMU	–	environmental monitoring unit
IEE	–	initial environmental examination
IEA	–	initial environmental assessment
MES	–	municipal environmental standards
PCR	–	Physical cultural resources
PIU	–	project implementation unit
PPMU	–	program preparation and management unit
UCSA	–	Uzbekistan Agency *"Uzkommunhizmat"*
STP	–	sewerage treatment plant
WWTP	–	waste water treatment plant

WEIGHTS AND MEASURES

LPCP – liters per capita per day

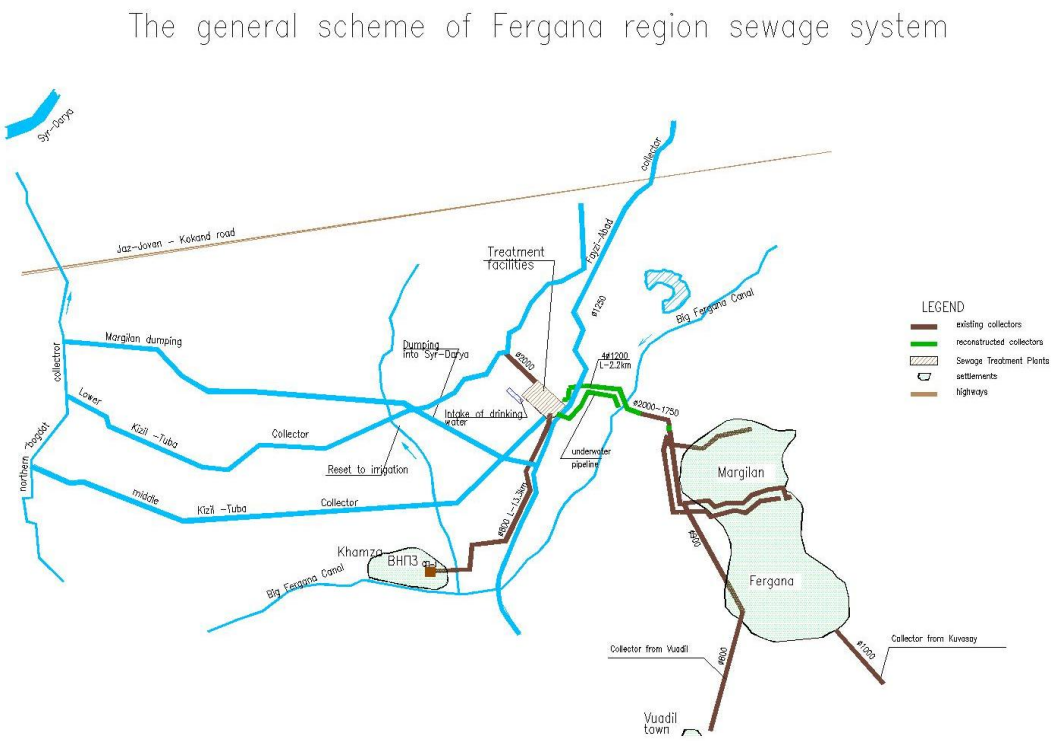
NOTE

In this report, "$" refers to US dollars.

Map 1: Republic of Uzbekistan

Map 2: Fergana oblast

Map 3: Layout of Fergana oblast Sewerage System



I. INTRODUCTION

A. Purpose of the Report and the Project Background

1. This report presents the findings of an initial environmental examination (IEE) on the proposed project rehabilitation sewerage system in Fergana and Margilan cities (Fergana province). This is the project of Tranche 4 of a multitranche financing facility (MFF) Water Supply and Sanitation (WSS) Services Investment Program. The IEE was conducted to identify the impacts on the environment in the proposed project area during the project preparation period and to recommend methodologies to mitigate adverse impacts arising from project implementation.

2. The proposed MMF Investment Program will improve access to safe, reliable, and sustainable WSS to about 3 million residents in provincial capitals and district towns in oblasts (provinces) in Uzbekistan. The investment program is carried out by the Agency *"Uzkommunhizmat"* (UCSA) jointly with local governments, and town level vodokanals (water supply companies). It is focusing on physical and institutional strengthening of water supply and sewerage subsectors.

3. This project involves rehabilitation of sewerage treatment facilities which are common system in Fergana and Margilan cities and also includes rehabilitation/construction of sewerage networks in two cities. It is expected that this project will be able to provide sewage services for the population total of 34,700 people, who currently do not have an access to centralized sewerage system. This project will provide sewage and sludge treatment in accordance with standards of Uzbekistan.

4. This project was developed in accordance with the annual government's investment programs approved by the Presidential Decree dated December 21, 2010 № PP-1446 "On the acceleration of infrastructure development, transport and communication construction in 2011 - 2015" and № PP-1446 of 15.11.2011 "On measures of layout implementation in Fergana city, construction and rehabilitation of social facilities, transport and communal infrastructure in 2012-2015".

B. Extent of the IEE Study

5. The IEE was carried out by project preparatory consultant and prepared in accordance with the ADB's *Safeguard Policy Statement* (SPS) 2009, especially for environmental safeguard, and relevant government's laws and regulations on environmental.

6. Since independence, many laws and regulations on environmental issues have been developed in Uzbekistan. *The Law on Environmental Protection* (January 1993) established a legal, economic, and organizational framework for environment protection, ensuring sustainable development and defining principles, including the conduct of environmental studies. The State Committee for Nature Protection (Goskompriroda) is a primary environmental regulatory agency, and reports directly to the parliament. Goskompriroda is responsible for supervising, coordinating and implementing environmental protection and controlling the usage and renewal of natural resources at the central, oblast and rayon (district) levels.

7. In addition to the 1993 law in environmental protection, Goskompriroda uses the following additional legal instruments to manage environmental issue related to sewerage system:

(i) **On water and water use (June 12, 1993).** Regulation of water relations, rational use of water for the population and economy, water protection from

pollution and depletion, prevention and eradication of harmful effects of water, improvement of water bodies and protecting the rights of enterprises, institutions, organizations, farmers and farmer households and citizens in the area of water relations;

(ii) **On Air Protection (January 3, 1997).** Preservation of the natural composition of the atmosphere. Prevention and reduction of harmful chemical, physical, biological and other impacts on air. Legal regulation of activity of state bodies, enterprises, institutions, organizations, associations and individuals in the field of air;

(iii) **On Protection and Use of Flora (January 9, 1998).** Conservation in the wild species composition, its gene pool. Preserving the integrity of natural plant communities and habitat protection of wild plants. Ensuring the rational use and reproduction of plants. Legal regulation of businesses and individuals in the protection and use of flora;

(iv) **On Protection and Use of Fauna (January 13, 1998).** Regulates relations in the sphere of use of wild animals in the wild on land, sea, air and soil, permanently or temporarily inhabiting the territory of the Republic of Uzbekistan, as well as contained in the semi-free conditions or artificial habitats for scientific or conservation purposes. The objective of the legislation on the protection and use of wildlife is to regulate relations in the protection, use, restoration and reproduction of animals in order to ensure the conditions of its existence, the conservation of species diversity, the integrity of natural com ¬ societies and environment;

(v) **On Protected Natural Areas (January 6, 2005).** The purpose of this law is to regulate relations in the field of security and management of protected natural areas. The main objectives of this law are to preserve typical, unique and valuable natural sites and complexes, the genetic pool of plants and animals, to prevent the negative impact of human activity on nature, the study of natural processes, conducting environmental monitoring, environmental education and upbringing; and

(vi) **On Environmental Assessment (July 1, 2000).** The Environmental Assessment refers to the establishment of conformity of the planned or existing business and other activities with environmental requirements and determines the admissibility of the implementation object of ecological expertise. The objectives of environmental impact assessment (i) verification of compliance with environmental requirements projected economic and other activities to pre-decision-making on implementation; (ii) check the level of environmental hazards of proposed or existing business and other activities that may have a negative impact on the environment and health of citizens; and (iii) check the adequacy and reasonableness, the measures provided for environmental protection and sustainable use of natural resources.

8. International and local sanitation engineers and specialists in environmental protection from consultants team visited project cities, studied the current status and sanitation problems on these sites and sewage treatment plants, prepared the feasibility study and held a public consultation and hearing prior to this report (September 13-15, 2011.) Public consultations included:

(i) Gathering of baseline information available on the physical, chemical, biological, and socio-economic environment of the project area and sites; and understanding the technical, social, and institutional aspects of the project implementation;

(ii) Public consultation and field visits;

(iii) Screening of potential issues, concerns, and impacts relative to location, design, construction, and operation to distinguish those that are likely to be significant for a project implementation and warranting further study;
(iv) Recommending measures to mitigate adverse issues, concerns, and impacts, particularly to the project design team;
(v) Indicating potential environmental impacts, recommending mitigation measures and how to implement and monitor the mitigation measures;
(vi) Preparing an environmental management plan (EMP) indicating impact areas, recommended mitigation measures, method of monitoring the impacts and responsible persons; and
(vii) Proposing the institutional set-up for implementation of the EMP.

9. This IEE report is based on findings from the field works, from reviewing technical descriptions of the engineering designs in the draft appraisal reports, and outcomes of discussions with officers of the relevant agencies, and affected people provided during public consultation.

10. This IEE report includes the finding from audit compliance from the existing facilities is presented in general in the following sections (i) description of the environmental condition of the project areas based on findings of site reconnaissance, results of waste water quality and sludge tests and analyses; (ii) project descriptions based on the engineering designs contained in the draft appraisal reports; (iii) assessment of potential environmental impacts and proposed mitigation measures, and the EMP that include also corrective measures from the existing facilities.

II. DESCRIPTION OF THE PROJECT

A. Project Brief Description

11. The proposed project will provide wastewater disposal and sewage treatment in Fergana and Margilan cities in accordance with standards of the Republic of Uzbekistan. This project involves rehabilitation and improvement of sewerage system in Fergana and Margilan cities through rehabilitation of sewerage treatment facilities which are common for both cities and also includes rehabilitation/construction of sewerage networks in Fergana and Margilan cities.

1. Waste Water Treatment Plant in Fergana and Margilan cities

12. At present the purification index of wastewater treatment at the sewage treatment plants is very low (30-50%) and does not meet the regulatory requirements of the Republic of Uzbekistan. To ensure wastewater treatment in these cities in accordance with standards of the Republic of Uzbekistan, the complete rehabilitation of existing waste water treatment facilities with a capacity 260,000 m^3/day and also the extension of their capacity up to 300,000 m^3/day would be provided. The quality of wastewater treatment after project implementation will be significantly improved and will comply with the provisions of the Republic of Uzbekistan.

2. Rehabilitation of sewerage networks in Fergana city

13. To eliminate emergency conditions caused by overflowing of waste water from manhole and wells and to improve ecological situation in Fergana city, the rehabilitation of sewers and sewage networks with total length 11.7 km, 300 mm – 8.1 km 400 mm – 1.5 km and 500 mm – 2.1 km are provided.

14. Sewage collection flush tanks will be built to receive waste water generated from unsewered population of Fergana and Margilan cities and surrounding rural villages.

3. Extension of sewers in Margilan city

15. Construction of 4.86 km of sewers and networks is provided to extend the coverage of centralized sewerage services in Margilan city. To ensure timely waste water discharging in 3 districts in Margilan city and to prevent environmental pollution, the rehabilitation of out-off operation sewerage pumping station is provided.

B. Environmental category of the Project

16. In accordance with the regulatory requirements of the Republic of Uzbekistan categorization of wastewater treatment facilities is determined based on their capacity. Sewage treatment plants of over 280 m^3/day capacity belong to category I. However such categorization is made up not on the degree of environmental impact, but the power of waste water treatment plant (WWTP). During the process of feasibility studies preparation program preparation management unit (PPMU) experts and designers had meetings with the experts of State Environmental Expertise under Goskompriroda and they feel an urgent need to implement the project. Both the management and the specialists of State Environmental Expertise believe that this project should be considered as environmentally-friendly site subject to the degree of environment impact and classified in category B based on the assessment of the extent of damage on environment. On behalf of State Environmental Expertise the experts of Fergana branch of Goskompriroda assisted in preparation of input data and wastewater testing and its impact on the reservoirs where wastewater is discharged after treatment (all the analyzes were done by experts of the Goskompriroda in their laboratories). In addition the experts of Nature Protection Committee suggested assisting in environmental monitoring during construction and rehabilitation of the sites.

17. Based on the environmental assessment framework prepared under the Tranche 1, the consultant filled up the rapid environmental assessment (REA) checklist, and proposed that this project could be categorized as B project in accordance to *ADB SPS* 2009, especially for environmental safeguard.

18. Based on the Uzbekistan environmental law and regulation, the proposed project is a category I project. The category I projects require the preparation of an initial environmental assessment (IEA), which is similar to ADB's IEE. State Ecological Expertise (Gosekoexpertisa) under Goskompriroda approves category I projects. The IEA of project was presented for environmental review and the endorsement of the Goskompriroda № 18/788з dated September 14, 2011 was received. The copy of environmental clearance with summary in English is attached in Appendix 4.

C. Need for Project

19. The sewers and sewage networks in Fergana are operating since 1961. Sewers and networks are built with ceramic and reinforced-concrete pipe and for so long operating period its significant parts are deteriorated and are required to reconstruct. There are numerous accidents of waste waters drains in the ground and of irrigation network in the sewers and networks. The ground under sewage conduits is progressively washing out; conduits are subsiding and sometimes falling. Many conduits are greatly silted. There are clogs, conduits subsidence and also sewers could be deteriorated by the crown corrosion with sulfide gas during the typical operation and maintenance

20. Sewage-purification facilities are set in operation in 1973. Existing waste waters treatment technology is based on the traditional scheme of activated sludge process.

Sewage-purification facilities include arrays, sand catchers, primary clarifiers, aerotanks and secondary clarifiers. Waste waters disinfection is implemented with liquid chlorine solution. Waste waters sludge is transferred to the sludge drying beds to reduce wasted sludge water contents without additional treatment.

21. At present, the main parts of electro-technical and technological constructed equipments are disabled for long operation time and with no rehabilitation. As a result:

(i) Arrays building – among five arrays only three are in operation state. Large wastes settled on screens are removed by hand;
(ii) Main pumping station – four of seven installed are in operational state;
(iii) Horizontal sand catchers – do not work as sand removing system failed;
(iv) Primary setting tank – four tanks are operating among eight, sludge removing system failed. The pumping station of raw sludge doesn't work, all the pumps are out of order;
(v) Aerotanks – work as settling tank because of failure of aeration system.
(vi) Final settling tank – six of 10 are working. Sludge is badly removed because of slime pump failure;
(vii) Chlorination section - building is in poor condition. Equipment is out of order;
(viii) Measuring tray - equipment is missing;
(ix) Aerobic stabilizers – are not completed;
(x) Sludge thickener with pumping station – are not completed;
(xi) Sludge and sand beds – work bad, need cleaning and partial reconstruction of the drainage system;
(xii) Sludge pumping station – there is one pump of four required;
(xiii) Blowing house – equipped with eight blowers, power-consuming equipment, and are out of date; and
(xiv) Technological trays and pipes –because of the long term of exploitation sliding shutters are rotted and valves are out of order.

22. The above data show that almost all of the equipment has come into repair and needs to be replaced by modern, energy-efficient one. All canalization treatment facilities need to be replaced. The condition of all metal structures (stairs, railings) can be dangerous for life and health of the staff.

23. Many facilities are not operating and because of the malfunction of equipments the degree of wastewater treatment is very low and does not exceed 30-50%.

24. Discharging inadequately treated wastewater leads to pollution of the Syrdarya River, which is the source of drinking water for the residents of the Republic of Uzbekistan and Tajikistan.

25. The effectiveness and efficiency of the current sewage treatment plant has yet to be improved to meet the maximum permissible concentration norm as indicated in data provided by Fergana Oblast Vodocanal and presented in the table below.

№	Characteristics	Unit of measurement	Influent water	Damping after treatment	Maximum permissible concentration (the norm)
1	Colour		grey	Light grey	
2	Smell		fec.	week fec.	
3	transparency	sm	5	7	
4	Suspended solids	mg/l	70	60	18

№	Characteristics	Unit of measurement	Influent water	Damping after treatment	Maximum permissible concentration (the norm)
5	pH		7.9	7.9	
6	oxidability	mg/l	42	30	
7	Ammoniacal azote	mg/l	6.6	4.2	1.9
8	Nitrites	mg/l	0.2	0.08	0.06
9	Nitrates	mg/l	-	0.4	9.5
10	chlorides	mg/l	87	85	110.0
11	sulfates	mg/l	365	362	350.0
12	Mineralization	mg/l	1,020	1,000	1,000
13	Dissolved oxygen	mg/l	-	1.8	6
14	COD	mg/l	148	82	40
15	BOD5	mg/l	96	44	15
16	Ferrum	mg/l	0.15	0.12	0.5
17	Phosphates	mg/l	0.5	0.4	1,5
18	Petroleum derivatives	mg/l	0.04	0.02	1.0
19	Copper	mg/l	0.001	NA	NA
20	Chromium +3	mg/l	NA	NA	NA
21	Chromium +6	mg/l	NA	NA	NA
22	Zinc	mg/l	NA	NA	NA
23	Lead	mg/l	NA	NA	NA
24	Nickel	mg/l	NA	NA	NA
25	Cadmium	mg/l	NA	NA	NA
26	Manganese	mg/l	NA	NA	NA

Source: Data is collected from Fergana Oblast Vodocanal. The table shows average contamination level within the period from January till September 2011. Laboratory analysis of wastewater quality is carried out in accordance with the approved schedule three times a month.

26. As it is shown in the table above the concentration of contamination in waste water after treatment at the sewage treatment plant exceeds the performance standards of the Republic of Uzbekistan for suspended solids and BOD5 - three times, COD - two times, nitrogen ammonia - 2.2 times.

27. Fergana vodocanal laboratory also performs analyzes of activated sludge from aeration tanks and on sludge beds. Activated sludge samples were taken for analysis on the January 25, 2012. They show that due to the failure of the aeration system in aeration tanks the concentration of dissolved oxygen in the mixture of activated sludge is 2.5 mg/L (normal 5-6 mg/L). In this regard the flakes of mud are small and light and the water above the mud with a nonsag turbidity. Due to a small amount of dissolved oxygen in the mixture of activated sludge the required degree of biological wastewater treatment is not achieved. Flocculated sludge is weakened; loose flakes of silt are easily carried beyond the secondary tanks. Activated sludge is dominated by flagellates, sulfur bacteria, filamentous, holotrichous, Gastrotricha and sucking worms. Humidity mixture of sludge and sludge entering the sludge beds is 98.5%, ash-39%. Heavy metals in sewage sludge are not available, since they are practically absent in the wastewater entering wastewater treatment plant.

28. Sewage treatment plants have serious impact/damage on environment and it was determined that the rehabilitation project should be compulsory carried out urgently and necessarily.

29. Some parts of Fergana and Margilan cities are not connected to sewer system and rely on alternative sanitary methods such as septic tanks system. Some people are ready to pay and connect to sewerage system but nowadays vodokanal have to deny them because

of sewer system overloaded and sewerage treatment plant (STP) shutdown. Rehabilitation and improvement of sewer system will ensure better operation and maintenance of sewer and sewage treatment system and these action planning would be satisfied with national effluent standards of STP.

D. Project Location

30. Fergana city is the regional centre of Fergana oblast and is located in the south-east part of Fergana valley. Population of Fergana city is 237,600 people. Margilan city is located to the north of the Fergana at the distance of 11 km. Population of Margilan city is 205,700 people.

31. Due to close location of Fergana and Margilan cities, its sewers and networks are common and waste water are discharged to the same waste water treatment plant which located 24 km north-west from Fergana city.

32. Rehabilitation/construction of sewerage networks will be done within the urban areas of Ferghana and Margilan cities. All sewage treatment plants are located in undeveloped zone close to agricultural fields planted with cotton. The nearest rural village is situated at the distance of about 1 km.

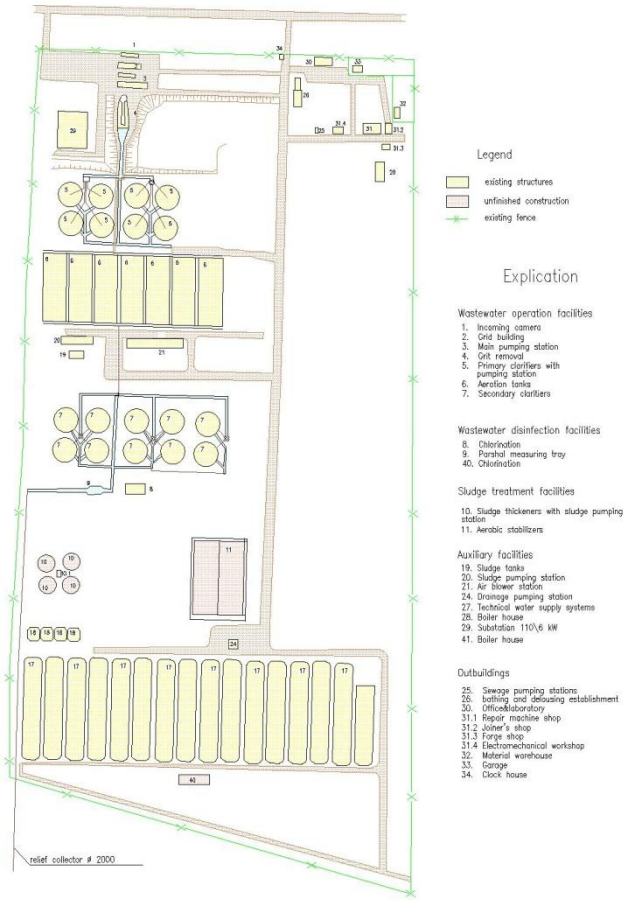
33. General layout of sewerage system in Fergana and Margilan cities is shown on Map 3. As it is shown in the diagram wastewater from the district center Vuadil and Altiarik Oil Refinery Plant, located in Khamza city is discharged to this wastewater treatment plant.

34. Layout of existing facilities is provided below.

E. Scope of work

35. Currently population of Fergana and Margilan cities are 443,300 people, including 268,800 people or 60.6% are connected to centralized sewerage system. Improvement of sewerage collection and treatment system will be based on estimated population expects of 969,250 people by 2025 in Fergana, Margilan, and adjacent regions.

Existing wastewater treatment facilities general plan.



F. Project description

36. The physical components of the project rehabilitation and improvement of sewerage system that are subject to environmental assessment are listed below.

37. The total length of existing sewerage network in Fergana city is 366.3 km and in Margilan is 111.5 km.

38. Under the project 11.7 km of sewerage networks will be reconstructed in Fergana city and

4.86 km of new construction of sewer line in Margilan city. Fiberglass or plastic pipes should be used for rehabilitation and construction of sewage network pipe.

39. The sewage reservoir station in Fergana city will be built to receive waste water generated from population of Fergana and Margilan cities, pre-treated waste from industries, and surrounding rural villages. Three sewerage pumping station in Margilan city will be rehabilitated.

40. Due to the limitation of available funds under Tranche 4, rehabilitation and extension of sewerage network of these cities is not a priority of the project. These works will be carried out gradually in future.

41. Currently the WWTP receives about 200,000 m^3/day of wastewater form households, municipals and industrial enterprises from Fergana, Margilan, Tashlak cities and adjacent areas.

City	**Quantity of waste waters m^3 per day**			
	Domestic Sewage	Institutional and organization	Industrial enterprises	Total
Fergana	26.24	8.25	3.79	38.28
Margilan and Tashlak	20.33	2.53	1.54	24.39
Districs	5.79		127.20	133.01
Total	**52.36**	**10.78**	**132.53**	**195.67**

42. As indicated in the table the amount of waste water from industrial enterprises is 132.53 m^3/day or 67.7% of the total volume of wastewater.

43. Three industrial enterprises (Fergana refinery, oil refinery and Altyaryk of Fergana "Nitrogen") discharge 121.3 m^3/day of wastewater, which makes 91.5% of the total volume of industrial waste water entering the municipal sewer.

44. The volume of waste water from the remaining 44 companies is insignificant and amounts to a total of 8.5% of all industrial wastewater.

45. The first stage of wastewater treatment plants of 150 m^3/day capacity was built in 1973 out of “Fergana Oil Refinery” funds.

46. Expansion of these facilities up to 260,000 m^3/day was done at the expense of Fergana "Nitrogen" in 1996. However the expansion works of these facilities have not been brought to fruition and a number of structures have not been built (aerobic stabilizer, concentration tank, chlorination room).

47. Discharge of industrial wastewater into the municipal sewerage system is carried out only after a preliminary treatment at local sewage treatment plants of these companies.

48. Specialized laboratory of Fergana Regional Vodokanal monitors content of pollutants in industrial wastewater discharged into municipal sewers every day.

49. In accordance with the resolution of the cabinet of ministers of Uzbekistan №11 of 3.02.10 Regulations for industrial waste water discharge and Procedure for calculation of compensation for excess discharges of pollutants into the municipal sewer networks of the cities and other settlements of the Republic of Uzbekistan were approved.

50. In accordance with these rules only industrial wastes which were treated at local sewage treatment facilities and were brought to the requirements of municipal environmental standards and do not cause malfunction of sewerage networks and treatment plans can be discharged to municipal sewerage.

51. Based on those rules Ferghana Region Vodokanal maintains municipal environmental standard for industrial wastes discharge into municipal sewers for every industrial enterprise and together with the Nature Conservation Committee monitors the concentration of pollutants in industrial wastewater, as well as implementation of all the necessary arrangements for the construction / reconstruction of local treatment facilities by these industries to ensure appropriate regulatory treatment of industrial wastewater.

