

Environmental Monitoring Report

Project number: 52256-006
January-June 2021
January 2022

Kyrgyz Republic: Osh-Plotina Water Treatment Plant Chlorine Neutralization Unit

Prepared by the Department of Drinking Water Supply and Sewerage Development under the State Agency of Architecture, Construction, Housing and Communal Services under the Cabinet of Ministers of the Kyrgyz Republic for the Asian Development Bank.

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Сокращения

ADB	Asian Development Bank
DDDWSS	Department of Development of Drinking Water Supply and Sanitation
EA	Executive Agency
WTP	Water treatment plant
EMP	Environmental management plan
GKR	Government of the Kyrgyz Republic
IEA	Initial environmental assessment
VO	Vodokanal of Osh
PPKR	Permanent Representation in the Kyrgyz Republic
PPE	Personal protective equipment

1. INTRODUCTION

1.1. Preamble

1. In 2011, ADB approved the Emergency Reconstruction and Reconstruction Project. The project aimed to: (i) rebuild the country's financial capacity to meet the sharp increase in additional costs associated with the conflicts in April and June 2010; and (ii) rebuilding damaged houses and improving basic infrastructure.
2. One of the components of the Initial Project was the rehabilitation of the chlorination plant located at the Ozgorsk Wastewater Treatment Plant (WSP). The initial project started on February 14, 2011 and was completed on November 23, 2016 (actual completion date). Although the project completion report concludes that the project was successful, it raises issues related to the standards applied in the water sector in the Kyrgyz Republic in relation to current standards.. ADB and the Government agreed that the modernization of chlorine neutralization plants at the water treatment plant is a priority to meet the latest international standards and the highest levels of safety
3. Given its urgency, the government has requested the modernization of the chlorine neutralization unit at the Ozgor wastewater treatment plant.
4. This report is a Semi-Annual Environmental Monitoring Report (SAEMR) for the project « Osh-Plotina Water Treatment Plant Chlorine Neutralization Unit »
5. This is the first Environmental Monitoring Report for this project. It covers the activities of the project carried out from 01 January 2021. until June 30, 2021

1.2. Brief information

6. Osh city is the second largest city in the Kyrgyz Republic. The number of subscribers who receive water supplied by the Osh municipal enterprise or Oshgorvodokanal (about 72,000 families (taking into account the number of 5 people per family)). Osh city is mainly supplied with surface water from the Ak-Bura river, treated at the Ozgur water treatment plant, producing about 180,000 m³ of water per day, equal to about 80 percent of the water supply. The rest of the water comes from wells and drainage galleries at four main locations. Ozgor AF was built in 1978 with 6 fast filters (line I) and expanded in 1991 to 10 new filters (line II). The design capacity of the two treatment lines is 50,000 m³ / day and 80,000 m³ / day, respectively (Figure 1-1). However, the plant's average daily capacity is 180,000 m³ / day, according to UWC, indicating that the plant is currently overloaded.
7. During a visit to the ADB mission in May 2018 to the recently rehabilitated Ozgur wastewater treatment plant, some safety concerns of the Chlorination Plant were identified. Currently, the chlorination shop of the Ozgor Air Force stores up to eight containers with liquid chlorine with a capacity of 800 to 1000 kg, located in one room. The only existing emergency solution in the event of a chlorine leak is a sarcophagus, which can isolate one barrel of chlorine. There is a ventilation system that can draw in chlorine gas, but it will be

dispersed directly into the environment through the ventilation pipe, which can adversely affect the environment. The proposed neutralization unit will help absorb and neutralize the leakage of gaseous chlorine before discharge, thereby ensuring the safe operation of the chlorination unit of Ozgor WTP



Cleaning line 50000m³/day



Cleaning line 80000m³/day.

Figure 1-1 Water treatment plant Ozgor.

2. PROJECT DESCRIPTION AND CURRENT ACTIVITIES

2.1 Project Description

8. The aim of the project is to ensure the sustainability of the existing the Ozgur drinking water treatment plant in the city of Osh, located in the Osh region of the Kyrgyz Republic (Figure 2-1).
9. The proposed chlorine neutralization unit is located in the building of the existing chlorination water treatment plant "Ozgur" in the city of Osh. (Figure 2-2 and Figure2-3)