52. Ferghana and Altyaryk oil-refineries and "Fergana Nitrogen" JSC have local treatment facilities to clean up industrial wastewater. Wastewater from these oil refineries are treated in sand traps (collectors), oil removers, skimmers, ponds of additional sludge. Wastewater treatment of "Fergana Nitrogen" is made at the stations of acidic and saline wastewater neutralization and at nitro and denitrification facilities. These companies obtained the approved Municipal Environmental Standards (MES) and concentration of sewage contamination of these industrial plants does not exceed the stipulated standards.

53. In this regard, the load of mixed contaminants from industrial and domestic wastewater entering the municipal sewage treatment plants does not exceed the approved standards. Table below indicated the quality of wastewater from two main industries. It is indicated that these wastewaters do not contain toxic industrial contaminants and heavy metals.

№	Index	Unit of measurement	Fergana and Altiaryk Oil-Refining Plants		"Fergana Azot" JSC	
			MES	Actual concentration	MES	Actual concentration
1	Suspended solids	mg/l	350.00	130.00	230.00	75.00
2	TBOD	mg/l	100.00	80.00	110.00	75.00
3	COD	mg/l	400.00	190.00	220.00	200.00
4	Ammonium nitrogen	mg/l	10.00	3.80	5.50	4.10
5	Nitrite nitrogen	mg/l	1.27	0.40	0.10	0.07
6	Азот нитратный	mg/l	25.00	2.70	8.0	4.70
7	Nitrate nitrogen	mg/l	2.50	0.26	0.70	0.10
8	Dry residue	mg/l	1,600.00	1,065.00	1,000	950.00
9	Chlorides	mg/l	338.00	125.00	80.00	55.00
10	Sulphate	mg/l	420.00	360.00	420.00	360.00
11	Sulphide	mg/l	1.50	NA	1.50	NA
12	Petroleum derivatives	mg/l	9.50	4.00	1.20	0.76
13	Iron	mg/l	2.67	0.75	0.50	0.38
14	Lead	mg/l	NA	NA	NA	NA
15	Copper	mg/l	1.00	0.003	0.10	0.003
16	Zinc	mg/l	NA	NA	NA	NA
17	Chromium+3	mg/l	NA	NA	NA	NA
18	Chromium+6	mg/l	NA	NA	NA	NA
19	Nickel	mg/l	NA	NA	NA	NA
20	Cadmium	mg/l	NA	NA	NA	NA
21	Manganese	mg/l	NA	NA	NA	NA

Source: Data is presented by Fergana Oblast Vodocanal (average 10 month 2011).
Analysis are carried out by Ferghana Region Vodokanal laboratory according to the schedule. For these three companies analyzes are done every day, for other industries once in 10 days.

54. Based on the rules if pollution load in industrial wastewater exceeds the standard, approved in MES, Nature Conservation Committee on Vodocanal information is to put penalties to industrial enterprises infringing the norms. Nonetheless, there has been no experience that industries disposed their waste water exceeding the MES. According to Vodocanal data excessive discharge did not take place in the year of 2011.

55. The main target of the project is to ensure the waste water treatment in project cities in accordance with regulatory requirements of Uzbekistan through complete reconstruction of the existing treatment facilities including the expansion of its capacity to 300,000 m^3/day.

56. Existing waste water treatment facilities were started to service in 1973. The current wastewater treatment methods (using mechanical and biological treatment) with activated sludge main process don't meet the effluent limit of the Republic of Uzbekistan.

57. The scope of supplies on reconstruction of facilities includes:

(i) Inlet chamber. Repair of the receiving chamber and the equipment of its new sluice gates;
(ii) Grating building. Repairs of building and installation of five new grids for detention and fragmentation of heavy wastes;
(iii) Distribution chamber. The installation of an additional four submersible sewage for the supply of flow to the treatment plant. The total number of pumps will be seven. To regulate the flow rate one of the pumps will be equipped with a frequency converter. The main pumping station will be decommissioned and will be used as warehouse;
(iv) Horizontal grit chambers. One horizontal sand trap of the three units will be reconstructed. The replacement of scraper mechanisms of removal of sand system, shield valves and pipe-lines is provided;
(v) Grit dewatering bay. Total reconstruction of the existing four areas;
(vi) Primary radial-flow settling tanks with pumping station of raw sludge.5 Of the available eight-radial settling tanks of 40 mØ will be reconstructed. In these settling tanks the replacement of scrapers, pipes and sluice gates is provided;
(vii) In a pumping station of raw sludge is provided the replacement of pumps for raw sludge and pumping pop substances;
(viii) Aerotanks. four of available seven in-line aerotanks are to be reconstructed. The replacement of the aeration system, sluice gates, pipe-lines and armature is provided;
(ix) Final radial settling tanks.8 of the current 10 radial settling tanks of 40 m Ø are to be reconstructed. The replacement of disposal tracks, pipe-lines and sluice gates is provided;
(x) Aerobic stabilizers. To stabilize the activated sludge and raw sludge the completion of two aerobic stabilizers and installation of aeration system, pipe-lines and locking armature is provided;
(xi) Disposal tracks. To gasket a stabilized mixture of activated sludge and raw sludge the completion of 2 disposal tracks 30 m is provided. The completion of the pumping station of sludge pumping is provided for supply of compacted sludge on sludge beds;
(xii) Sludge pumping station. The reconstruction of sludge pumping station and the replacement of mechanical and electrical equipment is provided for the supply of return activated sludge to aerotanks and extra sludge to aerobic stabilizers;
(xiii) Sludge beds. The reconstruction of the existing sludge beds is provided for drying of compressed sludge;

(xiv) Chlorination section. Chlorination section on liquid chlorine with capacity of 44 kg of chlorine per hour is to be built to disinfect wastewater. This room will be equipped with modern and protective equipment;

(xv) Blowing station. The reconstruction of the existing blower station with complete replacement of mechanical and electrical equipment is provided to supply air to aerotanks and aerobic stabilizers;

(xvi) Process communications and energy supply. The replacement of transformer substations, intrasite power transmission lines and industrial pipe-lines and locking armature is provided;

(xvii) Administrative and laboratory building. The repairs of building and maintenance of laboratory with equipment and furniture is provided;

(xviii) Accessory buildings and constructions. The repair and supplement of equipment to the mechanical repair shop, garage and warehouse, and construction of disinfestations post are provided.

III. DESCRIPTION OF THE ENVIRONMENT

A. Physical resources

58. Fergana region is located in the east of the Republic of Uzbekistan, in the southern part of the Ferghana Valley. Borders on the west - with Tajikistan, in the south with Kyrgyzstan, in the north - with Namangan and in the east - with the Andijan region. Total area of this province is 6,800 km^2 (1% of Uzbekistan area). Most of the provinces area is relatively flat area (79%) while the remaining 21% is foothills and mountains.

59. Fergana city is the provincial capital of Fergana province. Total area of Fergana city is 95 km^2 and the total population is 237,600 people as of year 2011.

B. Climate

60. The climate of the Fergana province is generally milder than the climate of the lower Syrdarya and Tashkent areas, which are exposed to harsher northern winds. The Fergana Valley is located on the leeward side of the Chatkal and Fergana Mountains, which creates a more stable weather pattern with less distinct drops in temperature during the winter periods. The western and central parts of the Fergana valley are dry, while the eastern part of the valley is slightly wetter with about 170 mm of annual rainfall. Annual average rainfall increases in the foothills and ranges from 270 mm to 447 mm. No specific evaporation figures are available, but a significant moisture deficit is evident during the summer period, which is hot and has maximum incoming radiation. The vegetative growth period for the Fergana province is 210–220 days.

61. July is the hottest month when average daily temperatures reach 35.1^oC while January is the coldest month when the average temperature drops to -2.6^oC. Wind speed is relatively stable throughout the year, but highest during the spring months from March to May. In the lower Fergana valley around Khodjent (formally called Leninabad) strong winds occur during spring time and create unfavorable climatic conditions. During that time of the year wind speeds may reach 30-35 m/s, which have the potential to dry and erode the surface layers of the soil and cause serious damage to young cotton and other plants by wind and soil blasting and exposing of the root systems. On average there are 42 windy days in the Fergana oblast and dust storms occur regularly during the spring. Dry hot winds (garmsel) often occurs in July, especially in the western part of the valley but is not as pronounced in the eastern areas of the province.

62. Fergana city is located in the southern part of Fergana Province in the foothills of Alay Mountains (at an altitude of 580 m). The climate in the region of the city is continental.

Average annual temperature is +13^{o} C. Average temperature of January, which is the coldest month, is -2.7^{o}C, and the warmest month is July with average temperatures of +26.4^{o}C, but maximum temperatures reaching +42^{o}C. Average annual precipitation is 192 mm, which mostly takes place during winter and spring seasons.

C. Topography and Soils

63. Fergana city is located in the southern part of the Olay mountains foothills. The Fergana valley has a long history of agriculture production, but it is primarily through irrigation. Most of the soil in the province is characterized by sierozem soils, light and typical sieriozem on the adyr and meadow-bogie at the Syrdarya province terrace. The plain is located on the proluvial-alluvial plain on the periphery of the outwash fans of the southern Fergana river and the plain is nearly level. The plain has formed on quaternary era deposits of gravel deposits varying from 6-22 m in thickness, which are covered by fine sandy loam and fine sands.

64. The province is categorized as a seismic area seven to eight on the richter scale and all structural and mechanical design specifications will take account of this.

D. Water Resources

65. The main waterway of Fergana Province is Syrdarya River, which is formed from the joining of Naryn and Karadrya rivers. Water in Syrdarya River is characterized by high turbidity levels (during high water flow season 5,300 g/m^3 and up 2000 g/m^3 in low flow season).

66. Other waterways include the rivers Isfarasoy, Shahimardan, Margilansay, Altiariqsay, Soh, and Quvasay and main irrigation canals include Big Fergana Canal and South-Fergana Canal.

67. Big Fergana canal is supplied by water from Karadarya River through Andijansay and Shahimardansay. Water from South-Fergana canal is almost exclusively used for irrigation purposes and during winter time the canal is shutdown for cleaning and repairing works.

68. Karkidan water reservoir is located 20 km east of Fergana city. This reservoir receives water from Karadarya River, Isfarasay, Shahirmardansay, and South Fergana Canal.

69. Ground water for Fergana is sourced from the Chimyon-Ayval aquifer, which is a quaternary deposition (more than 500 meter deep). The water for Fergana is taken from the upper and middle quaternary at a depth of approximately 300 meter. Water for Fergana city supply is mostly sourced through the Pakana-Lyagan well field, and only a few wells are located at Fergana city territory. The total confirmed amount of water, which can be sourced from the Pakana Lyagan aquifer, is 191,000 m^3/day.[1]

70. Discharge of inadequately treated sewage after WWTP is done to lower Kiziltepa reservoir passing close to WWTP.

71. This reservoir was built in the 1960s of last century and is designed to divert drainage water from Fergana, Margilan cities and north-western part of Tashlak rayon into North Baghdad sewer and then into the Syr Darya river. Lower Kiziltepa collector is part Achikul sewer collector network.

[1]In addition to supplying water to Fergana the Chimyon-Ayval aquifer also provides water for part of Margilan's water demand. See further in IEE for Margilan subproject.

72. The average annual water discharge in the reservoir is 1.0 m^3/sec. Along the banks of the reservoir abundant trees (mulberry, poplar, willow), and various shrubs and reeds can be seen. Frogs, snakehead, carps and catfish exist in the reservoir. In summer water from reservoir is used by farmers to irrigate cotton and fully taken (water does not reach the Syr Darya River).

73. Monitoring of water quality in the reservoir is done by the Goskompriroda Laboratory of Ferghana region once a month.

74. The table below presents the result water analysis of water sample taken from the receiving water body at the site before receiving water from treatment plant and the site after receiving discharge of treated waste waters taken in December 2011. The water sample was taken and analyzed by the Goskompriroda Laboratory of Fergana region.

№	Ingredient rates	Unit of measurement	Content in collector water	
			Before discharge	After discharge
1	Temperature	^oC	11.00	11.10
2	pH		7.40	7.20
3	COD	mg/l	10.00	14.0
4	Suspended solids	mg/l	11.00	13.00
5	Dry residue	mg/l	413.00	612.00
6	Sulfate	mg/l	96.00	130.00
7	Chlorides	mg/l	44.60	48.40
8	Ammonium nitrogen	mg/l	0.04	0.30
9	Nitrate	mg/l	2.00	2.80
10	Nitrite	mg/l	0.005	0.01
11	Phosphate	mg/l	0.02	0.16
12	Phenol	mg/l	отс	отс
13	Petroleum derivatives	mg/l	0.030	0.05
14	Iron	mg/l	0.030	0.04

75. Besides according to the outcome of the agreement reached between ADB consultants, experts of Goskompriroda and PMU, Goskompriroda Laboratory of Ferghana region carried out analyses on January 24–25, 2012 and submitted test results to TC consultants group. The specialists analyzed wastewater before treatment (at the entrance to WWTP), after treatment (downstream of WWTP) as well as the water of Lower Kiziltepa Reservoir before and after WWTP discharge.

76. Samples for analysis were collected at different times of day 7:30 a.m., 13:00 pm. and in 9:00 p.m. The results of these analyzes are presented below.

Sampling in 13:00 on January 24, 2012

№	Ingredient rates	Unit of measurement	WWTP		Lower Kiziltepa Reservoir	
			Before treatment	After treatment	Before WWTP discharge	After WWTP discharge
1	Smell	Point	5.00	1.00	0.00	0.00
2	Colour		Grey	Colorless	Colorless	Colorless
3	Temperature	^oC	17.00	18.00	11.00	15.00
4	Suspended solids	mg/l	115.60	32.00	15.00	20.00
5	pH		7.00	7.00	7.40	7.10

№	Ingredient rates	Unit of measurement	WWTP		Lower Kiziltepa Reservoir	
			Before treatment	After treatment	Before WWTP discharge	After WWTP discharge
6	Dry residue	mg/l	1,150.00	1,028.00	413.00	600.00
7	Iron	mg/l	0.028	0.02	0.02	0.02
8	Ammonium nitrogen	mg/l	1.08	0.82	0.04	0.30
9	Nitrite	mg/l	0.019	0.021	0.005	0.014
10	Nitrate	mg/l	1.00	0.66	2.00	2.60
11	Sulfate	mg/l	326.00	230.00	96.00	188.00
12	Chlorides	mg/l	67.00	57.00	44.60	50.00
13	Phosphate	mg/l	0.28	0.21	0.02	0.08
14	COD	mg/l	200.00	90.00	10.00	30.00
15	Petroleum derivatives	mg/l	0.60	0.40	NA	0.10
16	Phenol	mg/l	0.10	NA	NA	NA
17	Chromium	mg/l	NA	NA	NA	NA

Sampling in 21:00 on January 24, 2012

№	Ingredient rates	Unit of measurement	WWTP		Lower Kiziltepa Reservoir	
			Before treatment	After treatment	Before WWTP discharge	After WWTP discharge
1	Smell	point	5.00	1.00	0.00	0.00
2	Colour		Grey	Colorless	Colorless	Colorless
3	Temperature	^{o}C	17.00	18.00	12.00	15.00
4	Suspended solids	mg/l	115.00	38.00	14.00	23.00
5	pH		7.10	7.00	7.40	7.00
6	Dry residue	mg/l	1 120	980.00	420.00	610.00
7	Iron	mg/l	0.03	0.01	NA	NA
8	Ammonium nitrogen	mg/l	1.20	0.84	0.04	0.36
9	Nitrite	mg/l	0.021	0.023	0.005	0.013
10	Nitrate	mg/l	1.10	0.60	2.10	2.60
11	Sulfate	mg/l	360.00	235.00	95.00	142.00
12	Chlorides	mg/l	88.60	85.00	44.60	49.60
13	Phosphate	mg/l	0.28	0.21	0.02	0.16
14	COD	mg/l	198.00	70.00	10.00	28.00
15	Petroleum derivatives	mg/l	0.70	0.30	NA	0.10
16	Phenol	mg/l	0.10	NA	NA	NA
17	Chromium	mg/l	0.01	NA	NA	NA

Sampling in 7:30 on January 25, 2012

№	Ingredient rates	Unit of measurement	WWTP		Lower Kiziltepa Reservoir	
			Before treatment	After treatment	Before WWTP discharge	After WWTP discharge
1	Smell	point	5.00	1.00	0.00	0.00
2	Colour		Grey	Colorless	Colorless	Colorless
3	Temperature	^{o}C	17.00	18.00	10.00	10.00
4	Suspended solids	mg/l	112.00	35.00	11.00	21.00
5	pH		7.00	7.10	7.40	7.2

№	Ingredient rates	Unit of measurement	WWTP		Lower Kiziltepa Reservoir	
			Before treatment	After treatment	Before WWTP discharge	After WWTP discharge
6	Dry residue	mg/l	1 119	1,016.00	400.00	616.00
7	Iron	mg/l	0.028	0.016	0.03	0.048
8	Ammonium nitrogen	mg/l	1.06	0.94	0.04	0.36
9	Nitrite	mg/l	0.018	0.019	0.005	0.013
10	Nitrate	mg/l	1.00	0.70	2.00	2.68
11	Sulfate	mg/l	340.00	228.00	96.00	122.00
12	Chlorides	mg/l	81.60	85.00	44.00	55.00
13	Phosphate	mg/l	0.14	0.28	0.01	0.15
14	COD	mg/l	201.00	70.00	10.00	32.00
15	Petroleum derivatives	mg/l	0.6	0.3	NA	0.10
16	Phenol	mg/l	NA	NA	NA	NA
17	Chromium	mg/l	NA	NA	NA	NA

E. Ecological Resources

77. In the Fergana province 287 species of birds, 41 mammals, 30 fishes, 25 reptiles, and two amphibians have been recorded.

78. Particular wildlife of the region is very rich. In Syrdarya's tugays there are wild boars in foothills and Adyr areas – wolves, foxes, jackals, hares; in the swamp areas beavers and musk beaver are found. Birds include various transient European birds e.g. barn swallows, common mynah, pygmy cormorant, palm dove, sand martin, blue cheeked sunbird, grey heron, little ringed plover. Magpies, the common mynah and tree sparrows are commonly resident in the subproject area. Other birds which may be sited in the region of the subproject area include storks, ducks and the black cormorant. Fish commonly found in the Syrdarya River include: Cuprinus carpio, catfish, Schisothorax intermedius, white silver carp and the mottled silver carp.

79. There is little original vegetation left in the area, as it has been replaced by agricultural crops, e.g. cotton, wheat and maize or deciduous trees, e.g. poplars (Topil), plane trees (Cheenara), osier (Salix), apples, pear, peach, pomegranate (Punica), fig (Ficus carica), quince, cherry (Cerasus), Circassian walnut, plum (Prunus), almond (Amugdalus), tamarex, dzhida, yantak and Pecainam harmla. Mulberry trees and Tamrex are often planted along the drainage canals while salt tolerant grasses and sedges are found in the lower wetter areas.

80. There is no sensitive wild fauna or flora in the vicinity of the proposed construction sites. Thus, the proposed sewerage system construction works will not have any significant impact on flora and fauna of the Fergana province as they take place within already existing occupied and disturbed areas; e.g. on the city territory and along existing roads and structures.

F. Economic Development

81. There are approximately 42,000 organizations, enterprises and other economic entities conducting economic activity and the Fergana-Margilan area is one of the most industrialized regions on the Fergana Valley region. The most developed industries in the area are oil and gas, textile, chemical, silk production, energy sector, fat-and-oil industry as well as production of building materials.

82. The oil and gas industry includes Ferghana Oil-Processing Plant (FNPZ), which was established in 1958 and is one of the major enterprises for fuel and lubricants production in Central Asia. A refurbishment of the plant was concluded in 2000 with the help of Mitsui and Toyo Engineering to enable the plant of complying with new international standards for light oil and to improve environmental conditions at the plant.

83. The chemical industry includes Ferghana Plant of Chemical Fibers, which produces acetate threads and has a new production line for production of Polyamide-six cord fabric. Also included is Ferghana Chemicals Plant of Furane Compounds, which produces cotton cellulose of various grades which is widely applied in many branches of industry; OJSC “Kokand Superphosphate Plant”, which producing mineral fertilizers for agriculture as well as superphosphates; OJSC “Ferghanaazot”, which produces cellulose acetates is one of the largest producers of magnesium chromate defoliant and sodium chromate.

84. The textile industry sector includes “Daewoo-Ferghana-Textile”, which has capacity to produce 21 thousand tons of yarn and 12 million running meters of gray cloth per year.

85. The fruits and vegetables production sector includes nine fruits and vegetables processing enterprises: JV “Delkons”, Canning Factory “Uchkuprik Ros”, JV “MS Food Processing Co.”, JV “Shark Ne’matlari”, Kuva Canning Factory, JV “Mega Dry”, Wine-Producing Factory “T. Shodiev” and Wine-Vodka Producing Factory OJSC “Mastona”. These enterprises process around 14 million tons of fruit and vegetable products per year.

86. The machinery construction sector in the region includes Uzbek-British JV CJSC “Eurasia TAPO-Disk”, which produces wheel discs for cars. The enterprise is a supplier to GM Uzbekistan and AvtoVAZ.

87. Production of building materials includes Joint-Stock Company “Kvartz”, which is one of the leading enterprises in Central Asia producing glass jars, bottles, sheet glass; colored and tinted glass as well as glasses for automobile building industry.

1. Infrastructure

88. Fergana city consists of a mix of multi-storey commercial and housing units and individual houses. The city has several landscaped parks and is well planted with trees.

89. The city both has a centralized hot water supply, which is distributed from city- and district boiler-houses, and a centralized natural gas supply.

90. The sewage system of Fergana is a centralized collection and treatment systems. After collection in the in-city collection system the sewage is conveyed to the Fergana Municipal WWTP which is responsible for treatment of all sewage from Fergana and Margilan. Sewage collection, treatment, and disposal as well as collection of service fees are the responsibility of Fergana and Margilan cities vodokanal.

91. Monitoring of the quality of industrial wastewater discharged into municipal sewers is done by Fergana regional Vodocanal in accordance with the schedule approved by the Chief Engineer. Testing regularity depends on the wastewater volume discharged and the extent of the possible impact of industrial effluents on wastewater treatment plants performance. Analysis of industrial flows of the three major companies Fergana Oil Refining Plant, Altyaryk refinery and "Fergana Nitrogen" JSC is done on a daily basis, for other companies three times a month.

2. Transportation

92. There is a well-developed transport network in the region comprising 262 km of railways and 8200 km of roads. International charter flights go to Sharjah, Istanbul, Delhi, Karshi, Moscow cities from Fergana Airport.

3. Land use

93. Agrarian sector has significant importance to the region's economy and the favorable climatic conditions of Ferghana valley region have made its reputation of big harvests of fruits and vegetables with unique taste. The agricultural production of the Fergana region includes 280,000 tons of cotton, 650,000 tons of grain, 100,000 tons of potatoes, 310,000 tons of other vegetables, 24,000 tons melons and 44,000 tons of grapes, and 160,000 tons of other fruits. The livestock sector is also a prosperous one in the region and produces annually 75,000 tons of meat, 460,000 tons of milk, 110 million eggs, 630 tons of wool, and 2 million tons of silkworm cocoons.

G. Social and Cultural Resources

94. The Fergana province includes following 15 districts: Altyaryk, Akhunbabaev, Bagdad, Besharyk, Buvaydin, Dangarin, Kuvin, Rishtan, Sokh, Tashlak, Uzbekiston, Uchkuprik, Ferghana, Furkat, and Yazvin regions. Ferghana city is the administrative center of the province and other big cities include Kokand, Margilan and Kuvasay.

95. Fergana region's population is 3,000,000 people of which 72% reside in rural areas and 28% in cities population density reaches 425 people per km^2 and the residents include more than 60 different nationalities. The region's active labor resource comprised 1,700,000 people.

96. There are three higher educational institutions, nine academic lyceums, 108 vocational educational institutions and more than 900 general educational schools in the Fergana Region. In Fergana there are 69 kindergartens, 47 schools, 19 professional colleges, and six Academic Lyceum. The medical sector of Fergana includes 10 hospitals and 34 general medical clinics.

97. Fergana city houses a natural history museum and is famous for its beautiful trees, but apart from that, there are no historical sites or monuments of international or national significance.

IV. POTENTIAL ENVIRONMENTAL IMPACTS AND THEIR MITIGATION

98. Screening of potential issues, concerns and/or impacts relative to location, design, construction, and operation of this project was carried out following ADB's *Environmental Guidelines.*

99. Currently the discharge of insufficiently treated waste water of about 200 m^3/day from this plant has resulted a contamination of the Lower Kyzyltepa collector, that later falls into the Syrdarya River. The draft K2633-UZB of ADB and China Loan for SCO member states implementing in the project area envisage to extend water supply in Fergana and Margilan cities. After implementation of these projects in 2015 the volume of water supplied to Fergana and Margilan cities will be increase to 100 m^3/day. Consequently, the volume of wastewater entering the WWTP will also increase. The increase of additional wastewater volume would aggravate the ecological situation in the region.

A. Impacts and mitigations due to Location

100. Project civil works will be conducted at three sites:

(i) In urbanized territory of Ferghana city: rehabilitation of 11.7 km of sewer network;

(ii) In urbanized territory of Margilan city: construction of 4.8 km sewers and 3 waste water pumping stations;

(iii) In the undeveloped area 24 km away from Fergana city and 11 km from Margilan city major works will be carried out envisaged by the project: reconstruction and expansion of WWTP.

101. The site of WWTP has an area of 73 hectares, fenced with metal wall. There are no houses, schools or other educational institutions, hospitals, religious institutions and administrative buildings nearby WWTP.

102. The site selection was driven by the existing facilities and therefore, it is in accordance with local government land use planning. Both wastewater treatment facilities and three sewerage pumping station in Margilan city are located within existing dedicated area. Routes identified for the transmission of sewerage collectors and networks will mainly follow existing roads. Therefore, there is no environmental impact expected from the sitting of the project.

103. The main feature of most environmental aspects of any construction activities is an inevitable destruction of technological structure of nature systems and natural ingredients to some extent.

104. Impact during construction can be considered from environmental point of view as a type of industrial activity, followed by the specific environmental destructions. Rehabilitation and construction of the sewer collection system and wastewater treatment is in fact a method of environmental protection, but has little impact on environment during implementation, which leads to both positive and negative consequences. Production of inorganic dust and combustion in the construction and operation of vehicles produced in the period of work. Soil and vegetation are disturbed. But the impact for these components will be temporary on environment and will have a reversible effect.

105. All project components are located well clear of any forests or other environmentally sensitive areas; consequently, potential impacts on environmentally sensitive areas as well as cultural, historical, and religious sites have been avoided. Similarly, there will be no impact on cultural use of lands by minorities nor will there be impairment of aesthetics.

106. The project facilities will be designed and constructed to have no impact on the natural drainage pattern.

107. Access roads and power supply is already available to all the sites for project construction purposes and no significant impacts related to basic infrastructure is foreseen.

108. Land acquisition for sewerage treatment facilities, three sewerage pumping stations in Margilan city and sewage collection reservoir station in Fergana city is not required since all works will mainly take place within vodokanal areas. Rehabilitation or construction of pipelines will also have no impact on farm land as pipeline route have no affect on fertile farm field and pass along the road within government lands.

109. Thus, construction sites associated with the rehabilitation of sewage facilities will have a minor or minimal negative impact on the environment, which can easily be mitigated or eliminated by design within construction and operation stages.

B. Impacts and mitigations related to Design

110. The project design is basically the rehabilitation and upgrading of existing sewerage system. The consultant has developed a preliminary design that is based on the existing facilities, which is considered the most cost-efficient option of meeting the objectives of this project. While the volume of industrial waste water discharged into municipal sewers comes to 68%, the structure of wastewater entering the WWTP does not differ much from domestic sewage. As indicated in tables pages 21 and 41 the mixture of industrial and domestic waste waters do not contain heavy metals and other toxic substances. Even oil content in the incoming waste water is insignificant (0.6-0.7 mg/L) and this content can be reduced by biological treatment facilities to 90-95%, that is brought up to 0.05-0.07 mg/L, which is lower than the maximum permissible concentration. All organic and inorganic contamination of industrial and municipal wastewater mixture will be treated biologically activated sludge under aerobic conditions (aeration). Therefore the plants of completed biological treatment are enough to treat the mixture of industrial and domestic wastewater to the maximum permissible concentrations.

111. Surplus activated sludge and raw sludge after the aerobic stabilization and compaction will be directed to sludge beds for drying. The project provides for collection of drainage water from the sludge by means of perforated pipes laid in the bottom of the sludge beds and sending to the wastewater treatment plant for its cleaning. Given that there are no heavy metals and other toxic substances in waste water, these substances are missing in sewage sludge respectively. Sewage sludge is collected and used as organic fertilizer for cotton on nearby farms. Thus, the project provides for the measures to prevent environmental pollution.

112. A full range of biological treatment facilities is designed for this wastewater treatment plant. It is not expected to have big inputs of wastewater that contain significant amount of heavy metals and petroleum wastes. However, oil trap facilities will installed to ensure that oil wastes will not destruct the whole process adopted for this treatment plant.

113. Routing of sewers and networks is designed along existing roads and piping materials will be used with high-density polyethylene (HDPE) and polyvinylchloride (PVC) complying with international standards. Non-metallic pipes are characterized by long lasting durability and resistance to corrosion. Steel pipes and asbestos cement pipes will not be used for any purpose.

114. Due to high demand in disinfection chemicals the project provides waste water disinfection with liquid chlorine. The new methods of chlorine gas use are applied in this project and provide control over the content of chlorine in the air. In chlorination station is provided scrubber, reservoir for cancel solution, pumps, and gas emission pipe and gas analyzers for monitoring of air composition in storage of chlorine. In addition two independent ventilation systems were designed in chlorination station–continuously operating and emergency.

115. All STPs emit greenhouse gases as part of the operation, with the most serious one being methane, which is produced in the anaerobic sections of a STP. The design of the STP includes only aerobic unit processes and the direct greenhouse gas emission from the facility will therefore be minimized.

116. The risk of fire will be minimized by proper selection of fire-resistant or -retardant materials and an adequately designed power supply system that includes grounding of all sub-systems, appropriate insulation, and circuit breakers.

117. All structures in contact with the ground will be designed incorporating anti-corrosion measures for mitigation of negative impact on ground water and all structures will be designed to withstand seismic activity up to 9 on the richter scale.

118. Generally, all possible methods are applied to avoid future environmental damage in design basis but there is needed some consideration of other protection methods during detail design. At just as the current design, impacts on the environment are considered.

1. Environmental Impacts and mitigations during Construction

119. All the reconstruction works work will be carried out in accordance with construction regulations and norms of the Republic of Uzbekistan.

2. Environmental impact and mitigation during sewer networks construction stage

120. Activities during construction phase which could potentially result in environmental impacts are: project site cleaning and development, equipment and construction materials mobilization, pipelining, WDC construction services and reconstruction after construction works completion. Potential environmental impact at this stage is described below. Project site cleaning for construction of new facilities may result to minor solid waste. WDC will be constructed in the developed area. Although the pipeline network for both main trunk line and distribution line will pass along the roads. However project site clearing for rehabilitation work will generate waste from corrosive steel pipes. All corrosive steel pipes will be collected by contractor and sent to a local processing plant. The contractor will consult with the engineer and local residents regarding the temporary storage for corrosive steel pipes before sending them to a local processing plant. Location of temporary storage must be approved by the PIU and storage time should not exceed 3 days. Contractors will also consult with the engineer and local population regarding the acceptable method of soil conservation from earthworks.

121. Project site cleaning, equipment and building materials mobilization will increase the traffic of heavy trucks used by contractors and suppliers. To avoid and minimize traffic accidents and violations against the local population within the project site, contractors together with engineers will consult with local authorities to search an acceptable route for traffic expansion during equipment and construction materials transportation as well as an acceptable parking space. The routing should go to the maximum distance from schools, hospitals, markets and other social infrastructures of the community, and parking area should be located at least 100 meters away from the main infrastructure. If necessary the contractor and PIU will inform public through mass media about temporary roads blocking and possible detour. Temporary traffic lights at the crossroads where it will take a temporary detour will be installed and operated by the contractor under PIU supervision. Traffic police control will be strengthened in communities during rehabilitation/construction as well as adequate warning system will be on place.

122. Increased traffic will cause dust and other contaminants associated with construction activities in the project area. The Contractor must demand to reduce this impact. In addition to dust, movement and operation of construction equipment will be noise sources during construction (such as excavators, cranes, compressors, and other machinery). In order to minimize the effects of noise and violation construction works will take place from 7:00 a.m to 7:00 p.m in summer and from 9:00 a.m to 7:00 p.m in winter. If the project is located not far from schools, clinics, the contractor together with engineer should consult with local communities (mahalla).

123. The contractor under PIU engineer supervision must comply strictly with generally accepted health and safety standards. It is also recommended to place warning signs in conspicuous sites about project area, as well as its unsafe areas, which are not allowed for public. National environment protection, health and safety regulations must be met at all stages of construction in sub-project. Employees involved in the project should be aware of the standard environmental protection requirements and recommendations of PEO.

124. If during pipe-laying contractor discovers any material artifacts, the contractor must register and report the discovery of it to PIU which will coordinate the further steps with local authorities.

125. In addition to unused corrosion of steel pipelines the following different types of solid waste will appear in the project area, such as: wood, concrete, steel, thrown out old equipment, oil filters, plastic, packing boxes of equipment. The contractor is obliged to provide collecting containers and used oil collecting containers for onward transportation to the places specially designed for disposal of waste under Khokimiyat.

126. For oil waste due to vehicles maintenance in particular will be carried out exclusively in gas stations premises that are equipped with a place to store waste oil and other liquid contaminants. Equipment maintenance is prohibited in the project area, except when a workshop was established on the site and designed for collection and storage of waste oils and other liquid contaminants.

3. Environmental impact and mitigation during construction and rehabilitation of sewer treatment facilities

127. In order to implement project design for rehabilitation and construction of treatment facilities the following activities will be conducted:

(i) Emptying and cleaning of existing capacitive structures. Sediment and silt can be the main sources of soil and water contamination (surface and groundwater) to be removed during cleaning process works. To eliminate the adverse impact on environment removal of sand from sand traps, silt and sediment from the primary and secondary clarifiers and aeration tanks is designed as well as removal of sediment beyond the project site to specially reserved burial place - city landfill located near Margilan city (see Appendix 2);
(ii) Buildings and structures reconstruction, modern technological equipment.
(iii) During structures and buildings reconstruction works construction waste will be generated (concrete debris, brick fight, screed, tiles, rubble, glass);
(iv) All construction waste will be transported by special machinery to isolated space for burial (town dump located near Margilan city at a distance of 28 km from the sewage treatment facilities, see Appendix 2).

128. At the present time the problem of construction waste recycling is very crucial. The economy of this process is achieved by the fact that the materials do not need to be carried from their current location that means no loading, transporting and unloading cost. Alternatively, you cannot worry about the place for construction waste disposal at the site and the cost for it. For example, buyers of broken bricks, recycled rubble and other wastes can come to the site of building demolition by their own vehicle and take out everything they need.

129. Recycling of construction debris on site and its continued use will be also on place. For example possible production of appropriate backfill materials as well as refined scrap iron and therefore no need to carry and deliver it from another location.

130. During construction stage strict adherence to safety regulations monitoring of noise levels, dust, vibration impact is a must. During civil works it is necessary to provide containers for collection of garbage and wasted oil, followed by removal to specially designated burial sites and regeneration.

131. If it is required to deliver crushed stone, gravel, sand for construction works permission to use the sites and quarries must be obtained.

132. During construction stage transportation will be allocated strictly along the marked roads to avoid destruction of fertile soil layers.

133. It is necessary to arrange adequate sanitary conditions for construction workers and medical care. Site supervisors will produce daily rounds of construction sites in order to perform a visual inspection of environmental activities by builders (not causing harm to animals and plants, waste collection and oils in special containers, etc.).

4. Increased Traffic and Use of Machinery

134. Traffic of heavy trucks employed for the transportation of construction materials will increase temporarily during construction of the sub-project. At this designing phase it is difficult to calculate the required number of vehicles accurately. The consultants have made a tentative calculation of the necessary equipment based on the experience in implementing similar works in other cities. For rehabilitation of sewerage system in Fergana city about 10 dump trucks will be hired, in Margilan city - five dump trucks, for sewage treatment plants - about 15 dump trucks.

135. Ferghana and Margilan are large cities with heavy traffic and this small amount of additional equipment will not affect the traffic. WWTP are located in a separate enclosed area away from residential houses or office buildings.

5. Increased Noise Pollution

136. Other temporary environmental concerns, relate to the use of excavators, cranes, compressors, and other machineries during the construction works, will include (i) noise and dust from construction sites, and (ii) safety for workers and inhabitants. This technique which produces additional noise is assumed in Fergana city– five, in Margilan– three at WWTP up to 10 units. Ferghana and Margilan are large cities with heavy traffic and such a small amount of additional equipment will not affect overall noise level in the cities. WWTP are located in a separate enclosed area, away from residential houses or office buildings and additional noise generated during construction works will have no significant impact on population and will be temporary. Measures will be taken in accordance with the EMP to limit dust and noise levels and enforce strict observance of safety rules at main road crossings, along main roads, along the Makhalla streets and near sub-project construction sites. Temporary traffic lights at road crossings where sensible and temporary traffic diversions will be installed and implemented by the contractors, under the supervision of the PIU. Traffic police control will be intensified in Makhallas during the rehabilitation/construction period and adequate warning will be provided to enhance measures of prudence among school children. The contractor and the PIU will inform temporary road closings and traffic diversions to the public via media announcement.

a. Solid and Liquid Waste Management during implementation of project

137. Construction activities at sewage networks. During construction work period on the networks and the rehabilitation of pipelines construction wastes would be generated which require a strict system of collection, disposal and minimization.

138. The following wastes will appear during repair and rehabilitation works of sewerage networks:

(i) Wastes generated during collectors and networks dismantling (chunks of concrete, ceramics), which will be exported outside the city to specially reserved places city landfill located near Margilan city;

(ii) Wastes of mechanical cleaning of collectors from the sediments consisting of debris, mineral salts and organic substances to be removed and buried outside the city in a specially designated place.

139. Various types of solid waste such as wood, plastic, and cardboard from packaging equipment will exist at the sites. The measures to mitigate adverse environmental impacts include provision of containers for solid waste sorting. Cardboard boxes from equipment packing will be sold to the "Vtorutilsyrya" collection points, worked-out plastic to the nearby ventures of plastic processing.

140. Vehicles service will be done exclusively at gas filling stations, used oil and other liquid contaminants are to be stored in specially equipped places and exported for recovery to the nearest storage depot. Construction site after completion of civil works will be cleared of debris and landscaped.

141. During construction works at sewage waste water treatment facilities. In order to implement project design for rehabilitation and construction of treatment facilities the following activities will be conducted:

142. Emptying and cleaning of existing capacitive structures. Sediment and silt can be the main sources of soil and water contamination (surface and groundwater) to be removed during cleaning process works. To eliminate the adverse impact on environment removal of sand from sand traps, silt and sediment from the primary and secondary clarifiers and aeration tanks to sludge (drying) beds.

143. Building and structures rehabilitation, equipping with modern techniques During structures and buildings reconstruction works construction waste will be generated (concrete debris, brick fight, screed, tiles, rubble, glass).

144. All construction waste will be transported by special machinery to isolated space for burial (town dump located near Margilan city at a distance of 28 km from the sewage treatment facilities, see Appendix).

145. At the present time the problem of construction waste recycling is very crucial. The economy of this process is achieved by the fact that the materials do not need to be carried from their current location that means no loading, transporting and unloading cost. Alternatively, you can not worry about the place for construction waste disposal at the site and the cost for it. For example, buyers of broken bricks, recycled rubble and other wastes can come to the site of building demolition by their own vehicle and take out everything they need.

146. Recycling of construction debris on site and its continued use will be also on place. For example possible production of appropriate backfill materials as well as refined scrap iron and therefore no need to carry and deliver it from another location.

147. During construction stage strict adherence to safety regulations monitoring of noise levels, dust, vibration impact is a must. During civil works it is necessary to provide containers for collection of garbage and wasted oil, followed by removal to specially designated burial sites and regeneration.

b. Biological Environment

148. Run-off, if any, from construction sites into nearby water bodies will be controlled in accordance with the EMP so as to eliminate any detrimental effect downstream to aquatic flora and fauna. Impact on local flora and fauna will be minimal. Land clearing for sewer network improvement will avoid alignment that requires for any tree cutting.

149. For the WWTP, reconstruction works will be carried out alternately on each settler, and after putting it into operation, reconstruction of the next tank will start. In the same way all other facilities will be reconstructed. For this reason negative impact on biological environment to the reservoir will be kept to minimum and will not be increased significantly compared with the current status.

150. The rehabilitation of the sewerage system using appropriate piping and proper construction methods will assure that leakage to the groundwater is reduced to minimal levels. After completion of the project, effluent from the WWTP will be of much better quality conforming to government standards compared with the present poor quality, thereby minimizing the current negative impacts on the Syrdarya River and downstream dwellers.

c. Socio-Economic Environment

151. Only minimal impacts on land use are expected, since sites are typically located on lands not used for any other purpose or in built-up areas. However, the contractor will produce a plan showing the impacts of pipe-laying affecting some utilities and/or trees established within the road allowances, which will be coordinated and in conformance with the land and resettlement framework.

152. Any temporary loss of access to houses and business will as far as possible be mitigated by establishing temporary access routes to affected households and businesses, especially when risk of economical impact to businesses due to lack of access for customers is identified or foreseen.

153. The project activities will have no adverse environmental impacts and the minor impacts that will arise during especially the construction phase, and which will be mitigated by the EMP requirements, will not affect particular vulnerable groups disproportionately.

154. Impact to Physical Cultural Resources (PCR) is not foreseen, as the construction activities planned will take place on existing facilities or in build-up areas inside the Fergana and Margilan cities. However, the contractor will be required to establish a Chance-Find procedure, as part of the EMP, to be used in case PCR is found during excavations and other construction activities. The Chance-Find procedure shall include inclusion of relevant local historical and archeological experts to help determine procedure for securing and preserving any PCR objects found during the course of the construction activities.

155. This analysis shows that impact on environment associated with construction works for rehabilitating and improvement of the sewerage treatment plant is of temporary and

reversible nature. The proposed mitigation measures are quite feasible as reflected in the EMP.

C. Impacts during Operation

156. Based on the analysis carried out in IEE, the consultants believe that the operation of sewerage system will not produce any significant negative environmental impacts. Pumping equipment is sufficiently far from human habitation as not to cause any impacts due to noise and vibration. Existing 4 sewerage pumping stations in Margilan city are located far from dwelling area. Rehabilitation of 3 pumping stations provided by supply of complete pumping station, equipped with modern pumps which noise level is several times lower than existing ones. One sewerage pumping station (Mukimiy) will be put out of action and sewerage of the area will be achieved through the construction of gravity sewer Ø 300 mm length 1.5 km.

157. There are no threats of hazardous industrial waste/effluent discharge into the sewerage system. Three industrial companies (Fergana oil refinery, Altiarik oil refinery and JSC "Fergana Azot") discharge 121.3 thousand m^3/day of waste water, which is 91.5% of total amount of industrial waste water entering into municipal sewerage system. Waste water volume of the remaining 44 companies connected to municipal sewerage system is insignificant and come to 8.5% of all industrial waste water. In pursuance of Decree of Cabinet of Ministers of the Republic of Uzbekistan dated 3 February 2010 №11 "On additional measures to improve environmental performance in the communal utilities system" these companies have developed "Municipal environmental standard for discharge into the sewer" which is adjusted by Regional Committee for Nature Protection and approved by Fergana Vodokanal. The stated Municipal environmental standard provides rehabilitation of local treatment facilities of these companies in 2010-2012 to improve sewerage treatment and reduce the volume of industrial waste water discharged into municipal sewer. The Regional Committee for Nature Protection monitors the implementation of these measures. Regional Vodokanal has a laboratory which monitor quality of waste water treatment discharged into municipal sewers after companies local treatment facilities.

158. Sludge beds will be rehabilitated to avoid contamination of soil, ground water and receiving waters by leaching of sludge contained pollutants. The drainage system of the sludge drying beds will be designed to protect groundwater contamination from sludge leachate. Percolated piping system was used and located below the groundwater table which is only a few meters at the STP site.

159. On WWTP CBS the following sewage sludge are produced:

(i) Sand in sand traps;
(ii) Raw sludge in primary radial settling tanks;
(iii) The excess activated sludge from secondary clarifiers.

160. The following scheme of sludge treatment is envisaged by the project:

(i) The sand from sand traps is to be sent to drying on gravel site and then transported for disposal in landfills, located not far from Margilan city;
(ii) The crude residue of primary clarifiers along with excess activated sludge from secondary clarifiers is sent to an aerobic fermentation to stabilize under aerobic conditions. Once stabilized the mixture of sediments of 98% moisture content goes to concentration tank to seal it up to 94-96% moisture, after that the mixture of sediments is sent for drying to sludge beds. The dried sewage sludge is brought to a moisture content of 50-70% and then is used by farmers to fertilize cotton;

(iii) Sludge drying process in sludge beds is done due to filtration of spin-off water and evaporation;
(iv) Separated water is filtered through the drainage system and discharged to the inlet of treatment facilities for further treatment;
(v) Evaporation takes place under sun influence.

161. The operation of the proposed components is expected to result in significant benefits. The main benefit will be an improvement of water quality in Syrdarya River since the quality of waste water treatment in project area will be significantly improved and meet standards of Uzbekistan.

162. It's also expected to receive significant benefits in residential environments because 17,700 people in Fergana and 17,000 people in Margilan city could be connected to centralized sewerage systems through rehabilitation and new construction of sewer system

163. The following socio-economic benefits resulting from proper sewerage system will far outweigh any minimal adverse environmental impacts:

(i) Large portion of population in Fergana and Margilan cities will receive an adequate access to centralized sewerage system. Coverage of sewerage services at the end of project implementation will be 74% in Fergana city and 49% in Margilan city;
(ii) Sanitary-epidemiological situation in region will be improved; the level of public health will be increased significantly and will be shown in health indicating improvements because of better hygiene (e.g., reduced frequency of diarrhea and other water-borne diseases);
(iii) Reduced lost work days for adults (e.g., increased income), and lost school days for children (improved educational benefits) due to reduced incidences of diseases.

D. Environmental Management Plan

164. Table 1 of the EMP in Appendix 2 summarizes anticipated environmental impacts, mitigation measures, required environmental monitoring, activities to ensure implementation of mitigation measures, and identifies the entities responsible for carrying out those activities. The estimated costs for implementation of this EMP that are not already included in the subproject construction contract are also indicated.

165. It is important to reiterate that in addition to the recommended mitigation measures, regulations on environmental protection, safety, hygiene shall be fully complied with in all phases of the construction. Workers (primarily the on-site work supervisors) should be made aware of, and trained/guided in standard environmental protection requirements and the IEE recommendations

166. In the bidding and construction contract documents, bidders and contractors will be made responsible for ensuring that:

(i) Work activities are well organized and safely carried out;
(ii) Transportation companies involved in construction use only properly registered, safe vehicles; that all drivers must have current driving licenses; and that trucks are not overloaded;
(iii) Essential personal protective equipment is supplied to, and used by, all relevant staff;
(iv) Workers are properly trained and obey all relevant regulations on work safety and risk prevention;

(v) No transportation or heavy equipment movement, or mechanical digging is used at night in residential areas; and
(vi) No concrete mixers will be used anywhere near architecturally significant and religious sites or near schools during school times.

167. The contractors must adhere to the relevant regulations regarding Uzbekistan's standards, in particular the norms issued by the Goskomprirodafor the subproject after submission of the IEA and the ECA reports. These stipulations will include:

(i) Maximum allowed amount of air pollution;
(ii) Maximum allowed amount of water pollution;
(iii) Maximum allowed amount of wastes;
(iv) List of environmental actions which will be required to be followed by the subproject to meet existing regulations on impact on the environment.

V. INSTITUTIONAL REQUIREMENTS AND ENVIRONMENTAL MONITORING PLAN

A. Institutional Arrangements

168. The UCSA will be the executing agency (EA) of the project. PPMU has been established at the UCSA to manage and monitor all implementation activities of Tranches 1, 2, 3, and 4 projects. The PPMU will include environmental specialist and social specialist.

169. The environmental consultant in the PPMU will have responsibilities to implement overall EMP on-behalf of the PPMU and the EA. Specifically, her/his responsibilities are: (i) ensure that the detailed designed will incorporate all environmental concerns,(ii) is to ensure that all biding document will include environmental requirement as stated in the IEE and its EMP, the contract document will include the responsibility of contractors in implementing the EMP and the government requirement stated in the environmental clearance throughout the whole project cycle, (iii) coordinate the environmental consultant at the PIU level to undertake monitoring, and submit the field monitoring report to PPMU on time, (iv) ensure that the reporting of implementation of EMP and monitoring plan done and submit timely to ADB and other relevant government Agencies, and coordinate with the regional nature protection committee to involve them in monitoring the implementation of the EMP at least one per year, (v) act as the focal point to resolve any environmental complaint related with the project, and coordinate with the PIU staff to handle unforeseen environmental impacts.

170. Each PIU will be staffed by environmental consultant during the construction period to assist (i) the supervision consultant, and contractor in implementing EMP; (ii) reporting the result from monitoring the implementation of EMP during the construction period, and to resolve any unforeseen environmental problems rose during the construction, and (iii) advocate and receive any complaint from affected people.

171. The EA would establish the Environmental Monitoring Unit (EMU). The EMU will be headed by a qualified staff among those assigned full time (including project consultants) to the PPMU. At least one technical support staff and if possible one administrative staff will be assigned to the EMU. Relevant agencies (such as Goskompriroda, State Committee for Geology and Mineral resources of the Republic Uzbekistan (Goskomgeologiya), Center of Hydrometeorological Service under the Cabinet of Ministers of the Republic of Uzbekistan (Uzgidromet), Sanitary and Epidemiological Service (SES) of the Ministry of Health, and if possible and acceptable, NGOs will assign their representative to support EMU.

172. Project Management Consultant (PMC) provided during implementation should include Environmental Specialists (expatriate and local) who will impart expert advice and

guidance and conduct capacity building on environmental management and monitoring, particularly to the members of the EMU and Construction Supervisors.

173. The Environmental consultants at the PIU office will mainly responsible to guide and monitor the implementation of EMP and monitoring plan during the pre-construction and construction periods. Environmental monitoring during operation of water supply schemes will be largely the responsibility of the operation and maintenance staff attached to the local municipality (under oblast vodokanals) governed by Oblast Hokims with the technical support of UCSA. However the following agencies also have a role in regular monitoring of water quality:

(i) Goskompriroda that responsible for coordination all monitoring activity;
(ii) State Committee for Geology and Mineral Resources of the Republic of Uzbekistan (Goskomgeologiya), which is responsible for monitoring the quality of ground water sources;
(iii) Centre of Hydro-meteorological Service under the Cabinet of Ministers of the Republic of Uzbekistan (Uzgidromet), which is responsible for monitoring the state of the rivers, lakes, water reservoirs, pollution of atmospheric air, and land;
(iv) Ministry of Agriculture and Water Management, which monitors quality of collector-drainage waters (by 2 to 4 indicators of mineralization);
(v) SES of the Ministry of Health, which monitors water quality of water sources and water in pipelines from centralized drinking water intakes;
(vi) Wastewater quality monitored both by the vodokanal and the National Environment Protection Committee.

B. Grievance Redress Mechanism

174. As ADB require that all ADB funded project should have the grievance redress mechanism to receive and resolve affected people complaint related with the project. The mahalla and the vodokanal will become the receiver of complaints from affected people. The mahalla and vodokanal will inform PIU if there is any complaint received by them.

175. The PIU has to resolve the complaint within 15 days after receiving complaint. If within 15 days, complaint is not resolved or complainants not satisfied with the PIU. The complainants could go directly to the PPMU or the EA. The PPMU on behalf of the EA should resolve within 15 days after receiving the complaint. If it is not resolved, the complainants could go to the higher level government institution, or ADB Accountability Mechanism.

176. The environmental consultant from PPMU, and PIU, together with the staff from local vodokanal will conduct awareness campaign for people living around the project areas that there is a mechanism to solve their complaint, if any. If there is any complaint received by Mahalla or vodokanal, PIU will also inform ADB.

1. Environmental Monitoring Plan

177. Table 1 of the EMP in Appendix 2 summarizes anticipated environmental impacts, mitigation measures, required environmental monitoring, activities to ensure implementation of mitigation measures, and identifies the entities responsible for carrying out those activities.

2. Reporting of Environmental Monitoring Results

178. Environmental monitoring results and Monitoring the implementation of EMP will be documented and submitted by PPMU to ADB and other relevant Government Agency

annually. However, the quarterly project progress report, particularly during the construction period should include report on the progress of implementing EMP.

179. The environmental monitoring report will be use as a feedback to ensure that signs of adverse impacts are detected at the earliest possible time.

180. The format for the monthly and annual environmental monitoring report will be developed during project implementation by the consultant appointed for the Project Implementation Management.

3. Budget for Environmental Monitoring

181. The cost of environmental monitoring will be that required for the remuneration of staff involved in EMP activities and their traveling expenses as well as any direct cost for monitoring activities. If any NGO members are involved, they will be from the area and therefore, no cost for their involvement but voluntary participation is considered.

182. The nature of the projects and the project locations do not necessitate any specific measurements, such as noise level or quality of water in wastewater receiving water bodies, during the construction phase. However, if any unexpected impact arises, it is recommended that PPMU and PIU will take necessary actions.

183. It is estimated that the required investment for environmental management would be $400,000 for upgrading laboratory facilities for analysis of sewerage treatment quality (rehabilitation of building, laboratory equipment and furniture). Other costs for EMP implementation especially during the construction stage will be covered and included in civil work costs. Therefore, it is important to ensure that bidding document, contract document spell out this requirement and the IEE report including the EMP should be provided to the contractors.

VI. PUBLIC CONSULTATIONS AND INFORMATION DISCLOSURE

184. Invitation for public consultation was announced through Fargona hakikati and Margilon hakikati, and broadcasted on local regional television. The public consultation meeting was held on September 14–15, 2011 and discussions took place with representatives of government agencies and relevant community members and leaders including makhallas (neighborhood communities) of the project area (Appendix 1). It was held four public meetings, two in each city. Meetings were held in conference halls of Khokimiyats of Fergana and Margilan cities. 59 people in Fergana city and 60 people in Margilan took place at these meetings.

185. There was no concern with the potential impact related with project construction raised by the participants. Issues raised during the consultation briefly summarize below:

(i) Participants were concerned about rehabilitation of road after replacement of pipes;
(ii) People were interested in the planned capacity of STP and whether they would be sufficient taking into account population growth up to 2020;
(iii) Experts of Goskomprirodaof Fergana Oblast were offered close cooperation to Vodokanal and PIU for implementation of EMP;
(iv) Teacher of college has proposed to provide interaction and cooperation between Vodokanal and college to attract young specialist after graduation.
(v) Makhalla representatives proposed to involve local private companies for maintenance of sewerage networks;

(vi) There were also questions related to the amount of the loan and duration of civil works.

186. In addition the participants expressed their interest in project implementation and agreed that temporary environmental impact and inconvenience during project implementation are minor and population is ready to participate in project implementation.

VII. FINDINGS AND RECOMMENDATIONS

187. This IEE shows that the rehabilitation of sewerage system in Fergana and Margilan cities is unlikely to cause significant adverse impacts on the environment. The environmental impacts mostly occur during construction phase, and the impact is temporary, and reversible.

188. The proposed mitigation measures are manageable, and can be implemented without difficulty through proper engineering design and incorporation or application of recommended mitigation measures and procedures at all stages in accordance with the EMP.

189. The requirement for contractor to implement EMP will be described and included in the bidding and contract document.

190. The current implementation arrangement for Tranche 1, Tranche 2, and Tranche 3 with full time environmental consultant at the PPMU, and intermittent consultant at the PIUs during the construction stage will be able to ensure that EMP will be implemented, monitored, and reported. For the Grievance Redress Mechanism, the environmental consultant at the PIUs will take role as the receiver of complaint, and the environmental consultant at the PPMU level will become the key person in resolving the complaint related with environmental concerns.

191. It is recommended to review the EMP and revise if needed after completing the detailed designed. All the necessary government's clearances and permits, aside from environmental clearance that has been granted, should be obtained after the completion of the detailed design.

VIII. CONCLUSIONS

192. The IEE finding shows that there is no expected impact related with the location of the project components. The environmental impacts will mostly occurred during the construction stage, and the impacts are temporary and reversible, and can be mitigated by adopting very manageable measures that well reflected in the environmental management plan. All required monitoring works have been prepared. Therefore, no further environmental impact assessment study is required.

RAPID ENVIRONMENTAL ASSESSMENT (REA)
CHECKLIST SEWERAGE SYSTEM

Instructions:

This checklist is to be prepared to support the environmental classification of a project. It is to be attached to the environmental categorization form that is to be prepared and submitted to the Chief Compliance Officer of the Regional and Sustainable Development Department.

This checklist is to be completed with the assistance of an Environment Specialist in a Regional Department.

This checklist focuses on environmental issues and concerns. To ensure that social dimensions are adequately considered, refer also to ADB checklists and handbooks on (i) involuntary resettlement, (ii) indigenous peoples planning, (iii) poverty reduction, (iv) participation, and (v) gender and development.

Answer the questions assuming the "without mitigation" case. The purpose is to identify potential impacts. Use the "remarks" section to discuss any anticipated mitigation measures.

Country/Project Title : **Uzbekistan: Water Supply and Sanitation Services. Tranche 4**

Sector Division : **Rehabilitation of sewerage system in Fergana and Margilan cities**

Date Conducted : 24 September 2011

Environmental specialist: Kyeong Jin Chung, Larisa Frank,

SCREENING QUESTIONS	Yes	No	REMARKS
A. Project Siting Is the project area …			
Densely populated?	■	☐	STP is not located within densely populated area, but work on network improvement will take place within the city. Impacts will be temporarily and can easily be mitigated through EMP requirements
Heavy with development activities?	☐	■	
Adjacent to or within any environmentally sensitive areas?	☐	■	
Cultural heritage site	☐	■	
Protected Area	☐	■	
Wetland	☐	■	
Mangrove	☐	■	
Estuarine	☐	■	

SCREENING QUESTIONS	Yes	No	REMARKS
Buffer zone of protected area	☐	■	
Special area for protecting biodiversity	☐	■	
Bay	☐	■	
B. Potential Environmental Impacts Will the Project cause ……			
impairment of historical/cultural monuments/areas and loss/damage to these sites?	☐	■	
interference with other utilities and blocking of access to buildings; nuisance to neighboring areas due to noise, smell, and influx of insects, rodents, etc.?	■	☐	Temporarily during construction work, but will easily be mitigated through EMP requirements. After completion there will be no negative impact.
dislocation or involuntary resettlement of people	☐	■	
impairment of downstream water quality due to inadequate sewage treatment or release of untreated sewage?	☐	■	Current situation will be improved during STP rehabilitation and waste water emissions will be in accordance with national standards.
overflows and flooding of neighboring properties with raw sewage?	☐	■	
environmental pollution due to inadequate sludge disposal or industrial waste discharges illegally disposed in sewers?	☐	■	
Noise and vibration due to construction?	■	☐	Temporarily during construction work, but will easily be mitigated through EMP requirements
discharge of hazardous materials into sewers, resulting in damage to sewer system and danger to workers?	☐	■	
inadequate buffer zone around pumping and treatment plants to alleviate noise and other possible nuisances and protect facilities?	☐	■	
social conflicts between construction workers from other areas and community workers?	☐	■	
road blocking and temporary flooding due to land excavation during the rainy season?	☐	■	
noise and dust from construction activities?	■	☐	Temporarily during construction work, but will easily be mitigated through EMP requirements
traffic disturbances due to construction material transport and wastes?	■	☐	Temporarily during construction work, but will easily be mitigated through EMP requirements
temporary silt runoff due to construction?	☐	■	

SCREENING QUESTIONS	Yes	No	REMARKS
hazards to public health due to overflow flooding, and groundwater pollution due to failure of sewerage system?	☐	■	
deterioration of water quality due to inadequate sludge disposal or direct discharge of untreated sewage water	☐	■	
contamination of surface and ground waters due to sludge disposal on land?	☐	■	Sludge beds and drainage system will be rehabilitated and sludge bed leschate will be collected and treated in main sewage treatment process in accordance with national law «On water and water use » (6 May, 1993). Therefore we estimate that contamination of surface and ground waters due to sludge disposal could not be occurred
health and safety hazards to workers from toxic gases and hazardous materials which may be contained in sewage flow and exposure to pathogens in sewage and sludge?	■	☐	All facilities will be designed taking into account mitigation of potential adverse impact. Workers will have regular training on working with hazardous and harmful materials including chlorine, as well as training on health security. All employees will be provided with all necessary equipment for personal protection.

ENVIRONMENTAL MANAGEMENT PLAN FOR RECONSTRUCTION OF SEWERAGE SYSTEM OF CITIES FERGANA AND MARGILAN

Table A2.1: Environmental Management Plan

Items of activity	Potential Environmental Impacts	Proposed Mitigation Measures	Responsible Entities	Cost Estimation ($)
Pre-construction Project Stage				
Accidents during operations	Risk of accidents after completion causing damage of pipelines and further flooding if the area by wastewater due to inadequate designs	• Estimation of capacity and slope of pipelines should be prepared in accordance with Uzbekistan norms; • Design structures to withstand seismic forces in accordance with Uzbek Construction Norms and Regulations (CNR) 2.01.03-96 “Civil Works within seismic areas”; • Ensure unhindered access to the facilities and availability of roads to them in case of emergencies.	Consultants • provide conceptual design incorporating mitigation measures;; Design-build contractors, if any, • provide detail design incorporating mitigation measures; PIU • reviews conceptual and detail designs for compliance with mitigation measures	Cost of consultants covered in the project budgets. Required measures will be items included in costing of the construction budget.
Leaks from sewerage network.	Environmental pollution	• Pipes used in the sewerage network should be corrosion-proof and have a long service life.	Consultants • provide conceptual design incorporating mitigation measures; Design-build contractors, if any, • provide detail design incorporating mitigation measures; PIU • reviews conceptual and detail designs for compliance with mitigation measures	Cost of consultants covered in the project budgets. Required structures will be items included in costing of the construction budget.
STP operations causing raw sewage leaks	Environmental pollution (contamination of ground and surface water, soil)	• Include settling ponds for filter backwash and sludge from clarifiers in design to avoid washing out contaminants during maintenance of plant. • Include back-up power supply to run equipment during power failures in design. Provide observation wells and monitor groundwater quality at STP	Consultants • provide conceptual design incorporating mitigation measures; Design-build contractors, if any, • provide detail design incorporating mitigation measures; • PIU reviews conceptual and detail designs for compliance with mitigation measures	Cost of consultants covered in the project budgets. Required structures will be items included in costing of the construction budget.

Items of activity	Potential Environmental Impacts	Proposed Mitigation Measures	Responsible Entities	Cost Estimation ($)
Pipe-laying for new extensions	No expected resettlement, but if it becomes relevant, the land acquisition and resettlement framework (LARF) will be reviewed and amended as necessary to ensure no adverse environmental impact from resettlement.	• Resettlement is addressed in the land acquisition and resettlement framework (LARF) • Review LARF (if any) to ensure environmental aspects of resettlement are considered and addressed.	• Monitoring of implementation of LARF by PIU, EMU Consultants; • Review of PPMU progress Reports By PIU and LARF Committee	in this phase of extension of sewerage networks are no re-settlement cost.
Location of Hazardous Materials (Haz-Mat) storage and of noisy equipment and operations.	Health hazard and nuisance to people living in proximity to facilities and to workers on the site.	• Design layout of facilities, which includes ample buffer distance (as per Uzbek CNR) to households living in close proximity to facilities and to worker facilities. • Include acoustic assessments to determine if noise mitigation at source (noise barriers) is required to prevent nuisance to nearby households or the workers on the facilities. • If predicted noise level at neighboring households is expected to exceed ADB/IFC guidelines include acoustic barriers in design. • Include vibration from equipment, which is part of the network, in acoustic assessments.	Consultants • provide conceptual design incorporating mitigation measures; Design-build contractors, if any, • provide detail design incorporating mitigation measures; PIU • reviews conceptual and detail designs for compliance with mitigation measures	Cost of consultants covered in the project budgets. Required structures will be items included in costing of the construction budget.
Effluent disinfection by chlorine gas at STP.	Impacts on workers health and surrounding environment during operations.	• Design chlorination facilities with equipment and facilities to ensure the protection of environment and workers • For safe handling of chlorination, following design features should be considered as a minimum: - Separate room for chlorination equipment will be provided. The room will be located in view of prevailing wind direction. - The room will be equipped with inlet exhaust ventilation providing necessary exchange of air. The fan will discharge the air to the outside of the	Consultants • provide conceptual design incorporating mitigation measures; Design-build contractors, if any, • provide detail design incorporating mitigation measures; PIU • reviews conceptual and detail designs for compliance with mitigation measures	Cost of consultants covered in the project budgets. Required structures will be items included in costing of the construction budget.

Items of activity	Potential Environmental Impacts	Proposed Mitigation Measures	Responsible Entities	Cost Estimation ($)
		building and will not be connected to other exhaust system. - The room will have shatter-resistant inspection window mounted in the door or exterior wall. - The room will have locks so that it can be kept inaccessible to staff other than the operator of the equipment. The room door will open outward for easy exit in case of emergency. - Separate light and fan switches will be provided outside the room. - The room floor will have a non-slip surface and floor drains for spilled liquid. - A safety shower and eyewash will be provided near the chlorination room entrance. - The chlorination room will have continuous leak detection equipment with sound and visual warnings.		
Inadequate implementation of environmental requirements by contractor	Environmental pollution.	• Review of bidding and contract documents, to ensure sufficient leverage to facilitate compliance with specific contractual requirement, e.g. withholding of payment or penalty clauses, to ensure contractors' implementation of environmental mitigation measures. • Contracts to require contractor to have designated staff to oversee environmental issues and mitigation. • Contracts to include the requirement for the contractor to provide environmental induction training to all staff.	Consultants • Review bidding and contract documents to ensure leverage options.	Cost of consultants covered in the project budgets Contractors' cost should be covered by contract sum, as it will be part of the contract requirements to follow EMP requirement.

Items of activity	Potential Environmental Impacts	Proposed Mitigation Measures	Responsible Entities	Cost Estimation ($)
Construction Project Stage				
Contractor or workers not following contractual environmental requirements	Environmental pollution.	• Monitor for contractors compliance with EMP requirements;	Technical Supervisor at site • ensures compliance with EMP PIU • ensure monitoring of environmental requirements – by delegation to Environmental Specialist /Environment Focal Point of the PIU PIU-Environment Focal Point • monitors contractor's compliance with all provisions of the EMP.	Cost of construction supervision included elsewhere in project budget.
Machines, equipment, and vehicles used for construction and transport	Emissions from construction equipment exhaust; Dust from vehicles, land clearing, grading, excavation, etc; Noise and vibration from transport vehicles	• Excavated or stockpiled soil and sand shall be watered before loading, if there is a risk of dust generation, e.g. if it is fine materials or under windy conditions. • Access roads passing through inhabited communities shall be watered to limit dust nuisance to roadside dwellings and mitigate road safety during transport of construction materials and equipment. • Soil, sand and other construction materials on transport vehicles shall be covered. • Speeds of such vehicles shall be limited, particularly on unpaved areas. • All heavy equipment and machinery shall be fitted in full compliance with the national (SNPC) and local regulations with regards to emissions and noise. • Fuel-efficient and well-maintained haulage trucks shall be employed to minimize exhaust emissions. • Smoke-belching vehicles and	Construction technical Supervisor • ensures compliance with EMP • visually inspects safety equipment use, observes vehicle noise levels, etc., • check trucks entering site to assess emissions and licensing; etc PIU-Environment Focal Point • monitors contractor's compliance with all provisions of the EMP	Contractor's additional activities for EMP implementation already included in budget; Cost of supervision included in project cost estimate Cost of PIU supervision included elsewhere in project budget.

Items of activity	Potential Environmental Impacts	Proposed Mitigation Measures	Responsible Entities	Cost Estimation ($)
		equipment shall not be allowed and shall be removed from the project sites. • Develop Traffic Management Plan to mitigate impact on local traffic conditions during construction. • Confine heavy construction related traffic to the least sensitive access roads to the construction sites to avoid accidents and nuisance to dwellers along the road and other road users ; • Require the owners of the transport vehicles to only use properly registered and well-maintained vehicles with mufflers to mitigate noise and emissions; • All vehicles shall be well-maintained and fitted in full compliance with the national (SNPC) and local regulations. • As a rule, the operation of heavy equipment shall be conducted in the time span 7am-7pm only unless otherwise agreed with local residents. • During nighttime (10pm to 7am) noise impact on sensitive areas, such as residential areas or hospitals shall not be more than 3dB above background noise levels, as measured at the nearest sensitive receiver (Leq15minutes) two weeks prior to the commencement of works. • Construction equipment, which generates excessive noise, such as compressors, jackhammers shall be enclosed to prevent noise nuisance. • Near sensitive locations, e.g.		

Items of activity	Potential Environmental Impacts	Proposed Mitigation Measures	Responsible Entities	Cost Estimation ($)
		hospitals, schools, mosques, and schools, discuss and agree with the PIU – Environment Focal Point and the principals of the facilities the agreed time for operating noisy machinery. • Minimize transportation during high traffic periods (e.g., when students are entering or leaving school) to minimize potential traffic accidents		
Site preparation	Erosion from site clearing, grading and excavation resulting in sedimentation of water bodies;	• Preserve existing ground cover wherever possible, and provide approved ground cover where necessary; • Use appropriate stabilizing techniques to prevent cave-ins or landslides in excavated areas. • Constructing buildings and facilities following the land protection activities stipulated in CNR 3.01.01-97 and CNR 3.05.03-97. • If construction needs to take place during periods with expected rain, additional plan how to mitigate erosion and sedimentation must be agreed with PIU–Environment Focal Point prior to the work commences.	Specialist of technical inspection • ensures compliance with EMP PIU-Environment Focal Point • monitors contractor's compliance with all provisions of the EMP	Contractor's additional activities for EMP implementation already included in budget; Cost of PIU supervision included elsewhere in project budget.
Revegetation and landscaping	Erosion and sedimentation to water bodies, due to excessive clearing of vegetation or extended periods without vegetation.	• Prior to any clearing of vegetation, make a species inventory of the area to be cleared. Use vegetation inventory to identify appropriate local plant species to be used for revegetation. • Avoid tree removal unless justified on engineering, safety, and environmental grounds. • Store topsoil separately from other soil and re-use for revegetation upon completion of works. • Monitor revegetation regularly, especially during initial growth to ensure	Construction technical Supervisor • ensures compliance with EMP PIU-Environment Focal Point • monitors contractor's compliance with all provisions of the EMP	Expected that site cleaning, restoration and revegetation is included in contract estimate of the contract budget Cost of PIU supervision included elsewhere in project budget.

Items of activity	Potential Environmental Impacts	Proposed Mitigation Measures	Responsible Entities	Cost Estimation ($)
		stable growth and lasting groundcover • After civil work to create greenbelt of trees and shrubs on perimeter of STP to ensure esthetics of the area for adjacent residents.		
Excavation for pipe-laying; Road use for transport of material and equipment	Damages to utilities by excavation; Temporary access cut-off to properties; Current access roads in poor condition may become worse due to construction vehicles.	• Require contractors to carry out a utility survey before construction and take action during construction to minimize impact on utilities and attend to any damage; • Provide temporary access during construction, if required; • Contractor and PIU to ensure that coordination meetings are held and agreement has been obtained from Hokimiyat; prior to any construction beginning on the site • Obtain permission for road use from relevant authorities and agreement to repair damages immediately after construction.	Construction technical Supervisor • coordinates with PIU and relevant authorities and agencies. • receives and records public complaints and resolves them PIU-Environment Focal Point • monitors contractor's complaint resolution procedures and compliance with all provisions of the EMP	Contractor's additional activities for EMP implementation already included in budget; Cost of supervision included in contract cost estimate of the contract budget Cost of PIU supervision included elsewhere in project budget.
Wastewater generated at construction site	Site rainwater runoff can wash away residues, garbage, leaves, grease, etc., thereby potentially polluting nearby surface water	• Store all liquid/solid waste properly above ground to avoid spills/ leaks; • Store Haz-Mat, e.g. fuels, chemicals, and hazardous waste, in bunded areas to avoid leaks escaping to the ground or nearby surface waters. Provide ample natural ventilation • Develop spill response procedures and provide spill response kits at all Haz-Mat storage areas and work sites.	Contractor's Site Supervisor • ensures compliance with EMP • periodic visual observation of run-off from construction sites PIU-Environment Focal Point • monitors contractor's compliance with all provisions of the EMP	Contractor's additional activities for EMP implementation already included in budget; Cost of supervision included in cost estimate of the contract budget Cost of PIU supervision included elsewhere in project budget.
Solid Waste generated by construction activities	Construction materials (wood, steel bar, cement, etc.), paper, packing, domestic/human waste from work sites causing environmental pollution and adverse aesthetic impact	• Prior to start of construction, develop an inventory of waste fractions expected to be generated during construction for approval of disposal routes and sites by Hokimiyat and SES • Provide refuse collection containers and used oil collection containers at all construction sites and labor camps. • Sell paper, resin, iron, and steel and	Technical Supervisor for construction process • monitors waste stream to ensure maximum recycling. • Ensures proper disposal PIU-Environment Focal Point • monitors contractor's compliance with all provisions	Contractors' cost included elsewhere in contract cost. Cost of PIU supervision included elsewhere in project budget.

Items of activity	Potential Environmental Impacts	Proposed Mitigation Measures	Responsible Entities	Cost Estimation ($)
		other recyclable waste fractions to other enterprises for recycling. • Dispose inorganic solid waste (concrete, bricks, etc.) properly after approval by Hokimiyat and SES. • After completion of civil works, collect all garbage and waste construction materials from the sites, and dispose in specially designated places agreed by the SES	of the EMP	
Nuisance from Construction - complaints	Nuisance and impacts from the construction activities to neighboring activities and households.	• Include in contract clauses to reflect this, including the contractor's responsibility to mitigate nuisances, noise, vibration, and dust impacts and other nuisances to neighbors. • Ensure that contractor incorporates good construction management practices • Ensure that contractor liaises with local community on approach to mitigation. • Clarify by signboards on construction sites and/or stickers on equipment outlining how affected parties can lodge complaints. • Ensure that contractor records complaints, response and resolution monitoring and includes complaints registration in regular progress reports.	Construction Technical Supervisor • ensures good construction management PIU-Environment Focal Point • monitors contractor's compliance with all provisions of the EMP	No additional cost, for contract. Monitoring cost already in project budget Cost of PIU supervision included elsewhere in project budget.
Use of local labor and from outside areas	Inadequate working and living facilities for workers	• Construction sites − Provide adequate sanitary facilities, potable water supply, waste collection, portable/temporary toilets etc. on-site during construction. • Labor camps, if any − Provide adequate sanitary facilities, potable water supply, waste collection, etc. − Test potable water supplies per Uzbek regulation − Ensure that locations of all labor camps are approved by PIU -	Technical Supervisor for construction process • ensures good construction management • ensures adequate sanitary conditions for workers PIU-Environment Focal Point • monitors contractor's compliance with all provisions of the EMP	Cost is included in the labor cost of the construction budget Cost of PIU supervision included elsewhere in project budget.

Items of activity	Potential Environmental Impacts	Proposed Mitigation Measures	Responsible Entities	Cost Estimation ($)
		Environment Focal Point and Hokimiyat; • Maximize use of local labor to minimize the need for temporary camps, and also to ensure socioeconomic benefit for the local population.		
Use of labor from outside areas	Non-local construction crews may generate increased demand for camp followers, illegal drugs, gambling, etc.	• Maximize use of local laborers who will live at home during construction.	Technical Supervisor for construction process • ensures use of local labor PIU-Environment Focal Point • monitors contractor's compliance with all provisions of the EMP	No cost involved
Workers' Safety	Inadequate safety during work	• Contractor shall be required to use appropriate stabilizing techniques during excavations, especially during excavations for trenches to avoid cave-ins. • Educate and train workers on regulations on work safety and risk prevention and to obey them • Workers exposed to noise impact greater than 85 Db(A) shall wear hearing protection. • Contractor shall make available all Personal Protection Equipment needed for workers, e.g. safety shoes, hard hats, safety glasses, and hearing protection • Asbestos cement pipe provisions detailed under pre-construction project stage	Technical Supervisor for construction process • ensures safe trenching methods • ensures workers' safety • ensure compliance with asbestos cement handling requirements PIU-Environment Focal Point • monitors contractor's compliance with all provisions of the EMP	Cost of supervision included in cost estimate of the contract budget Cost of PIU supervision included elsewhere in project budget.
Physical Cultural resources	Disturbance to PCR	• Any known PCR shall be identified and marked prior to construction, in consultation with local expert prior to commencement of construction. • A chance find procedure shall be in place prior to construction start and workers and site supervisors shall be familiarized with the procedure.	Consultants • Develops Chance Find Procedure. Construction technical Supervisor • Ensures compliance with Chance Find Procedure during construction PIU-Environment Focal Point	Cost of consultants covered in the project budgets Cost of supervision included in cost estimate of the contract budget Cost of PIU supervision included elsewhere in project budget.

Items of activity	Potential Environmental Impacts	Proposed Mitigation Measures	Responsible Entities	Cost Estimation ($)
		• In case suspected PCR is found during construction appropriate local expert shall be consulted prior to advise on protective measures prior to continuation of the work.	• monitors contractor's compliance with all provisions of the EMP	
& Maintenance Project Stage				
Toxic material released to environment	Damage to the environment and to people handling Haz-Mat, e.g. chlorine.	• Store all Haz-Mat in accordance with rules of storage of these substances. • Develop spill response procedures and provide spill response kits at all Haz-Mat storage areas. • Include routine training in proper handling of chlorine and other Haz-Mat in the O&M staff training, which covers the full range of technical and management skills required to safely operate the STP; • Regularly inspect all chlorine dosing equipment, storage facilities and safety equipment. • Monitor all chlorine storage and dosing equipment and storage facilities for chlorine leaks.	Vodokanal plant manager • ensures safe Haz-Mat handling and storage • develops spill response procedure and provides spill response kits • ensures that O&M staff receives training in chlorination safety procedures from PIA PIU-Environment Focal Point • monitors plant manager's compliance with all provisions of the EMP	Operational cost and training cost included in annual recurrent budget of PIA; After rehabilitation for initial training of O&M staff appropriate expenditures included in project cost.
Sludge handling at the STP	Unsafe disposal of sediments and sludge from STP into water ways or the environment	• Solid wastes that are captured in the screen must be treated and disposed in specially designated areas agreed by the SES and Hokimiyat; • Sand captured by the sand trap must be treated and disposed in a safe site agreed by the SES and Hokimiyat; • Sediment processed in sludge drying bed can be used for fertilizing agricultural land, if analysis of samples confirm non-presence of toxic substances and as per Uzbek regulation. • If analysis show toxic contents making it unsuited for fertilizing agricultural land, alternative disposal sites needs to be identified by agreement with Hokimiyat and SES.	Vodokanal plant manager • ensures safe capture of waste water, sand, and sludge disposal • ensures that O&M staff receives training in sludge handling procedures from PIA PIU-Environment Focal Point • monitors plant manager's compliance with all provisions of the EMP	Cost included in the annual recurrent budget of the implementing agency (Vodokanal) Rehabilitation of the laboratory including purchasing of new laboratory equipment for the STP at $400,000 included in project cost.

Items of activity	Potential Environmental Impacts	Proposed Mitigation Measures	Responsible Entities	Cost Estimation ($)
Effluent discharge from the STP	Contamination of water resources	• Ensure effluent quality complies with national standards.	Vodokanal plant manager • ensures efficient operation of facilities that the effluent quality will be in compliance with standards of the State Nature Protection Committee PIU-Environment Focal Point • monitors plant manager's compliance with all provisions of the EMP	Effluent quality monitoring cost included in budget of operating agency; Rehabilitation of the laboratory including purchasing of new laboratory equipment for the STP at $400,000 included in project cost.
Accidents	Risks to workers and facilities due to hazards related to fire and other disasters	• Establish comprehensive safety regulations; • Train and equip all O& M staff to follow the regulations on occupational safety and risk prevention; • Install proper alarm systems; • Ground all electrical equipment and provide circuit breakers • Provide back-up water supplies for fire fighting. • Provide fire extinguishers at strategic locations around the site and monitor them for functionality	Vodokanal plant manager • ensures that O&M staff receives training in occupational safety from PIA PIU-Environment Focal Point • monitors plant manager's compliance with all provisions of the EMP	Cost involved in the annual budget of the implementing agency (Vodokanal) After rehabilitation for initial training of O&M staff appropriate expenditures included in project cost.
Contingency planning	Emergency measures as to what options are available and what measures are to be followed in various emergency situations (emission of chlorine, fire and etc).	• Team of STP emergency situations should be established in the shortest time to identify a suitable solution to rectify the problem; When problem is identified and a solution is agreed upon, Vodokanal may involve for solution of emergency situation qualified specialists.	• O&M staff and Vodokanal (technical specialists) jointly with relevant local authorities dealing with Health/ Science and Technology	Vodokanal Contingency expenses: If reserve O&M funds are insufficient, Vodokanal staff will work with the local authorities to meet supplemental funding.

EMP = environmental management plan, EMU = Environmental Monitoring Unit, IFC = International Finance Corporation, HRD = Human Resources Department, LARF = land acquisition and resettlement framework, O&M = operation and maintenance, PIA = Project Implementing Agency, PIU = project implementation unit, SES = Sanitary and Epidemiological Services

Table A2.2: Environmental Monitoring Plan

Mitigation Measure	Parameters to be Monitored	Location	Measurements	Frequency	Responsibilities	Cost
Construction Phase						
Control of impacts of construction on people and environment	Dust, noise, transport, waste disposal, land clearing, utilities and traffic impacts	All construction sites and access routes	Visual observation and complaints by public	Regularly during construction for compliance with the EMP requirements	Work supervisors of the PIU and EMU	Work supervisors are under project budgets for construction
Operation & Maintenance Phase Wastewater Treatment						
Mitigation Measure	**Parameters to be Monitored**	**Location**	**Measurements**	**Frequency**	**Responsibilities**	**Cost**
Adequate treatment of wastewater before discharge	Parameters in accordance with SNPC WWTP effluent norms[a] and ADB/IFC	Effluents released from the chlorine contact tank	Laboratory analysis of samples at SNPC and WWTP Laboratory	In accordance with standard set by SNPC and standard operating procedures	Provincial Goskomprirodaand the Vodokanals (PIA)	There will be adequate laboratory facilities at WWTP after project completion for effluent analysis, SNPC has budgets for routine work on effluent quality measurement in their budget
Adequate treatment of industrial wastewater before discharge municipal sewerage	Controlling parameters of industrial wastewater should meet household wastewater norms for inflow into sewerage system	Industries of Ferghana and Margilan cities discharging wastewater into municipal sewerage system	Laboratory analysis of samples at SNPC and WWTP Laboratory	Frequency is settled by Uzbekistan regulations in accordance with communal and environmental norms for inflor into sewerage	Provincial State Nature Protection Committee and the Vodokanals	There will be adequate laboratory facilities at WWTP after project completion for effluent analysis, SNPC has budgets for routine work on effluent quality measurement in their budget
Assurance of quality of sludge for use as soil conditioner for agricultural land	Heavy metal and any other suspected toxic substance	Sludge drying beds	Stabilized dried sludge samples	Once for every batch of dried sludge and before use as soil conditioner for agricultural land	Vodokanals (PIA) Heavy metal analysis by specialized laboratory in Tashkent	There will be adequate laboratory facilities at WWTP after project completion for the analysis of sludge and other parameters

EMP = environmental management plan, EMU = Environmental Monitoring Unit, PIU = project implementation unit, SES = Sanitary and Epidemiological Services, SNPC = State Nature Protection Committee, WDU = water distribution unit.

PUBLIC CONSULTATIONS HELD IN FERGANA AND MARGILAN CITIES

LIST OF PARTICIPANTS AND MINUTES OF FGDs HELD IN FERGHANA AND MARGILAN CITIES

СПИСОК

участников Фокус – группы города Фергана по разъяснению целей Проекта АБР «Улучшение услуг водоснабжения и санитарии в Узбекистане».

№	ФИО	Место работы	Должность	Подпись
1	Ходжаева Д	Хокимият	Зам. хокима города	
2	Мамадалиев А	Хокимият	Специалист	
3	Атакулова З	6-школа	Директор	
4	Ибрагимова А	17-школа	Директор	
5	Аминова Д	13-школа	Директор	
6	Бобожонов Х	Центральный рынок	Зам. директор	
7	Ахмедов Р	ДСЭНМ	Гл. врач	
8	Хакимова Г	ДСЭНМ	Специалист	
9	Гаипова Н	1- Поликлиника	Гл. врач	
10	Отажонов Н	2- Поликлиника	Гл. врач	
11	Куконбоева У	3- Поликлиника	Гл. врач	
~~12~~	Мамасидиков Ш	4- Поликлиника	Гл. врач	
~~13~~	Мансуров Х	5- Поликлиника	Гл. врач	
14	Хасанбоев Р	6- Поликлиника	Гл. врач	
15	Тухтасинова Д	ННО «Калб нури»	Руководитель	
16	Якубова Л	Соглом авлод учун	Руководитель	
17	Исмоилов З	12-Маърифат махалля	Председатель	
18	Холматов М	16-Ойбек махалля	Председатель	
19	Абдулазизова О	42-Парвоз махалля	Председатель	
20	Ходжаева Д	43-Нодирабегим махалля	Председатель	
21	Рахимжонов Р.	Обл. хокимият	Специалист	
22	Тухтасинов У	НОЧПУ ФерОК	Зам. председатель	
23	Абдуразакова Ф	Комитет женщин	Специалист	
24	Абидова М	Соц. отделение	Специалист	
25	Махмудова Ш	Центр занятости	Гл. специалист	
26	Акбаров Н	Камолот	Специалист	
27	Хурсанова М	ФНПЗ	Пред. ком. женщин	
28	Шералиева Д	Вещевой рынок	Предприниматель	
29	Шералиева Т	Центральный дом культуры	руководитель	

ВИЛОЯТ ХОКИМЛИГИ
ВАЁНИ

ПРОТОКОЛ
СОВЕЩАНИЯ
ФЕРГАНСКОГО
ОБЛАСТНОГО ХОКИМИЯТА

13 сентября 238/01-57

"ТАСДИҚЛАЙМАН"
Вилоят ҳокими ўринбосари
А.Рахимов
"11" сентябрь 2011 йил

Фарғона шаҳар ҳокимлигида ўтказилган йиғилиш
БАЁНИ

2011 йил 13 сентябр Фарғона ш.

Раислик қилувчи: А.Рахимов - вилоят ҳокимининг ўринбосари

Иштирок этдилар: О.Фозилов - Ўзбекистон "Узкоммунхизмат" агентлиги бошкарма бошлиғининг ўринбосари
Ж.Алиходжаева - Осиё Тараққиёт Банки лойиҳаларини амалга ошириш гуруҳи консультанти

Қатнашдилар: вилоят ҳокимлиги котибияти мудирлари А.Эҳсонов, О.Райимжонова, вилоят "Маҳалла" жамғармаси раиси, вилоят "Сувоқава" ИЧДБ бошлиғи, бош мухандиси, вилоят ер ресурслари кадастри бошлиғи, вилоят табиатни муҳофаза қилиш кўмитаси раиси, "Фарғона ҳақиқати" ва "Ферганская правда" "Марғилон ҳақиқати" газеталари бош муҳаррирлари, лойиҳани амалга ошириш Фарғона шаҳар гуруҳ раҳбари, Фарғона ва Марғилон шаҳар ҳокимларининг ўринбосарлари, "Сувоқава" шаҳар чиқариш корхонаси ва ер ресурслари кадастр хизмати бошлиқлари (*рўйхат бўйича*).

КУН ТАРТИБИ

Қорақалпоғистон Республикаси, Жиззах, Хоразм вилоятларида ҳамда Андижон, Фарғона ва Марғилон шаҳарларида ичимлик таъминоти, окава сув ва санитариясини яхшилаш бўйича инвестиция дастури ҳақида.

(А.Рахимов, О.Фозилов, Ж.Алиходжаева, А.Эҳсонов, И.Носиров, Г.Джахонов, Н.Мыларапов, С.Сирожиддинов, М.Оринов, Д.Ходжаева, А.Рахимов)

Йиғилишни вилоят ҳокимининг ўринбосари А.Рахимов олиб борди. Ўзбекистон Республикаси Бош вазирининг биринчи ўринбосари Р.Азимовнинг 2011 йил 1 февралдаги №14/1-655-сонли топшириғига асосан Қорақалпоғистон Республикаси, Жиззах, Хоразм вилоятларида ҳамда Андижон, Фарғона ва Марғилон шаҳарларида ичимлик таъминоти, окава сув ва санитариясини яхшилаш инвестиция лойиҳасининг амалга ошириш бўйича тузилган ишчи гуруҳ томонидан Фарғона ва Марғилон шаҳарларида бажарилиши лозим бўлган ишлари ҳақида гапириб ўтди.

Сўнгра Ўзбекистон "Узкоммунхизмат" агентлиги бошқармаси бошлиғининг ўринбосари О.Фозилов ва Осиё Тараққиёт Банки лойиҳаларини амалга ошириш гуруҳи консультанти Ж.Алиходжаевалар сўзга чиқиб, йиғилиш қатнашчиларини дастлабки бажарилиши лозим бўлган ишлар кетма-кетлиги ҳамда уларни бажаришга маъсулларнинг вазифалари ҳақида гапириб ўтишди.

Шундан сўнг ушбу масалага алокадор бошқарма ва ташкилотлар раҳбарларининг кун тартибидаги масала юзасидан хисоботлари ҳамда фикр ва мулоҳазалари тингланди.

Кун тартибидаги масалаларни муҳокама килиб, йиғилиш

ҚАРОР ҚИЛАДИ:

1. Фарғона ва Марғилон шаҳарларида Осиё Тараққиёт банки талаблари асосида белгиланган тадбирларни амалга ошириш бўйича ишчи гуруҳлари таркиби **1-, 2-иловаларга** асосан тасдиқлансин.

2. Ишчи гуруҳларига:

- "Фарғона ҳақиқати" ва "Ферганская правда", "Марғилон ҳақиқати" газеталарида зудлик билан жойларда ўтказиладиган лойиҳани амалга ошириш юзасидан лойиҳа доирасидаги ҳудудларда истикомат қилаётган фуқароларни бахс-мунозаралари/*Фокус группа*/га таклиф этиш бўйича эълонни чоп этиш;

- Осиё Тараққиёт банки томонидан берилган сўровномаларни сифатли тўлдирилишини таъминлаш максадида малакали мутахассисларни жалб этиш;

3. Фарғона ва Марғилон ҳокимлари ўринбосарлари, хотин-кизлар кўмиталари раислари (Ходжаева, Ахмедова)га Қорақалпоғистон Республикаси, Жиззах, Хоразм вилоятларида ҳамда Андижон, Фарғона ва Марғилон шаҳарларида ичимлик таъминоти, окава сув ва санитариясини яхшилаш инвестиция лойиҳасини амалга ошириш юзасидан бахс-мунозараларини ташкиллаш ва унда Фарғона ва Марғилон шаҳар "Сувокава" корхоналари томонидан лойиҳа тақдимотини ўтказилишини таъминлаш вазифалари топширилсин.

1. Вилоят табиатни муҳофаза килиш кўмитаси (Носиров)га жорий **йилнинг 14 сентябр кунига кадар** лойиҳани амалга оширилишининг **атроф-мухитта** таъсири тўғрисида ариза лойиҳасини **давлат экологик** экспертизасидан ўтказиш вазифаси топширилсин.

5. Вилоят ер **ресурслари кадастр** хизмати (Машрапов)га **2 кун муддатда** шахар **бўлимлари ва** "Сувокава" корхоналари раҳбарлари билан биргаликда **тармок** ўтадиган худудлардаги уй-жой хўжаликларини **мукаммал** ўрганиб чикиб, белгиланган тартибда такдим этилган **жадвалларни тўлдириш** вазифаси топширилсин.

6. Ушбу **йиғилиш карорининг** бажарилишини назорат килиш вилоят хокимлиги **котибияти** мудири А.Эхсонов зиммасига юклатилсин.

Йиғилиш баёнини
ёзиб борувчи (signature) Р.Рахимжонов

Вилоят хокимлигининг
2011 йил 13 сентябрдаги
№238/or-58 сонли йиғилиш
баёнига 1-илова

Фарғона шахрида Осиё Тараккиёт банки талаблари асосида **белгиланган** тадбирларни амалга ошириш бўйича ишчи гурухи
ТАРКИБИ

т/р	Ф.И.Ш.	Иш жойи, лавозими
1.	Ходжаева Д.	- шахар хокимининг ўринбосари, хотин-кизлар кўмитаси раиси, ишчи гурухи раҳбари
2.	Мачадалиев А.	- шахар хокимлиги бош мутахассиси, ишчи гурухи раҳбари ўринбосари
	Ишчи гурух аъзолари	
3.	Юсупов Д.	- вилоят "Сувокава" ИЧДБ бошлиги ўринбосари
4.	Хамролиев Б.	- шахар "Махалла" хайрия жамғармаси раиси в.в.б.
5.	Файзиматов Б.	- лойиҳани амалга ошириш Фарғона шаҳар гурухи раҳбари
6.	Эргашев Х.	- шаҳар "Сувокава" корхонаси бош муҳандиси
7.	Холиков М.	- шахар кадастр хизмати бошлиги
8.	Маликов Ш.	- шахар бош архитектори
9.	Мирзаолимов М.	- шахар табиатни муҳофаза килиш инспекцияси катта давлат инспектори

Вилоят хокимлигининг
2011 йил 13 сентябрдаги
№238/01-58сонли йиғилиш
баённига 2-илова

Марғилон шаҳрида Осиё Тараққиёт банки талаблари асосида белгиланган тадбирларни амалга ошириш бўйича ишчи гуруҳи
ТАРКИБИ

т/р	Ф.И.Ш.	Иш жойи, лавозими
1.	Ахмедова Ж.	- шаҳар ҳокимининг ўринбосари, хотин-қизлар кўмитаси раиси, ишчи гуруҳи раҳбари
2.	Орипов М.	- шаҳар ҳокимлиги бош мутахассиси ишчи гуруҳи раҳбари ўринбосари
Ишчи гурух аъзолари		
3.	Отабоев О.	- вилоят "Сувокава" ИЧДБ бош мутахассиси
4.	Ахмаджонов М.	- шаҳар "Маҳалла" хайрия жамғармаси раиси
5.	Хонкелдиев А.	- лойиҳани амалга ошириш Фарғона шаҳар гуруҳи раҳбари ўринбосари
6.	Тўхтасинов А.	- шаҳар "Сувокава" корхонаси бош мухандиси
7.	Максудов С.	- шаҳар кадастр хизмати бошлиғи
8.	Зикиров М.	- шаҳар бош архитектори
9.	Ходматов Ф.	- шаҳар табиатни муҳофаза килиш инспекцияси катта давлат инспектори

ПРОТОКОЛ
Проведения Фокус группы по разъяснению целей проекта АБР «Улучшение услуг водоснабжения и санитарии в Узбекистане»

14 сентября 2011г. г.Фергана

Председательствующий заместитель хокима г. Фергана Ходжаева Д.Ш.
Приглашенные: Представители предприятий, организаций, домохозяйств, общественных и неправительственных организаций (всего 30 человек) список прилагается
С информацией о Целях проекта выступили
Директор «Сувокава» г. Фергана Юлдашев М.:
В настоящее время Правительство Республики Узбекистан при содействии Азиатского банка Развития готовит проект по реконструкции системы питьевого водоснабжения и канализации нескольких районов Республики, в том числе и городе Фергане, включающий восстановление насосных станций и очистных сооружений, и прокладку систем питьевого водоснабжения и канализации в городах. Участникам встречи подробно на схеме были показаны те территории, по которым будут проводиться строительные работы и ответил на многочисленные вопросы участников.

Специалист ГПУП агентства «Узкоммунхизмат» Алимходжаева Д.Л:
Подробно рассказала о политике Правительства Узбекистана по обеспечению населения чистой питьевой водой и улучшение состояния санитарии и гигиены в регионах страны. Также конкретно участникам встречи были освещены требования Азиатского банка развития по социальной защите населения при подготовке проекта и ходе строительных работ.
Ответственный работник Санэпидстанции г. Фергана Хакимова М.:
Обстоятельно проинформировала участников о состоянии заболеваемости в городе Фергане, объяснила причины возникновения заболеваний из-за отсутствия необходимых санитарно-гигиенических условий, связанных с плохой работой канализационной системы в городе.
В обсуждении поставленных вопросов выступили руководители групп:

1. Умурзаков Саиджон директор 10 –школы - в своем выступлении попросил Хокимият города изыскать средства для проведения канализационных труб в школы и детские сады города, в которых отсутствуют канализация.
2. Чернова Алла - председатель комитета женщин ОАО «АЗОТ» при обсуждении вопроса внесла предложение осуществлять общественный контроль во время проведения канализационно–ремонтных работ, и чтобы в нём участвовали соответствующие специалисты, грамотные в своей области.
3. Сулаймонов Умарали зам гл врача ДСЭНМ - в обсуждении вопроса выступил с предложением провести разъяснительную работу среди населения махаллей, которые хотели бы при проведении строительных работ подключиться к канализации о необходимости сбора средств на эти цели.

Среди участников проведено анкетирование по социальным вопросам (прилагается)

Председательствующий Ходжаева Д.Ш.

ПРОТОКОЛ
Проведения Фокус группы по разъяснению целей проекта АБР «Улучшение услуг водоснабжения и санитарии в Узбекистане»

15 сентября 2011г. г.Фергана

Председательствующий заместитель хокима г. Фергана Ходжаева Д.Ш.
Приглашенные: Представители предприятий, организаций, домохозяйств, общественных и неправительственных организаций (всего 30 человек) список прилагается
С информацией о Целях проекта выступили

Директор «Сувокава» г. Фергана Юлдашев М.:

В настоящее время Правительство Республики Узбекистан при содействии Азиатского банка Развития готовит проект по реконструкции системы питьевого водоснабжения и канализации нескольких районов Республики, в том числе и городе Фергане, включающий восстановление насосных станций и очистных сооружений, и прокладку систем питьевого водоснабжения и канализации в городах. Участникам встречи подробно на схеме были показаны те территории, по которым будут проводиться строительные работы, рассказано, с какими трудностями сталкиваются работники «Сув окава» г. Ферганы для обеспечения нормальной работы канализационной сети в городе. М.Юлдашев ответил на многочисленные вопросы участников фокус группы.

Специалист ГПУП агентства «Узкоммунхозмат» Алимходжаева Д.Л:

Подробно рассказала,что по инициативе Президента Республики Узбекистан И.А, Каримова Правительством страны проводится большая работа по обеспечению населения чистой питьевой водой и улучшению состояния санитарии и гигиены в регионах республики. Так, за последние годы были вновь построены или реконструированы системы водообеспечения и канализационные системы во многих регионах страны.Также конкретно участникам встречи были освещены требования Азиатского банка развития по социальной защите населения при подготовке проекта и ходе строительных работ.
Ответственный работник Санэпидстанции г. Фергана Хакимова М.
Обстоятельно проинформировала участников о состоянии заболеваемости в городе Фергане, объяснила причины возникновения заболеваний из-за отсутствия необходимых санитарно-гигиенических условий, связанных с плохой работой канализационной системы в городе.
В обсуждении поставленных вопросов выступили руководители групп:

1.Заместитель главврача поликлиники 2 Жураходжаев Ф
В целях улучшения обслуживания населения предлагается увеличить количество фирм, которые вели бы профилактические работы для нормального поддержания канализационных систем в рабочем режиме. Иначе, даже при введении новой канализационной системы неполадки будут постоянными.

2.Заместитель директора «Фуран» завода Маматкулов Д.

Предложил шире проводить среди населения разъяснительную работу по сохранности и правильной эксплуатации канализационных систем, так как зачастую неисправности

происходят именно из-за неправильных действий людей, которые бросают в канализацию различные непроходящие предметы.

3.Советник по вопросам духовности и просвещения махали 55 –Абдуразакова М.

Многие жители махалли сталкиваются с трудностями при приобретении необходимых инструментов для ремонта водопроводной сети и канализации в своем домохозяйстве, так как их нет в продаже. Предлагает внести этот вопрос в соответствующие инстанции для положительного их решения.

4Учительница колледжа связи Юсупова Л.

Внесла предложение об установлении тесной связи руководства «Сув окава» г. Фергана с колледжами, готовящими специалистов , могущих работать в этой системе. Это позволило бы не только трудоустраивать выпускников, но и возможность отбирать наиболее лучших для этой работы.

Председательствующий Ходжаева Д.Ш.

ПРОТОКОЛ
Проведения Фокус группы по разъяснению целей проекта АБР «Улучшение услуг водоснабжения и санитарии в Узбекистане»

15 сентября 2011г. г.Фергана

Председательствующий заместитель хокима г. Фергана Ходжаева Д.Ш.
Приглашенные: Представители предприятий, организаций, домохозяйств, общественных и неправительственных организаций (всего 30 человек) список прилагается
С информацией о Целях проекта выступили

Директор «Сувокава» г. Фергана Юлдашев М.:

В настоящее время Правительство Республики Узбекистан при содействии Азиатского банка Развития готовит проект по реконструкции системы питьевого водоснабжения и канализации нескольких районов Республики, в том числе и городе Фергане, включающий восстановление насосных станций и очистных сооружений, и прокладку систем питьевого водоснабжения и канализации в городах. Участникам встречи подробно на схеме были показаны те территории, по которым будут проводиться строительные работы, рассказано, с какими трудностями сталкиваются работники «Сув окава» г. Ферганы для обеспечения нормальной работы канализационной сети в городе. М.Юлдашев ответил на многочисленные вопросы участников фокус группы.

Специалист ГПУП агентства «Узкоммунхизмат» Алимходжаева Д.Л:

Подробно рассказала,что по инициативе Президента Республики Узбекистан И.А, Каримова Правительством страны проводится большая работа по обеспечению населения чистой питьевой водой и улучшению состояния санитарии и гигиены в регионах республики. Так, за последние годы были вновь построены или реконструированы системы водообеспечения и канализационные системы во многих регионах страны.Также конкретно участникам встречи были освещены требования Азиатского банка развития по социальной защите населения при подготовке проекта и ходе строительных работ.
Ответственный работник Санэпидстанции г. Фергана Хакимова М.
Обстоятельно проинформировала участников о состоянии заболеваемости в городе Фергане, объяснила причины возникновения заболеваний из-за отсутствия необходимых санитарно-гигиенических условий, связанных с плохой работой канализационной системы в городе.
В обсуждении поставленных вопросов выступили руководители групп:

1.Заместитель главврача поликлиники 2-Жураходжаев Ф
В целях улучшения обслуживания населения предлагается увеличить количество фирм, которые вели бы профилактические работы для нормального поддержания канализационных систем в рабочем режиме. Иначе, даже при введении новой канализационной системы неполадки будут постоянными.

2.Заместитель директора «Фуран» завода Маматкулов Д.

Предложил шире проводить среди населения разъяснительную работу по сохранности и правильной эксплуатации канализационных систем, так как зачастую неисправности

происходят именно из-за неправильных действий людей, которые бросают в канализацию различные непроходящие предметы.

3.Советник по вопросам духовности и просвещения махали 55 –Абдуразакова М.

Многие жители махалли сталкиваются с трудностями при приобретении необходимых инструментов для ремонта водопроводной сети и канализации в своем домохозяйстве, так как их нет в продаже. Предлагает внести этот вопрос в соответствующие инстанции для положительного их решения.

4Учительница колледжа связи Юсупова Л.

Внесла предложение об установлении тесной связи руководства «Сув окава» г. Фергана с колледжами, готовящими специалистов , могущих работать в этой системе. Это позволило бы не только трудоустраивать выпускников, но и возможность отбирать наиболее лучших для этой работы.

Председательствующий Ходжаева Д.Ш.

Список участников Фокус- группы города Фергана по разъяснению целей Проекта АБР «Улучшение услуг водоснабжения и санитарии в Узбекистане»

№	ФИО	Место работы	должность	подпись
1	Сулаймонов Б	Дирекция	Зам.директор	
2	Расулова Н	4-дет сад	методист	
3	Махмудова М	ГорОНО	Пред.ком.жен	
4	Маматкулов Д	Фурановый завод	Зам.директор	
5	Хомидова М	2-дет сад	Методист	
6	Ходжаева Х	6- поликлиника	Врач	
7	Жураходжаев Ф	2-поликлиника	Гл.врач	
8	Мирзамутдинова М	Фермерское хозяйство	Фермер	
9	Мусаева С	Фермерское хозяйство	Фермер	
10	Юсупова Х	Фермерское хозяйство	Фермер	
11	Холдорова М	Фермерское хозяйство	Фермер	
12	Алимова Р	Фермерское хозяйство	Фермер	
13	Мамажонова З	Фермерское хозяйство	Фермер	
14	Абдуразакова М	57 – «Хамкорлик» махалля	Советник	
15	Маматбоева Х	67 Хувайдо махалля	Советник	
16	Позилжонова Т	64- Баркамол махалля	Советник	
17	Мирзаева С	60 Мехрибонлик махалля	Советник	
18	Лутфуллаева Х	58 Маданият махалля	Советник	
19	Эгамбердиева М	70 Хужамагиз махалля	Советник	
20	Юсупова Л	Алока коллеж	Зам директор	
21	Баракабаева Д	2-поликлиника	Врач	
22	Мамажонова Х	«Тадбиркор аёл»	Председаталь	
23	Абдуразаков Б	МП «Наргиз»	Зам..Председатель	
24	Эргашев А	Гор .хокимият	специалист	
25	Зокирова Л	Гор. хокимият	специалист	
26	Жураходжаев Р	Центральный рынок	Зам.директор	
27	Юнусалиева А	25 школа	Зам .директор	
28	Холматова Н	2- школа	Зам . директор	
29	Мамажонова Х	МП «Хуршида»	председатель	
30	Жумабоев З	Гор.водоканал	Специалист	

«Ўзбекистонда санитария ва сувоқава хизматини янада яхшилаш» юзасидан Осиё Тараққиёт Банки лойиҳасини тушунтириш мақсадида Фокус группаси томонидан ўтказилган семинар йиғилиши иштирокчилари рўйхати.

15.09.2011 йил

№	Ф.И.О.	Лавозими	Имзо
1.	Файзуллаев Рахматилло	"Робия хожи она" масжиди имоми	
2.	Нурматов Ш.	Шаҳар бош нурчи	
3	Мадаминов Й.	Бўлим бошлиғи	
4	Бурхонов Мухтор	А.Навоий маҳалла посбони	
5	Собирова Дилбар	А.Навоий маҳалла маслаҳатчиси	
6	Ризаева Хумора	3-умумтаълим мактаби ўқитувчиси	
7	Мухамедова Гулнора	"Иқбол" МФЙ маслаҳатчиси	
8	Холматова Умринисо	"Қиргули"МФЙ маслаҳатчиси	
9	Йўлдашева Патилахон	"Косибчилик" МФЙ маслаҳатчиси	
10	Фозилова Озода	"Оҳунбобоев" МФЙ маслаҳатчиси	
11	Набиева Мухтасар	"Янги ҳаёт" МФЙ маслаҳатчиси	
12	Омонов Шаробиддин	"Туягум" МФЙ котиби	
13	Холматов Махмуджон	"Қиргули" МФЙ котиби	
14	Қаландарова Мунаввархон	"Оролбўйи" МФЙ маслаҳатчиси	
15	Шокирова Мухтасархон	10-сонли мактабгача таълим муассасаси ходими	
16	Юсупова Хамидахон	"Б.Марғилоний" МФЙ маслаҳатчиси	
17	Юлдашев Ахатжон	ЎзЛИДеП шаҳар кенгаши	
18	Мўминов А.		
19	Мўминова Хамидахон	"Косибчилик" МФЙ котиби	
20	Мирзаева Замирахон	"Маориф" МФЙ маслаҳатчиси	
21	Султонова Дилоромхон	Шаҳар хотин-қизлар қўмитаси фаол аёли	
22	Умаров Хабибилло	"Пичоқчи" МФЙ раиси	
23	Хаджаева Гулнорахон	Шаҳар хотин-қизлар қўмитаси бошқарув аъзоси	
24	Нишонова Озодахон	Шаҳар соғлиқни сақлаш тизими ходими	
25	Хошимова Мавлуда	Терак-таги МФЙ маслаҳатчиси	
26	Охунов Эркин	Янги-боғ МФЙ раиси	
27	Шосаидова Раъно	Тиш даволаш поликлиникаси хакими	
28	Бойдадаева З.	"Ипакчи" МФЙ фаол аёли	
29	Эргашева Дилноза	Маънавият тарғиботи маркази ходими	
30	Хидоятова Эътибор	Педагогика коллежи ўқитувчиси	

«Ўзбекистонда санитария ва сувоқава хизматини янада яхшилаш» юзасидан Осиё Тараққиёт Банки лойиҳасини тушунтириш мақсадида Фокус группаси томонидан ўтказилган семинар йиғилиши
БАЁНИ

14 сентябрь 2011 йил Марғилон шаҳри

Йиғилиш раиси: Ж.Аҳмедова – Марғилон шаҳар ҳокими ўринбосари, шаҳар хотин-қизлар қўмитаси раиси.

Қатнашдилар: "Ўзкоммунхизмат"агентлиги мутахассиси Д.Алимходжаева, вилоят "Сувоқава" ишлаб чиқариш бошқармаси мутахассиси О.Отабоев, шаҳар ҳокими гуруҳ раҳбари М.Орипов, шаҳар "Сувоқава" ишлаб чиқариш давлат корхонаси бошлиғи Х.Хомидов, шаҳар СЭС бош хакими М.Тошболтаев, "Маҳалла" ҳайрия жамғармаси шаҳар бўлинмаси раиси М.Ахмаджонов, шаҳар СЭС сан.врачлари, мактаб ўқитувчилари, "Сувоқава" идораси ходимлари, МФЙ раислари, Жами: 36 нафар

КУН ТАРТИБИДА :

1. «Ўзбекистонда санитария ва сувоқава хизматини янада яхшилаш» юзасидан Осиё Тараққиёт Банки лойиҳасини тушунтиришга оид Фокус группасининг тақдимоти ҳақида.

Йиғилишни шаҳар хокими ўринбосари Ж.Аҳмедова очди ва олиб борди. Ж.Аҳмедова бугунги кунда давлатимиз томонидан аҳолини ижтимоий холатини янада яхшилаш, уларга кўрсатилаётган коммунал хизмат турларини юқори даражага кўтариш, айниқса "Сувоқава" ишлаб чиқариш тизимини янада ривожлантириш юзасидан бир қатор ибратли ишларни олиб борилаётганлиги ҳақида фикр билдирди. Шу ўринда «Ўзбекистонда санитария ва сувоқава хизматини янада яхшилаш» юзасидан Осиё Тараққиёт Банки лойиҳасини тушунтириш мақсадида Фокус группасининг ташрифи ва уларнинг мақсадини қисқача тушунтириб ўтди ҳамда ташриф буюрган меҳмонлар билан таништириб ўтди.

Кун тартибидаги масала юзасидан йиғилганларга тушунтириш бериш учун сўзни шаҳар "Сувоқава" ишлаб чиқариш корхонаси бошлиғи Х.Хомидовга берди.

Х.Хомидов шаҳарни ичимлик суви билан таъминлаш, аҳолини чиқинди сувлари ташламалари конализацияларининг бугунги холати юзасидан ахборот бериб, айрим худудларимизда сув ва конализация тармоқларининг

ва мулоҳазаларини билдирди. Давлатимз раҳбариятига шаҳримиз аҳолиси номидан миннатдорчилик билдириб, шаҳримиз учун бу лойиҳа жуда зарур эканлигини билдирди.

4-гуруҳдан: "Б.Марғилоний" МФЙ раиси М.Қоплонов – сувсиз инсон ҳаётини тасаввур қилиб бўлмайди, шундай экан аҳолининг турмуш даражасини кўтариш, тиббий маданиятини янада ривожлантириш, санитария ҳолатини яхшилаш бугунги кун талаби, шаҳримизда ташлама сувлар учун канализация тизимига талаб юқори эканлиги билдириб ўтиб, ушу лойиҳа энг долзарб ҳамда энг бирламчи ўриндаги бажарилиши зарур бўлган иш эканлигини қайта-қайта таъкидлаб ўтди. Лойиҳани амалга оширишда маҳалла фуқаролар йиғинлари аҳолиси номидан муваффақият тилади.

5-гуруҳдан: 20-умумтаълим мактаби ўқитувчиси М.Мадаминова – ушбу лойиҳанинг амалга ошиши аёлларимизнинг уй юмушларини енгиллаштиришини билдирди. Ушбу лойиҳа шаҳримизнинг ҳар бир кўчасига кириб боришида имконият берилишини таъкидлаб ўтиб, давлат раҳбарларига шаҳримиз учун бундай шароитлар яратилиши жуда зарурлигини билдириб ўтди.

Йиғилиш сўнгида шаҳар ҳокими ўринбосари Ж.Аҳмедова иштирокчиларининг таклиф ва мулоҳазалари юзасидан ўрганиб чиқиб, лойиҳа иштирокчиларидан ушбу масалани ижобий ҳал этиш, Тошкет шаҳрида ўтказиладиган тайёргарлик ишларида Фокус группаси шаҳримизда канализация ўтказиш ишлари лойиҳасини зарур деб топишларига ишонч билдирди.

Йиғилиш раиси: Ж.Аҳмедова

«Ўзбекистонда санитария ва сувоқава хизматини янада яхшилаш» юзасидан Осиё Тараққиёт Банки лойиҳасини тушунтириш мақсадида Фокус группаси томонидан ўтказилган семинар йиғилиши
БАЁНИ

15 сентябрь 2011 йил Марғилон шаҳар хокимлиги

Йиғилиш раиси: Ж.Аҳмедова – Марғилон шаҳар ҳокими ўринбосари, шаҳар хотин-қизлар қўмитаси раиси.

Қатнашдилар: "Ўзкоммунхизмат"агентлиги мутахассиси Д.Алимходжаева, вилоят "Сувоқава" ишлаб чиқариш бошқармаси бошлиғи Ғ.Жахонов, шаҳар "Сувоқава" ишлаб чиқариш давлат корхонаси бошлиғи Х.Хомидов, шаҳар СЭС бош хакими М.Тошболтаев, "Робия хожи она" масжиди имоми Р.Файзуллаев мактаб ўқитувчилари, "Сувоқава" идораси ходимлари, МФЙ вакиллари, Жами: 36 нафар

КУН ТАРТИБИДА :

1. **«Ўзбекистонда санитария ва сувоқава хизматини янада яхшилаш» юзасидан Осиё Тараққиёт Банки лойиҳасини тушунтиришга оид Фокус группасининг тақдимоти ҳақида.**

Йиғилишни шаҳар хокими ўринбосари Ж.Аҳмедова очди ва олиб борди. Ж.Аҳмедова бугунги кунда давлатимиз томонидан аҳолини ижтимоий холатини янада яхшилаш, уларга кўрсатилаётган коммунал хизмат турларини юқори даражага кўтариш, айниқса "Сувоқава" ишлаб чиқариш тизимини янада ривожлантириш юзасидан бир қатор ибратли ишларни олиб борилаётганлиги ва ушбу фаолият бизнинг шаҳримитзда ҳам ўтказилиши режалаштирилганлиги маълум қилиди. Кечаги куни ўтказилган семинар йиғилишини давоми сифатида йиғилиш иштирокчиларига «Ўзбекистонда санитария ва сувоқава хизматини янада яхшилаш» юзасидан Осиё Тараққиёт Банки лойиҳасини тушунтириш мақсадида Фокус группасининг ташрифи ва уларнинг мақсадини қисқача тушунтириб ўтди ҳамда ташриф буюрган меҳмонлар билан таништириб ўтди.

Кун тартибидаги масала юзасидан Республика "Ўзкоммунхизмат" агентлиги мутахассиси Д.Алимхождаева ушбу лойиҳанинг мазмуни ва мақсади билан йиғилиш иштирокчиларига тўлиқ тушунтириш бериб ўтди. Жумладан Президентимиз ташаббуслари билан аҳолини тоза ва сифатли ичимлик суви ҳамда канализация билан таъминлаш борасида зарурий маблағлар режалаштирилганлигини маълум қилди. Шаҳарга канализацияни

олиб кириш аҳоли саломатлигини тўлиқ муҳофазаси, юқумли касалликларни олдини олиш учун кенг имконият, аёллар меҳнатини енгилаштириш, аҳолини тоза ичимлик суви билан таъминлаш каби қулайликлар яратиши ҳақида гапириб ўтди. Гендер сиёсати бўйича ушбу лойиҳа амалга оширилиши Осиё тараққиёт банки жуда катта миқдорда маълум муддатга кредит ўтказиши юзасидан тушунтириш берди.

Ушбу масала юзасидан "Робия хожи она" масжиди имом хатиби Р.Файзуллаев сўз олиб ушбу лойиҳа амалга ошса шаҳримиз аҳолисининг турмуш тарзи, маданияти янада юксалишлиги, турли юқумли касалликларнинг бартараф бўлиши, шу ўринда аёллар меҳнатида енгилликлар яратилиши ҳамда аёлларимиз фарзанд тарбияси, ўз илм ва салоҳиятларини ривожлантиришга етарли имкон бериши мумкинлигини юзасидан ўз фикр ва мулоҳазаларини билдириб ўтди. Бу имкониятни шаҳримиз аҳолиси қўллаб-қувватлашини маълум қилди.

Кун тартибидаги масала юзасидан йиғилганларга тушунтириш бериш учун сўзни шаҳар "Сувоқава" ишлаб чиқариш корхонаси бошлиғи Х.Хомидовга берди.

Х.Хомидов шаҳарни ичимлик суви билан таъминлаш, аҳолини чиқинди сувлари ташламалари конализацияларининг бугунги холати юзасидан ахборот бериб, айрим худудларимизда сув ва конализация тармоқларининг эскирганлиги, баъзи худудларимизда канализация қувурлари ўтказилмаганлигини маълум қилди. Республикамиз хукумати томонидан шаҳримизда сувоқава хизматини янада яхшилашга катта эътибор қаратилаётганлиги ҳамда бу борада «Ўзбекистонда санитария ва сувоқава хизматини янада яхшилаш» юзасидан Осиё Тараққиёт Банки лойиҳасини амалга ошириувчи Фокус группасининг фаолияти юзасидан тушунтириш бериб ўтди. Канализация қувурларини ўтказилиш режаси билан таништириб ўтди. Йиғилганларга Фокус группаси томонидан ишлаб чиқилган аҳолини сув ва канализация тармоғлари билан таъминланганлик даражасини ўрганиш бўйича саволлик билан таништирди.

Йиғилиш иштирокчиларига саволномалар тарқатилиб, саволлик бўйича уларнинг фикр ва мулоҳазаларини ўрганилди.

Саволликни муҳокамаси юзасидан йиғилишдаги кичик гуруҳлар ўз мулоҳаза ва таклифларини билдирдилар:

1-гуруҳдан:"Сувоқава" ишлаб чиқариш корхонаси ишчиси Й.Мадаминов - сўровлардан билдикки, бизни муаммоларимиз билан давлатимиз раҳбарлари қизиқиб боряптилар бунинг учун раҳмат. Бу ҳайрли иш тезлашиши учун коммунал тўловларни вақтида тўлаш керак. Оқава сув тармоғлари янгилаш керак, қайта реконструкция қилиш юзасидан ўз таклиф ва мулоҳазаларини билдириб ўтди.

2-гуруҳдан: "Орол бўйи" МФЙ маслаҳатчиси М.Қаландарова – марказий канализация линиясига уланмоқчи бўлган фуқаролар сув оқава идораси руҳсати билангина уланади, аҳолини ўзига кавланган асфальтларни тартибга солиб қўйиш вазифаси юклатилишини таъминлаш зарурлигини билдирди, акс ҳолда ўқувчиларни мактабга қатнашларида муаммолар келтириб чиқиши мумкинлигини билдирди. Аҳолини кўча қатновида ноқулайликларни олиб келиши мумкин, шунинг учун ўз вақтида гуруҳ томонидан масъул шахс тайинланиши кераклигини таъкидлади.

3-гуруҳдан: ЎЗЛиДеП шаҳар кенгаши ўринбосари А.Юлдашев – ушбу лойиҳани ўрганиш жараёнида унинг қанчалик муҳимлигини айтмоқчиман, Сенат аъзолари билан ўтказилган учрашувларда ҳам халқимиз канализация системасидаги муаммоларни кўтарган. Насосларнинг ўзини эмас, уни симларини ҳам янгилаш керак. Катта линиянинг шаҳарга кириб келишини давлатимиз раҳбарлари қўллаб-қувватлашса, аҳоли яшаш жойларининг ички қатламларига фуқароларнинг ўзи ҳаракат қилиши учун қулайлик яратилишини билдирди.

4-гуруҳдан: 10-сонли МТМ ходими М.Шокирова – болаларимизнинг саломатлигини муҳофаза қилишда тоза ичимлик суви ҳамда сифатли канализация тизими бугунги куннинг энг муҳим омили эканлигини таъкидлаб, болалар боғчаларидаги санитария холатини яхшилаш мақсадида шаҳар боғчаларининг канализация тизимини қайта реконструкция қилиш зарурлигини айтиб, лойиҳани амалга оширишда шаҳардаги барча болалар боғчаларининг ҳолатини мониторинг қилиш кераклиги таклифини киритди. Лойиҳани амалга оширишда ҳалқ таълими тизимининг барча ходимлари қўллаб-қувватлашларини билдириб, ўз номидан муваффақият тилади.

5-гуруҳдан: “Пичоқчи” МФЙ раиси Х.Умаров – ушбу лойиҳанинг амалга ошиши аёлларимизнинг уй юмушларини енгиллаштиришини билдирди. Ушбу лойиҳа шаҳримизнинг ҳар бир кўчасига кириб боришида имконият берилишини таъкидлаб ўтиб, давлат раҳбарларига шаҳримиз учун бундай шароитлар яратилиши жуда зарурлигини билдириб ўтди.

Йиғилиш сўнгида шаҳар ҳокими ўринбосари Ж.Аҳмедова бугунги иштирокчиларининг таклиф ва мулоҳазалари юзасидан ўрганиб чиқиб, лойиҳа иштирокчиларидан ушбу масалани ижобий ҳал этиш, Тошкент шаҳрида ўтказиладиган тайёргарлик ишларида Фокус группаси шаҳримизда канализация ўтказиш ишлари лойиҳасини зарур деб топишларига ишонч билдирди.

Йиғилиш раиси: **Ж.Аҳмедова**

«Ўзбекистонда санитария ва сувоқава хизматини янада яхшилаш» юзасидан
Осиё Тараққиёт Банки лойиҳасини тушунтириш мақсадида Фокус группаси
томонидан ўтказилган семинар йиғилиши
иштирокчилари рўйхати.

15.09.2011 йил

№	Ф.И.О.	Лавозими	Имзо
1.	Файзуллаев Рахматилло	"Робия хожи она" масжиди имоми	
2.	Нурматов Ш.	Шаҳар бош нурчи	
3	Мадаминов Й.	Бўлим бошлиғи	
4	Бурхонов Мухтор	А.Навоий маҳалла посбони	
5	Собирова Дилбар	А.Навоий маҳалла маслаҳатчиси	
6	Ризаева Хумора	3-умумтаълим мактаби ўқитувчиси	
7	Мухамедова Гулнора	"Иқбол" МФЙ маслаҳатчиси	
8	Холматова Умринисо	"Қиргули"МФЙ маслаҳатчиси	
9	Йўлдашева Патилахон	"Косибчилик" МФЙ маслаҳатчиси	
10	Фозилова Озода	"Оҳунбобоев" МФЙ маслаҳатчиси	
11	Набиева Мухтасар	"Янги ҳаёт" МФЙ маслаҳатчиси	
12	Омонов Шаробиддин	"Туягум" МФЙ котиби	
13	Холматов Махмуджон	"Қиргули" МФЙ котиби	
14	Қаландарова Мунаввархон	"Оролбўйи" МФЙ маслаҳатчиси	
15	Шокирова Мухтасархон	10-сонли мактабгача таълим муассасаси ходими	
16	Юсупова Хамидахон	"Б.Марғилоний" МФЙ маслаҳатчиси	
17	Юлдашев Ахатжон	ЎзЛИДеП шаҳар кенгаши	
18	Мўминов А.		
19	Мўминова Хамидахон	"Косибчилик" МФЙ котиби	
20	Мирзаева Замирахон	"Маориф" МФЙ маслаҳатчиси	
21	Султонова Дилоромхон	Шаҳар хотин-қизлар қўмитаси фаол аёли	
22	Умаров Хабибилло	"Пичоқчи" МФЙ раиси	
23	Хаджаева Гулнорахон	Шаҳар хотин-қизлар қўмитаси бошқарув аъзоси	
24	Нишонова Озодахон	Шаҳар соғлиқни сақлаш тизими ходими	
25	Хошимова Мавлуда	Терак-таги МФЙ маслаҳатчиси	
26	Охунов Эркин	Янги-боғ МФЙ раиси	
27	Шосаидова Раъно	Тиш даволаш поликлиникаси хакими	
28	Бойдадаева З.	"Ипакчи" МФЙ фаол аёли	
29	Эргашева Дилноза	Маънавият тарғиботи маркази ходими	
30	Хидоятова Эътибор	Педагогика коллежи ўқитувчиси	

СПИСОК

Участников семинара по Проведению Фокус группы по разъяснению целей проекта АБР «Улучшение услуг водоснабжения и санитарии в Узбекистане»

№	Ф.И.О.	Должность	подпись
1.	Ахмедова Жамила Ахунджановна	Зам.хокима города Маргилана	
2.	Юсупова Шохиста Содиковна	Учительница средней школы № 31	
3	Шерматова Мавлуда Мухаммаджоновна	Учительница средней школы № 14	
4	Шарипова Шоира Абдунабиевна	Учительница средней школы № 16	
5	Охунова Одина Адиловна	Учительница средней школы № 4	
6	Мадаминова Мутабар Олимжоновна	Учительница средней школы № 20	
7	Тошболтаева Мухаббат Садиковна	Учительница средней школы № 9	
8	Собиров Зухриддин Абдувахобович	Учитель средней школы № 26	
9	Тухтасинов Арабек Махаматович	«Сув окава» инженер	
10	Тошхужаев Мурод Алиевич	«Сув окава» снабженец	
11	Мамажонов Исмоил	Председатель махалинского комитета «Галатой»	
12	Толипов Махмуд	Председатель махалинского комитета «Маориф»	
13	Азизова Замира		
14	Ботиров Одилжон Махмудович	«Сув окава» снабженец	
15	Содиков Рахмат	Председатель махалинского комитета «Туягум»	
16	Мирзаев Хатамжон	Председатель махалинского комитета «Косибчилик»	
17	Хожирахматов Обиджон Рустамбоевич	Дружинник махалинского комитета «Киргули»	
18	Хомидов Садриддин Улмасмович	Дружинник махалинского комитета «А.Яссавий»	
19	Азизов Мусожон Абидович	Председатель махалинского комитета «Гураввал»	
20	Сайдаматов Шухрат Ураимович	Сан.врач гор. СЭС	
21	Хакимов Алишер Абдужабарович	Сан.врач гор СЭС	
22	Зулфикоров Аспиёхон	Председатель махалинского комитета «А.Навойи»	
23	Исмоилов Юнус Юсупович	Председатель махалинского комитета «Охунбобоев»	
24	Коплонов Мухаммаджон	Председатель махалинского комитета «Б.Маргилоний»	
25	Хайдаров Баходирхон	Председатель махалинского комитета «Икбол»	
26	Ахатов Акмал	ГОР.СЭС ходими	
27	Муртазаев Асил	Председатель города Маргилана «Камолат»	
28	Фозилов Тойир	Председатель махалинского комитета «Терак таги»	
29	Нишанова Мавжуда Омоновна	Учительница Пед колледжа	
30	Каюмова Дилорам Камилджановна	Советчик Поселкового совета	

List of participant in the seminar assembly which has been carried out by Focus group with the purposes of to explain the project of the Asian development bank on "Improvement of sanitation and dump of waste water services in Uzbekistan"

No.	Name	Job	Position	Signature
1	Khodjaeva D.	Khokimiyat	Deputy hokim	*signed*
2	Mamadaliev A.	Khokimiyat	Specialist	*signed*
3	Atakulava Z.	School № 6	Director	*signed*
4	Ibragimova A.	School № 17	Director	*signed*
5	Aminova D.	School № 13	Director	*signed*
6	Bobojonov Kh.	Central Market	Deputy director	*signed*
7	Akhmedov P.	DSENM	Chief medical officer	*signed*
8	Khakimova D.	DSENM	Specialist	*signed*
9	Gaipova N.	Policlinic №1	Chief medical officer	*signed*
10	Otajonov N.	Policlinic №2	Chief medical officer	*signed*
11	Kukonboeva U.	Policlinic №3	Chief medical officer	*signed*
12	Mamasidikov Sh.	Policlinic №4	Chief medical officer	*signed*
13	Mansurov Kh.	Policlinic №5	Chief medical officer	*signed*
14	Khasanboev R.	Policlinic №6	Chief medical officer	*signed*
15	Tukhtasinova D.	NGO "Kalb Nuri"	Leader	*signed*
16	Yakubova L.	For Healthy Generation	Leader	*signed*
17	Ismailov Z.	Makhalla № 12 “Marifat”	Chairman	*signed*
18	Kholmatov M.	Makhalla № 16 “Oybek”	Chairman	*signed*
19	Abdulazizova O.	Makhalla № 42 “Parvoz”	Chairman	*signed*
20	Khodjaeva D.	Makhalla № 43 “Nodirabegim”	Chairman	*signed*
21	Rakhimjonov R.	Regional Khokimiyat	Specialist	*signed*
22	Tukhtasinov U.	NOCHPU FerOK	Vice-chairman	*signed*
23	Abdurazakova F.	The Women's Committee	Specialist	*signed*
24	Abidova M.	Department of Social	Specialist	*signed*
25	Makhmudova Sh.	Employment Center	Chief Specialist	*signed*
26	Akbarov N.	Kamolot	Specialist	*signed*
27	Khursanova M.	Fergana Oil Refinery	Chairman of the Women’s Committee	*signed*
28	Sheralieva D.	Clothing market	Business lady	*signed*
29	Sheralieva T.	Central House of Culture	Leader	*signed*

The protocol of meeting of the Khokimiyat of Fergana region.
The 13th of September No238/01-58

"Approved"
Deputy khokim of the Region
A.Rakhimov (signature)
dd. September___, 2011

The PROTOCOL
of meeting which has been carried out at Fergana city administration

September 13, 2011 Fergana city

The chairman: A.Rakhimov – Deputy Khokim of the region
Were present: O.Fozilov - Deputy Chief of management of "Uzkommunkhizmat"agency
J.Alikhodjayeva - The adviser of group of realization of the projects of the Asian Development Bank
The participants: The managers of secretary of regional administration A.Ekhsonov, O.Rayimjanova, the chairman of regional fund "Makhalla", the chief, the main engineer of regional state producing department "Suvakava", the chief of regional Cadastre of land resources, the chief of regional committee on protection of nature, main editors of the newspapers "Fergana Truth" and "Ferganskaya pravda", " Margilan truth ", the chief of group on realization of the project of Fergana city, the deputy khokims of Fergana and Margilan cities, the chiefs of the industrial enterprise "Suvakava" and the land resources service (according to the list).

AGENDA

On the investment program of drinking water delivery, improvement of a drain of waters and their sanitation in the Republic of Karakalpakstan, Jizzakh, Khorezm and Fergana regions, and in Andijan, Fergana and Margilan cities.

(A.Rakhimov, O.Fozilov, J.Alikhodjayeva, A.Ekhsonov, I.Nosirov, G.Djakhonov, N.Mashrapov, S.Sirojiddinov, M.Oripov, D.Khodjayeva, A,Rakhimov)

The meeting was presided by Deputy Khokim of the region A.Rakhimov. He has told about works which are necessary to carry out in the cities of Fergana and Margilan by the working group created for realization of the investment project of drinking water delivery, improvement of a drain of waters and their sanitation in the Republic of Karakalpakstan, Jizzakh, Khorezm and Fergana regions, and Andijan, Fergana and Margilan cities on the basis of the order № 14/1-655 from the February 1, 2011 of the First Deputy Prime Minister of the Republic of Uzbekistan R.Azimov.

Then, Deputy Chief of management of "Uzkommunkhizmat" agency O.Fozilov and the adviser of group of realization of the projects of the Asian Development Bank J.Alikhodjayeva have took the floor and have told to the participants of the meeting about a sequence of jobs which should be carried out in the first place, and about duties of the people responsible for their realization.

After that, the reports and opinions on the issue of agenda of the chiefs of authorities and organizations related to the given problem were heard.

Having discussed questions of agenda, assembly

DECIDES:

1. To ratify based on the applications №№ 1; 2 the composition of working groups for realization of arrangements specified on the basis of the requirements of the Asian development bank in Fergana and Margilan cities.
2. To working groups:
   - To publish urgently in “Fergana truth” and “Ferganskaya pravda”, “Margilan Truth” newspapers an advertisement on involving citizens to discussion (*Focus groups)* who are living in territory which is in the frame of project in order to realize project in local territories;
   - To involve the skilled experts in order to ensure qualitative filling of the questionnaire given by the Asian development bank;
3. To charge the Deputy Khokims of Fergana and Margilan, the chairmen of committees of the women (Khodjayeva, Akhmedova) to organize public debates on realization of the project of drinking water delivery, improvement of a drain of waters and their sanitation in the Republic of Karakalpakstan, Jizzakh, Khorezm and Fergana regions, and Andijan, Fergana and Margilan cities and to ensure the presentation of the project by the enterprises "Suvakava " of Fergana and Margilan cities.
4. To assign to regional committee (Nosirov) of preservation of environment an execution of a task to provide state ecological examination of application project about influence of its realization to environment **until 14th of September**.
5. To assign to regional cadastral service of land resources (Mashrapov) an execution of a task to fill presented tables accordingly **in 2 days** together with general managers of city departments and “Suvakava” enterprise by studying perfectly housing facilities where the branch will pass over.
6. To assign to regional Khokimiyat head of secretariat A.Ekhsonov a task of controlling an execution of current meeting decides.

Writer of the meeting protocol *signed* **R.Rakhimjonov**

Annex 1
to the Protocol of meeting of
Regional Khokimiyat
No238/01-58
dd. September 13,2011

The STRUCTURE
of workgroup on realization of activities in Fergana city established by requirements of Asian Development Bank

No	Name	Workplace, position
1.	Khodjaev D	Deputy khokim of city, Chairman of Women's Committee, Head of workgroup
2.	Mamadaliev A	Head specialist in city Khokimiyat – Deputy head of workgroup
The members of workgroup		
3.	Yusupov D	Deputy chairman of regional state producing department
4.	Khamroliev B	Caretaker of charitable of "Makhalla" city foundation
5.	Fayzimatov B	Head of Fergana city workgroup on realization of project
6.	Ergashev Kh	Head engineer of "Suvakava" city enterprise
7.	Kholiqov M	Head of city Cadastral service
8.	Malikov Sh	City Chief architect
9.	Mirzaolimov M	Senior state inspector of city committee of environment protection

Annex 2
to the Protocol of meeting of
Regional Khokimiyat
No 238/02-58
dd. September13,2011

The STRUCTURE
of workgroup on realization of activities in Margilan city established by requirements of Asian Development Bank

No	Name	Workplace, position
1.	Akhmedova J.	Deputy khokim of city, Chairman of Women's Committee, head of workgroup
2.	Oripov M.	Head specialist in city Khokimiyat – Deputy head of workgroup
The members of workgroup		
3.	Otaboyev O.	Deputy of regional state producing department chairman
4.	Akhmadjonov M.	Charitable of "Makhalla" city foundation
5.	Khonkeldiyev A.	Deputy head of Fergana city workgroup on realization of project
6.	Tukhtasinov A.	Head engineer of "Suvakava" city enterprise
7.	Maksudov S.	Head of the city cadastral service
8.	Zikirov M.	City Chief architect
9.	Kholmatov F.	Senior state inspector of city committee of environment protection

The PROTOCOL
of the seminar assembly which has been carried out by Focus group with the purposes of to explain the project of the Asian development bank on " Improvement of sanitation and dump of waste water services in Uzbekistan "

September 14, 2011 Fergana city

Chairman: Deputy Governor of Fergana city - Khodjaeva D. Sh.
Invited: Representatives of organizations of enterprises, households, public and non-governmental organizations (of 30 people) list attached.
With the information about the project were done.

The Chief of "Suvokava" of Fergana city - Yuldashev M.:

The Government of the Republic of Uzbekistan with the assistance of the Asian Development Bank is preparing a project on reconstruction of water supply and sewage disposal for several areas of the Republic, including the city of Fergana, which includes the restoration of the pumping stations and sewage treatment plants, and laying of drinking water supply and sanitation in urban areas. The participants of the meeting in detail in the scheme have been shown to those areas in which construction work will be carried out and answered to the number of questions of the participants.

Specialist of the GRPM Agency "Uzkommunkhizmat» - Alimkhodjaeva D.L.:

Detailed the policy of the Government of Uzbekistan to provide the population with clean drinking water and improvement of sanitation and hygiene in the country.
Participants of the meeting also specifically highlighted the requirements ADB about the development of social protection of the population while the project preparation and during construction work.

The responsible officer of the Fergana SES - Khakimova M.:

Thoroughly briefed the participants on the status of disease in Fergana explained the cause of the disease due to lack of health conditions associated with the poor performance of the sewerage system in the city.
In discussing of the issues raised in the following team leaders were made speeches:
1. Umurzakov Saidjon - Director of the 10 - School - in his speech asked the Khokimiyat of the city to raise funds for sewage pipes in Schools and kindergartens of the city, where there are no sewers.
2. Alla Chernova - Chairman of the women's committee of OJSC "AZOT", in the discussion made a proposal to exercise public control of time of sewage repair works, and that it was attended by relevant experts, competent in their field.
3. Sulaymonov Umarali deputy head doctor of the DSENM - in the discussion, he made a proposal to hold raising public awareness of makhalla committee, which would like to direct and construction works to connect to the sewer of the need to raise funds for these purposes.
Among the participants completed questionnaires on social issues (attached).

Chairman *signed* **Khodjaeva D.Sh.**

The PROTOCOL
of the seminar assembly which has been carried out by Focus group with the purposes of to explain the project of the Asian development bank on " Improvement of sanitation and dump of waste water services in Uzbekistan "

September 15, 2011 Fergana city

Chairman: Deputy Governor of Fergana city Khodjaeva D. Sh.
Invited: Representatives of organizations of enterprises, households, public and non-governmental organizations (of 30 people) list attached.

With the information about the project were done.

The Chief of "Suvokava" of Fergana city - Yuldashev M.:

The Government of the Republic of Uzbekistan with the assistance of the Asian Development Bank is preparing a project on reconstruction of water supply and sewage disposal for several areas of the Republic, including the city of Fergana, turn us rehabilitation of pumping stations and sewage treatment plants, and lying of drinking water supply and sanitation in urban areas. The participants of the meeting in detail in the scheme were shown the territory on which the construction work will be carried out, described the difficulties faced by workers “Suvokava” of Fergana city to ensure the normal operation of the sewer system in the city. M.Yuldashev answered to lot of questions of the private traders’ focus group.

Specialist of the GRPM "Uzkommunkhizmat" Alimkhodjaeva D. L.:

Provided that on the initiative of the President of the Republic of Uzbekistan I .A. Karimov's government of the country is doing a great job of supplying the population with pure drinking water and improvement of sanitation and hygiene in the regions. Thus, over the last few years have been re-built or reconstructed water systems and sewer systems in many parts of the country. Participants of the meeting also specifically highlighted the requirements of the Asian Development Bank for the social protection of the population while project preparation and the progress of construction work.

The responsible officer of the Fergana SES - Khakimova M.:

Participants were thoroughly informed about the state of disease in the city of Fergana, explained the cause of the disease due to lack of sanitary conditions associated with the poor performance of the sewerage system in the city.

During the discussion the issues raised were the leaders’ groupes:

1. **Deputy Head of the polyclinic №2 Jurakhodjaev F.**

In order to better serve the population is proposed to increase the number of firms that would conduct maintenance works for the normal maintenance of sewerage systems in operation: And yet, even with the introduction of a new sewer system problems will be permanent.

2. **Deputy Director of the Factory of Furan Mamatkulov D.** - proposed a broader conduct public outreach on safety and correct operation of sewerage systems, as is often the fault occur because of wrong actions of people who drop out of the sewer enduring various subjects.

3. **Adviser on spirituality and enlightenment of the makhalla № 55-Abdurazakova M.**

Many residents of the makhalla face difficulties in acquiring the necessary tools for the repair of water supply and sanitation in your household, because they are not commercially available. Proposes to make the issue in the appropriate authorities for positive solutions.

4. **Teacher College of Communications Yusupova L.** has made a proposal for a bond management "Suvokava" of Fergana city with the colleges that train specialists who are able to work in this system. This would not only employ graduates, but also the opportunity to select the most best for this work.

Chairman *signed* **Khodjaeva D.Sh.**

List of participant in the seminar assembly which has been carried out by Focus group with the purposes of to explain the project of the Asian development bank on "Improvement of sanitation and dump of waste water services in Uzbekistan"

No.	Name	Job	Position	Signature
1	Sulaymonov B.	Directory	Deputy director	*signed*
2	Rasulova N.	Kindergarten № 4	Methodist	*signed*
3	Makhmudova m.	City Department of Education	Chairman of the Women's Committee	*signed*
4	Mamatkolov D.	Factory of Furan	Deputy director	*signed*
5	Khamidova M.	Kindergarten № 2	Methodist	*signed*
6	Khodjaeva Kh.	Policlinic №6	Doctor	*signed*
7	Jurakhodjaev F.	Policlinic №2	Chief doctor	*signed*
8	Mirzamutdinova M.	Farm Household	Farmer	*signed*
9	Musaeva S.	Farm Household	Farmer	*signed*
10	Yusupova Kh.	Farm Household	Farmer	*signed*
11	Kholdoeova M.	Farm Household	Farmer	*signed*
12	Alimova R.	Farm Household	Farmer	*signed*
13	Mamajonova Z.	Farm Household	Farmer	*signed*
14	Abdurazzakova M.	Makhalla № 57 "Khamkorlik"	Adviser	*signed*
15	Mamatboeva Kh.	Makhalla № 67 "Khuvaydo"	Adviser	*signed*
16	Poziljonova T.	Makhalla № 64 "Barkamol"	Adviser	*signed*
17	Mirzaeva S.	Makhalla № 60 "Mekhibonlik"	Adviser	*signed*
18	Lutfullaeva Kh.	Makhalla № 58 "Madaniyat"	Adviser	*signed*
19	Egamberdieva M.	Makhalla № 70 "Khujamagiz"	Adviser	*signed*
20	Yusupova L.	College of Communication	Deputy director	*signed*
21	Barakabaeva D.	Policlinic №2	Doctor	*signed*
22	Mamajonova Kh.	"Business lady"	Chairman	*signed*
23	Abdurazakov B.	MP "Nargiz"	Deputy Chairman	*signed*
24	Ergashev A.	City khokimiyat	Specialist	*signed*
25	Zokirova L.	City khokimiyat	Specialist	*signed*
26	Jurakhodjaev R.	Central market	Deputy director	*signed*
27	Yunusalieva A.	School № 25	Deputy director	*signed*
28	Kholmatova N.	School № 2	Deputy director	*signed*
29	Mamajonova Kh.	MP "Khurshida "	Chairman	*signed*
30	Jumaboev Z.	Urban water canal	Specialist	*signed*

List of participant in the seminar assembly which has been carried out by Focus group with the purposes of to explain the project of the Asian development bank on "Improvement of sanitation and dump of waste water services in Uzbekistan"

15.09.2011

No	Name	Position	Signature
1.	Fayzullayev Rakhmatillo	Imam of “Robiya Khoji one” mosque	*signed*
2.	Nurmatov Sh.	City head electrician	*signed*
3.	Madaminov Y.	Head of department	*signed*
4.	Burkhonov Mukhtor	A.Navoiy makhalla guardsman	*signed*
5.	Sobirova Dilbar	Adviser at A.Navoiy makhalla	*signed*
6.	Rizayeva Khumora	Teacher at CS № 3	*signed*
7.	Mukhamedova Gulnora	Adviser at “Iqbol” AMC	*signed*
8.	Kholmatova Umriniso	Adviser at “Kirguli” AMC	*signed*
9.	Yuldasheva Patilakhon	Adviser at “Kosibchilik” AMC	*signed*
7.	Fozilova Ozoda	Adviser at “Okhunboboyev” AMC	*signed*
8.	Nabiyeva Muxtasar	Adviser at “Yangi khayot” AMC	*signed*
9.	Omonov Sharobiddin	Adviser at “Tuyagum” AMC	*signed*
0.	Kholmatov Makhmudjon	Adviser at “Kirguli” AMC	*signed*
1.	Kalandarova Munavvarkhon	Adviser at “Orolbuyi” AMC	*signed*
2.	Shokirova Mukhtasarkhon	Employee at Pre-educational institution No 10	*signed*
3.	Yusupova Khamidakhon	Adviser at “B.Margiloniy” AMC	*signed*
4.	Yuldoshev Akhatjon	City council of UzLiDeP	*signed*
5.	Muminov A.	Lawyer	*signed*
6.	Muminova Khamidakhon	Secretary at “Kosibchilik” AMC	*signed*
7.	Mirzayeva Zamirakhon	Adviser at “Maorif” AMC	*signed*
8.	Sultonova Diloromkhon	Activist woman of the City women’s committee	*signed*
9.	Umarov Khabibillo	Head of “Pichokchi” AMC	*signed*
0.	Khadjayeva Gulnorakhon	Authority member of the City women’s committee	*signed*
1.	Nishonova Ozodakhon	Employee in the health care system	*signed*
2.	Khoshimova Mavluda	Adviser at “Terak -tagi” AMC	*signed*
3.	Okhunov Erkin	Head of “Yangi bog” AMC	*signed*
4.	Shosaidova Rano	Doctor at dental polyclinic	*signed*
5.	Boydadayeva Z.	Activist woman of “Ipakchi” AMC	*signed*
6.	Ergasheva Dilnoza	Employee at the culture promotion center	*signed*
7.	Khidoyatova Etibor	Teacher at college of education	*signed*

The PROTOCOL
of the seminar assembly which has been carried out by Focus group with the purposes of to explain the project of the Asian development bank on " Improvement of sanitation and dump of waste water services in Uzbekistan "

September14, 2011 Margilan city

The chairman: J.Akhmedova – Deputy Khokim of Margilan city, Head of the city women's committee.

The participants: Expert of "Uzkommunkhizmat" agency D.Alimkhodjayeva, expert of the "Suvakava" producing department O.Otaboyev, Head of the group of the city khokim M.Oripov, Chief of the city "Suvakava" producing state enterprise Kh.Khomidov, Head doctor of the city SES M.Toshboltayev, Head of city department of "Makhalla" charity foundation M.Akhmadjonov, sanitary inspectors of the city SES, school teachers, personnel of "Suvakava" enterprise, Heads of AMC.
Altogether: 36 people

AGENDA:

1. On the presentation of Focus group concerning the explanation of the project of the Asian development bank on "Improvement of sanitation and dump of waste water services in Uzbekistan ".

Meeting has been opened and conducted by the Deputy Khokim of the city J.Akhmedova. J.Akhmedova has expressed opinion that for today the state puts into practice significant jobs for improvement of a social status of the population, increase of a level of types of municipal services rendered to them, and especially of the even greater development of industrial system of the plum of waste waters. At the same time, she has informed about visit of Focus group with the purposes of to explain the project of the Asian development bank on "Improvement of sanitation and dump of waste water services in Uzbekistan ", has in brief explained its purposes and has presented the arrived visitors.

The chief of the industrial enterprise "Suvakava" Kh.Khomidov was called on to explain to the floor the agenda issue. Informing about drinking water supply of the city, about a present condition of dumps of waste waters of the population, Kh.Khomidov also has expressed opinion on a condition of water and sewer networks in certain areas. Having expressed gratitude to the authority of our country on behalf of the population of city, he has informed about necessity of the current project for city.

From the 4th group: The chairman of AMC "B.Margiloniy" M.Koplonov having noted, that without water it is impossible to imagine the human life, as a consequence increase of a living standard of the population, even greater development of medical culture, actuality of improvement of a condition of the sanitation, raised demand for the water drain system of waste waters of the city, he repeatedly emphasized that this project is important and primary job which is necessary for executing. He on behalf of the population of the Assemblies of Makhalla citizens has wished successes in realization of the project.

From the 5th group: The teacher of a comprehensive school №20 M.Madaminova has noted that realization of current project will facilitate the house work for the women.

Having emphasized that this project will touch every street of our city, she has noted for state authorities the necessity of creation of such conditions for our city.

At the end of meeting, the Deputy khokim J.Akhmedova having studied the offers and opinions of the participants, was assured that this issue will be positively solved by the participants and they have found the necessity of the project of works of Focus group of laying of the water drain in preparatory works carried out in Tashkent city.

Chairman of the meeting *signed* **J.Akhmedova**

The PROTOCOL
of the seminar assembly which has been carried out by Focus group with the purposes of to explain the project of the Asian development bank on "Improvement of sanitation and dump of waste water services in Uzbekistan "

September 15, 2011 Khokimiyat of Margilan city

The chairman: J.Akhmedova – Deputy Khokim of Margilan city, Head of the city Women's committee

The participants: Expert of "Uzkommunkhizmat" agency D.Alimkhodjayeva, Chief of the "Suvakava" producing department G.Jakhonov, Chief of the city "Suvakava" producing state enterprise Kh.Khomidov, Head doctor of the city SES M.Toshboltayev, imam of "Robiya Khoji ona" mosque R.Fayzullaev, school teachers, personnel of "Suvakava" enterprise, representatives of AMC.
Altogether: 36 people

AGENDA:

1. On the presentation of Focus group concerning the explanation of the project of the Asian development bank on "Improvement of sanitation and dump of waste water services in Uzbekistan ".

Meeting has been opened and conducted by the Deputy Khokim of the city J.Akhmedova. J.Akhmedova has expressed opinion that for today the state puts into practice significant jobs for improvement of a social status of the population, increase of a level of types of municipal services rendered to them, and especially of the even greater development of industrial system of the plum of waste waters and informed that implementation of this kind of jobs in our city is planned. As a continuation of seminar assembly, which was carried out yesterday, she in brief has explained to the participants about visit of Focus group and their purposes to explain the project of the Asian development bank on "Improvement of sanitation and dump of waste water services" and has presented the arrived visitors.

According to the agenda issue the expert of Republican agency "Uzkommunkhizmat" D.Alimkhodjayeva gave to the participants of the meeting a detailed information about the importance and purposes of this project. Including, she has informed that under the initiative of the President the allocation of significant means in sphere of pure and qualitative drinking water delivery to the population and water drain is planned. She has told that the realization in city of the water drain will enable for complete protection of health of the population, for prevention of spread of infectious diseases, will facilitate housework of the women, and will create convenience to drinking water supply for the population. She has explained that the Asian development bank in view of realization of this project according to gender politics will give on the certain term the credit of the very large amount.

Making statement on this issue the imam khatib of "Robiya Khoji ona" R.Fayzullayev, has expressed the opinion that if this project will be carried out the lifestyle and the culture of the citizens will raise, that an opportunity to eliminate various infectious diseases will appear, at once the women's housework will be facilitated and will give them enough opportunities to be engaged in education of children, to develop the knowledge and competence. He has informed that the population of city will support such opportunity.

The chief of the industrial enterprise "Suvakava" Kh.Khomidov was called on to explain to the floor the agenda issue.

Informing about drinking water supply of the city, about a present condition of dumps of waste waters of the population, Kh.Khomidov also has notified on that in separate areas the water supply and the water drains systems have become outdated, in some areas the sewer pipes are not laid. He has explained, that the authorities of the Republic give the large attention to improvement in city of a sewer service and has explained activity of Focus group, which executes the project of the Asian development bank on "Improvement of sanitation and dump of waste water services in Uzbekistan " in this sphere. He has presented the plan of a lying of sewer pipes. He has acquainted the floor with the questionnaire, which was developed by Focus group to estimate a level of provision of the population by water and sewer systems.

The forms were distributed to the participants of meeting and their opinions and offers on the questionnaire were investigated.

After the discussion of the questionnaire by the small groups of the meeting they have stated their opinions and offers:

From the 1st group: the worker of "Suvakava" industrial enterprise Y. Madaminov - from the questionnaire we have understood that the government is interested in our problems, we thank it for this. In order to speed up this good business, it is necessary to pay municipal payments in time. It is necessary to update networks of waste water; he also has stated the offers and opinion on their reconstruction.

From the 2nd group: the adviser of “Orol buyi” AMC M.Kalandarova - citizens, which want to be connected to the central sewer line are able to do so only from the sanction of the office responsible for waste water; She has expressed necessity to oblige the citizens to rights of asphalt, which they have dug by themselves, otherwise the problems may occur for the schoolboys, which go to school. The population can have inconveniences in road movement, therefore, she has emphasized, and the group should nominate the responsible person.

From the 3rd group: The Deputy of the chief of city council of UzLiDeP - during the study of this project, I want to say how important is it, also at the meetings which have been carried out with the members of a Senate, the population lifted problems in system of the water drain. It is necessary to update not pumps, but their wire. If the government supports an installation of a large line in the city, he has informed, then the convenience are created that the citizens could work in internal layers of inhabited places.

From the 4th group: the pre-educational institution № 10 M. Shokirova - having emphasized, that pure drinking water and qualitative water drain system are for today the most important factor of protection of health of our children, having noted necessity of reconstruction of sewer system in kindergarten with the purpose to improve a sanitary condition in the city kindergartens, she has offered for realization of the project the necessity to lead monitoring of condition of all kindergartens of city. She has expressed support of all employees in realization of the project and on her own behalf has wished good luck.

From the 5th group: Head of “Pichokchi” ACM Kh.Umarov – he has noted that realization of current project will facilitate the housework for the women. Having emphasized that this project will touch every street of our city, he has noted for state authorities the necessity of creation of such conditions for our city.

At the end of meeting, the Deputy khokim J.Akhmedova having studied the offers and opinions of the participants, was assured that this issue will be positively solved by the participants and they have found the necessity of the project of works of Focal group of laying of the water drain in preparatory works carried out in Tashkent city.

Chairman of the meeting *signed* **J.Akhmedova**

List of participant in the seminar assembly which has been carried out by Focus group with the purposes of to explain the project of the Asian development bank on "Improvement of sanitation and dump of waste water services in Uzbekistan"

15.09.2011

No	Name	Position	Signature
7.	Fayzullayev Rakhmatillo	Imam of “Robiya Khoji one” mosque	*signed*
8.	Nurmatov Sh.	City head electrician	*signed*
9.	Madaminov Y.	Head of department	*signed*
10.	Burkhonov Mukhtor	A.Navoiy makhalla guardsman	*signed*
11.	Sobirova Dilbar	Adviser at A.Navoiy makhalla	*signed*
12.	Rizayeva Khumora	Teacher at CS No 3	*signed*
7.	Mukhamedova Gulnora	Adviser at “Iqbol” AMC	*signed*
8.	Kholmatova Umriniso	Adviser at “Kirguli” AMC	*signed*
9.	Yuldasheva Patilakhon	Adviser at “Kosibchilik” AMC	*signed*
3.	Fozilova Ozoda	Adviser at “Okhunboboyev” AMC	*signed*
9.	Nabiyeva Muxtasar	Adviser at “Yangi khayot” AMC	*signed*
0.	Omonov Sharobiddin	Adviser at “Tuyagum” AMC	*signed*
1.	Kholmatov Makhmudjon	Adviser at “Kirguli” AMC	*signed*
2.	Kalandarova Munavvarkhon	Adviser at “Orolbuyi” AMC	*signed*
3.	Shokirova Mukhtasarkhon	Employee at Pre-educational institution No 10	*signed*
4.	Yusupova Khamidakhon	Adviser at “B.Margiloniy” AMC	*signed*
5.	Yuldoshev Akhatjon	City council of UzLiDeP	*signed*
6.	Muminov A.	Lawyer	*signed*
7.	Muminova Khamidakhon	Secretary at “Kosibchilik” AMC	*signed*
8.	Mirzayeva Zamirakhon	Adviser at “Maorif” AMC	*signed*
9.	Sultonova Diloromkhon	Activist woman of the City women’s committee	*signed*
0.	Umarov Khabibillo	Head of “Pichokchi” AMC	*signed*
1.	Khadjayeva Gulnorakhon	Authority member of the City women’s committee	*signed*
2.	Nishonova Ozodakhon	Employee in the health care system	*signed*
3.	Khoshimova Mavluda	Adviser at “Terak -tagi” AMC	*signed*
4.	Okhunov Erkin	Head of “Yangi bog” AMC	*signed*
5.	Shosaidova Rano	Doctor at dental polyclinic	*signed*
6.	Boydadayeva Z.	Activist woman of “Ipakchi” AMC	*signed*
7.	Ergasheva Dilnoza	Employee at the culture promotion center	*signed*
8.	Khidoyatova Etibor	Teacher at college of education	*signed*

List of the participants of the workshop on conducting focus groups to explain the goals of the ADB project "Improvement of water and sanitation services in Uzbekistan"

№	Name	Position	Signature
1.	Akhmedova Jamila Akhundjanovna	Deputy Khokim of Margilan city	*signed*
2.	Yusupova Shokhista Sodikovna	Teacher of the Secondary School # 31	*signed*
3.	Shermatova Mavluda Mukhammadjonovna	Teacher of the Secondary School # 14	*signed*
4.	Sharipova Shoira Abdunabievna	Teacher of the Secondary School # 16	*signed*
5.	Akhunova Odina Adilovna	Teacher of the Secondary School # 4	*signed*
6.	Madaminova Mutabar Olimjonovna	Teacher of the Secondary School # 20	*signed*
7.	Toshboltaeva Mukhabbat Sadikovna	Teacher of the Secondary School # 9	*signed*
8.	Sobirov Sukhriddin Abduvakhobovich	Teacher of the Secondary School # 26	*signed*
9.	Tukhtasinov Arabek Makhamatovich	Engineer of “Suvokava”	*signed*
10.	Toshkhujaev Murod Alievich	Purchasing Specialist of “Suvokava”	*signed*
11.	Mamajanov Ismoil	Chairman of the Makhalla Committee “Galatoy”	*signed*
12.	Tolipov Makhmud	Chairman of the Makhalla Committee “Maorif”	*signed*
13.	Azizova Zamira		*signed*
14.	Botirov Odiljon Makhmudovich	Purchasing Specialist of “Suvokava”	*signed*
15.	Sodikov Rakhmat	Chairman of the Makhalla Committee “Tuyagum”	*signed*
16.	Mirzaev Khatamjon	Chairman of the Makhalla Committee “Kosibchilik”	*signed*
17.	Khojirakhmatov Obidjon Rustamboevich	Specialist of the Makhalla Committee “Kirguli”	*signed*
18.	Khomidov Sadriddin Ulmasovich	Specialist of the Makhalla Committee “A. Yassaviy”	*signed*
19.	Azizov Musojon Abidovich	Chairman of the Makhalla Committee “Guravval”	*signed*
20.	Saydamatov Shukhrat Uraimovich	Doctor of city SES	*signed*
21.	Khakimov Alisher Abdujabarovich	Doctor of city SES	*signed*
22.	Zulfikorov Aspiyokhon	Chairman of the Makhalla Committee “Alisher Navoiy”	*signed*
23.	Ismoilov Yunus Yusupovich	Chairman of the Makhalla Committee “Okhunboboev”	*signed*
24.	Koplonov Mukhammadjon	Chairman of the Makhalla Committee “B. Margiloniy”	*signed*
25.	Khaydarov Bakhodirkhon	Chairman of the Makhalla Committee “Ikbol”	*signed*

26.	Akhatov Akmal	Employee of city SES	*signed*
27.	Murtazaev Asil	Chairman of Margilan “Kamolot” committee	*signed*
28.	Fozilov Toyir	Chairman of the makhalla Committee “Terak Tagi”	*signed*
29.	Nishanova Mavjuda Omonovna	Teacher of the Pedagogical College	*signed*
30.	Kayumova Diloram Kamildjanovna	Adviser of village committee	*signed*

ENVIRONMENTAL CLEARANCE OF THE STATE NATURE PROTECTION COMMITTEE № 18/7883 DATED SEPTEMBER 14, 2011

O'ZBEKISTON RESPUBLIKASI
TABIATNI MUHOFAZA QILISH
DAVLAT QO'MITASI

100017, Toshkent sh., Mustaqillik maydoni, 5.
tel. +998 (71) 239-43-42, 239-11-71, faks 239-14-94

STATE COMMITTEE FOR
NATURE PROTECTION OF
THE REPUBLIC OF UZBEKISTAN

100017, 5, Mustakillik sq., Tashkent.
Phone +998 (71) 239-43-42, 239-11-71, faks 239-14-94

http: //www.uznature.uz e-mail: info@uznature.uz

20 11 yil « 14 » сентября № 18/7883

ЗАКЛЮЧЕНИЕ

государственной экологической экспертизы

По объекту – Оценка воздействия на окружающую среду реконструкции систем канализации городов Ферганы и Маргилана.
Заказчик – ООО «Islohotkonsaltservis».
Разработчик – ЧПФ «SUVOQOVA-XIZMAT».

Коммерческому директору
ООО «Islohotkonsaltservis»
НУРМУХАМЕДОВУ Н.

копии: Председателю Ферганаоблкомприроды
НОСИРОВУ И.А.
Директору ЧПФ «SUVOQOVA-XIZMAT»
КАРМАЗИНУ В.М.

На государственную экологическую экспертизу представлены материалы первого этапа оценки воздействия на окружающую среду намечаемой реконструкции систем канализации городов Ферганы и Маргилана.

Проектом предусматривается увеличение общего охвата населения услугами водоотведения, строительство новых и реконструкция существующих канализационных коллекторов, а также реконструкция существующих канализационных насосных станций (КНС), реконструкция и расширение Ферганских канализационных очистных сооружений.

Ферганские очистные сооружения действуют с 1974 года и являются региональными, принимающими стоки от городов Фергана, Маргилан, р/ц Ташлак, Хамза, Вуадиль. Установленная мощность очистных сооружений 260 тыс. $м^3$/сут. За 2010 год на очистные сооружения поступали стоки в объеме 195,67 тыс. $м^3$/сут. Очистка стоков на КОС – полная механическая и биологическая, сооружения доочистки отсутствуют. Сбросной коллектор диаметром 2000 мм длиной 2,2 км транспортирует очищенные стоки в нижний Кызылтепинский коллектор, далее стоки по коллекторно-дренажной системе поступают в р. Сырдарью.

Анализ современного состояния канализационных сетей гг. Ферганы и Маргилана показал, что в результате их длительной эксплуатации большая часть канализационных коллекторов, выполненных в основном из керамических и асбоцементных труб, пришла в негодность. Утечка неочищенных стоков из нарушенных стыков канализационных труб приводят к загрязнению почв, грунтов, грунтовых и поверхностных вод азотными соединениями, нефтепродуктами, взвешенными веществами и органическими соединениями. Положение усугубляется еще и тем, что железобетонные коллекторы сильно заилены и загазованы, что привело к коррозии бетона и обрушению верхнего свода коллекторов.

Существующие насосные станции перекачки для бесперебойной подачи стоков КОС в г. Фергане (1 ед.) и в г. Маргилане (4 ед.) нуждаются в капитальном восстановительном ремонте. На территории города Ферганы находится здание решеток, предназначенное для сбора стоков от неканализованного населения. Объект не эксплуатируется из-за отсутствуя технологического оборудования и пришедшего в негодность здания.

Ферганские очистные сооружения введены в эксплуатацию в 1974 г. Технология очистки сточных вод на КОС основана на методе использования активного ила. В состав очистных сооружений входят решетки, несколовки, первичные отстойники, аэротенки, вторичные отстойники.

В настоящее время система аэрации в аэротенках вышла из строя. Очистка стоков происходит за счет оседания взвешенных веществ в отстойниках и аэротенках, выводя их из строя. Стоки, прошедшие КОС, обеззараживаются вручную гипохлоритом кальции и затем направляются в р. Сырдарью. За все время эксплуатации капитального ремонта зданий и сооружений не производилось. Вышли из строя вентиляционное оборудования и котельная. В настоящее время ведутся работы на КОС по замене насосного оборудования.

Стоки, сбрасываемые в р. Сырдарью, из-за нарушения технологи очистки не соответствуют установленным нормам ПДС загрязняющих веществ в водотоки рыбохозяйственного назначения. Река Сырдарья является источником питьевого водоснабжения республик Центральной Азии.

Представленным проектом предусматривается внедрение эффективных технологических процессов, техническое перевооружение сооружений, оборудования для отвода очистки и обеззараживания сточных вод; увеличение охвата централизованной системы канализации населения г. Ферганы с 73,3 % до 77,5 % и г. Маргилана с 46 % до 49 %.

Для реализации проектных решений предусматривается: строительство в г. Фергана 7,4 км канализационных коллекторов и сетей с применением стекловолоконных либо полиэтиленовых труб диаметром 300-500 мм с установкой стекловолоконных колодцев, а также колодцев из монолитного железобетона; реконструкция 11,7 км канализационных коллекторов и сетей, находящихся в аварийном состоянии; строительство сливной станции на территории существующего здания решеток.

В г. Маргилане проектом предусматривается: строительство 9 км канализационных коллекторов и сетей из стекловолоконных, либо полиэтиленовых труб диаметром 150-300 мм, а также установка на сети колодцев, выполненных из стекловолокна или монолитного железобетона; реконструкция существующих насосных станций: Ташлак, Водстрой и Атлас.

Проектом предусматривается реконструкция существующих канализационных очистных сооружений с увеличением их мощности по приему стоков с 260 тыс. $м^3$/сут до 300 тыс. $м^3$/сут. Намечаемая реконструкция КОС включает: ремонт и переоборудование приемной камеры, здания решеток, распределительной камеры, песколовок; реконструкцию песковых площадок, первичных отстойников с насосной станцией сырого осадка, аэротенков, воздуходувной станции, иловой насосной станции, существующих иловых площадок, технологических коммуникаций, площадки водопроводных сооружений, зданий лаборатории, вспомогательных зданий, ограждения; строительство здания хлораторной; ремонт объектов энергетического хозяйства.

Проектом предусматривается прокладка коллекторов и сетей под проезжей частью автомобильных дорог, на отдельных участках трасс коллекторы будут прокладываться под землей вдоль автомобильных дорог. В процессе проведения работ по реконструкции и строительству сетей и коллекторов снос жилых строений не предполагается. При необходимости использования щебня, гравия и песка для выполнения строительных работ, следует использовать только утвержденные и имеющие соответствующую лицензию месторождения. При проведении строительных работ транспортные перевозки должны осуществляться строго по выделенным проездам. Обслуживание используемых технических средств (автогрейдеры, автопогрузчики, бульдозеры, тракторы, краны, экскаваторы, автосамосвалы и др.) должно осуществляться на специально оборудованных площадках и заправочных станциях; отработанные масла должны собираться в герметичные металлические емкости с последующей их сдачей на нефтебазу для переработки. Перед началом строительства коллекторов должен сниматься плодородный слой почвы и размещаться во временном отвале, с целью его использования при проведении рекультивации нарушенных земель в местах разработки траншей. Разработка грунта в траншеях при пересечении ими всех видов подземных коммуникаций допускается лишь при условии наличия письменного разрешения организации, эксплуатирующей эти коммуникации и в присутствии ответственных представителей.

В целях реализации проектных решении по реконструкции Загороднего коллектора предполагается осуществить вырубку 18 деревьев: 9-тутовников, 7-тополей, 2-яблони). В этой связи на следующем этапе проектирования следует рассмотреть альтернативные варианты смещения трассы трубопроводов и сохранения деревьев от вырубки.

В период проведения строительных работ в атмосферный воздух будут поступать пыль неорганическая и отработавшие газы ДВС, содержащие оксиды углерода, азота, серы, углеводороды, сажу, альдегиды, бенз(а)пирен.

Для снижения выбросов загрязняющих веществ до безопасного для окружающей среды уровня должен быть рассчитан оптимальный вариант строительной техники с минимальным количеством одновременно работающих машин и механизмов. В местах пылевыделения должны быть приняты меры по пылеподавлению.

Во время проведения ремонтно-строительных работ канализационных сетей будут образовываться отходы, представленные фрагментами разрушенных канализационных сооружений и отходы механической очистки коллекторов от наносов, состоящие из мусора, минеральных и органических веществ, данные отходы предусматривается вывезти на специально отведенное для захоронения место.

Для выполнения проектных решений по реконструкции КОС планируется проведение следующих видов работ: опорожнение и очистка существующих емкостных сооружений от ила, песка, иловых наносов, вывоз отходов на специально отведенное для захоронения место, реконструкция зданий и сооружений, оснащение их современным технологическим оборудованием. В этот период ожидается образование строительных отходов – обломки бетона, кирпичный бой, стяжка, щебень, битые плитки и стекло, отходы будут вывозиться в специально отведенное место на захоронение.

На данном этапе проектирования не был проработан вопрос безопасного для окружающей среды с учетом санитарных норм размещения образующихся отходов. В этой связи на следующем этапе проектирования необходимо уточнить месторасположения предполагаемых площадок и условия захоронения образующихся отходов.

На реконструируемых КОС обеззараживание очищенных сточных вод предусматривается жидким хлором. В этой связи организуется контроль за содержанием хлора в воздухе дозаторной и остаточного хлора в воде. Для минимизации поступления хлора в атмосферный воздух, предусмотрена система вентиляции с очисткой воздуха в скрубберe. Наличие хлора в производственных помещениях будет контролироваться автоматическими газоанализаторами.

В качестве возможной аварийной ситуации в процессе эксплуатации канализационных трубопроводов в проекте анализируются случаи нарушения их целостности, при этом не исключено попадание неочищенных стоков в почву, грунтовые и поверхностные воды. Городские сточные воды содержат большое количество поверхностно-активных моющих веществ, которые попадая в поверхностные водотоки губительно действуют на флору и фауну. С целью минимизации аварийных ситуаций предусматривается: прокладка трубопровода в месте перехода через канал в кожухе; использование труб из антикоррозийного материала.

Вероятная аварийная ситуация на КОС в хлораторной может возникнуть при разгерметизации контейнера с жидким хлором в помещении склада хлораторной или при разгерметизации трубопроводов с хлором в хлордозаторной.

При аварийной ситуации срабатывает газоанализатор, включается автоматически аварийная вентиляция и должна выключиться рабочая вентиляция, производится остановка утечки хлора.

По завершению намечаемой реконструкции систем канализации гг. Ферганы и Маргилана качество стоков, прошедших полную и механическую и биологическую очистку, должно соответствовать установленным нормам ПДС с учетом технически достижимых показателей очистных сточных вод.

Проектом предусматривается мониторинг уровня и минерализации грунтовых вод как в зоне городов так и расположения очистных сооружений. Также необходимо предусмотреть мониторинг уровня загрязнения и засоления грунтовых вод вблизи р. Сырдарьи, качество воды в реке и других водотоках. Для проведения мониторинга в районе расположения КОС, необходимо организовать сеть наблюдательных скважин, расположенных ниже и выше очистных сооружений. Для определения возможной фильтрации неочищенных стоков в грунтовые воды, перечень подконтрольных ингредиентов (ионы хлоридов, сульфатов, кальций, магний) следует дополнить нефтепродуктами, азотом аммонийным и азотом нитритным.

По завершении запланированных работ необходимо осуществить техническую рекультивацию временно использованных и нарушенных земельных участков, а также произвести посадку кустарниковой и древесной растительности в счет компенсации за срубленные деревья при реконструкции канализационного коллектора.

Анализ проекта показал, что представленные материалы в достаточной степени соответствуют требованиям действующих природоохранных документов к первому этапу оценки воздействия на окружающую среду..

Государственная экологическая экспертиза Госкомприроды Республики Узбекистан **согласовывает** проект заявления о воздействии на окружающую среду намечаемой реконструкции систем канализации гг. Ферганы и Маргилана.

До завершения реконструкции объектов необходимо представить на государственную экологическую экспертизу Заявление об экологических последствиях в установленном законодательством порядке. В документе, наряду с разработанными экологическими нормативами, следует представить конкретные план-графики мониторинга состояния грунтовых вод в зонах городов, сооружений КОС, а также качества воды в р. Сырдарья.

Ферганскому областному комитету по охране природы следует взять под постоянный контроль соблюдение требований природоохранного законодательства при проведении работ по реконструкции систем канализации гг. Ферганы и Маргилана, а также сооружений Ферганских канализационных очистных сооружений, обратив особое внимание на безопасное для окружающей среды размещение образующихся отходов и недопустимость несанкционированного изъятия сырья – щебня, гравия, песка.

Председатель **Н. УМАРОВ**

Тарасов В.А., тел. 239-19-77

STATE COMMITTEE FOR NATURE PROTECTION OF THE REPUBLIC OF UZBEKISTAN

14 September 2011 No.18/788

STATE ENVIRONMENTAL IMPACT STATEMENT

Project – Environmental Impact Assessment of Fergana and Margilan sewerage system reconstruction
Client – "Islohotkonsaltservis" LLC
Author – PEF "SUVOKOVA-XIZMAT"

To attn.: Mr. N.Nurmukhamedov – Director
"Islohotkonsaltservis" LLC
copy: Mr. I.Nosirov – Chairman
Nature Protection Committee of Fergana Region
Mr. V.Karmazin – Director
PEF "SUVOKOVA-XIZMAT"

To the state environmental impact assessment are submitted materials of the first evaluation stage of environment impact of planned reconstruction of sewerage systems of Fergana and Margilan cities.

The project provides increase of the total population coverage by waste water services, construction of new and reconstruction of existing sewerage collectors, and also reconstruction of existing sewerage pump stations, reconstruction and expansion of Fergana waste water treatment facilities.

The treatment facilities of Fergana city operate since 1974 and are regional accepting waste waters from Fergana, Margilan, Tashlak, Hamza, Vuadil cities. The established capacity of treatment facilities is 260 000 m^3/day. In 2010 into the treatment facilities are flowed 195 670 m^3/day waste water. Treatment of waste water in the sewerage treatment plants is the complete mechanical and biological, there are no tertiary plants. The tail drain in diameter of 2000 mm in length of 2.2 km transmits the treated waste water in the bottom collector Kiziltepa, further waste waters through collector-drainage system flows to Sirdarya river.

The analysis of an existing condition of sewerage networks of Fergana and Margilan cities has shown that as a result of their long operation the most part of the sewerage collectors constructed generally by ceramic and asbestos cement pipes, has become unfit for use. Leakage of untreated waste water from the broken joints of sewerage pipes leads to pollution of soils, grounds, ground and surface waters by nitrogen compounds, by the mineral oils, suspended materials and organic compounds. Condition is aggravated also by reinforced-concrete collectors strongly became silted and gas-polluted, that has led to corrosion of concrete and falling of the top cure of collectors.

Existing waste water pump stations for continuity flow of waste water to the treatment plants of Fergana (1 unit) and Margilan (4 units) cities require overhaul reconditioning. In territory of Fergana city there is the building of lattices intended for collection of drains from unsewered population. The object is not maintained because of unavailability of the processing equipment and become unfit for use building.

The Fergana treatment facilities were commissioned in 1974. The waste water treatment technology in the sewerage pump station is based on active silt use method. The structure of treatment facilities includes lattices, sand trap, primary sediment bowls, aeration tanks, secondary sediment bowls.

Further follows the description of project.

The project analysis has shown that the submitted materials adequately meet the existing environmental requirements to the first evaluation stage of environmental impact.

The state environmental impact assessment of the State Environmental Management Committee of the Republic of Uzbekistan **coordinates** the draft environmental impact assessment of the planned Fergana and Margilan sewerage systems reconstruction.

Before completion of reconstruction of objects it is necessary to submit for the State environmental impact assessment the Environmental Impact Statement in the order established by the legislation. In the document, along with the developed ecological specifications, it is necessary to submit the concrete monitoring plan – schedules on condition of ground waters in related to project cities, sewerage pump station facilities, and also quality of water to Sirdarya river.

The Fergana Regional Environmental Management Committee should take under the constant control of observance of the environmental legislation requirements at work on Fergana and Margelan sewerage systems reconstruction, and also facilities of Fergana waste water treatment facilities, having paid special attention to safe placing for environment of formed waste and inadmissibility of unauthorized withdrawal of raw materials – ballast stone, gravel, sand.

Chairman *(signature)* **N.Umarov**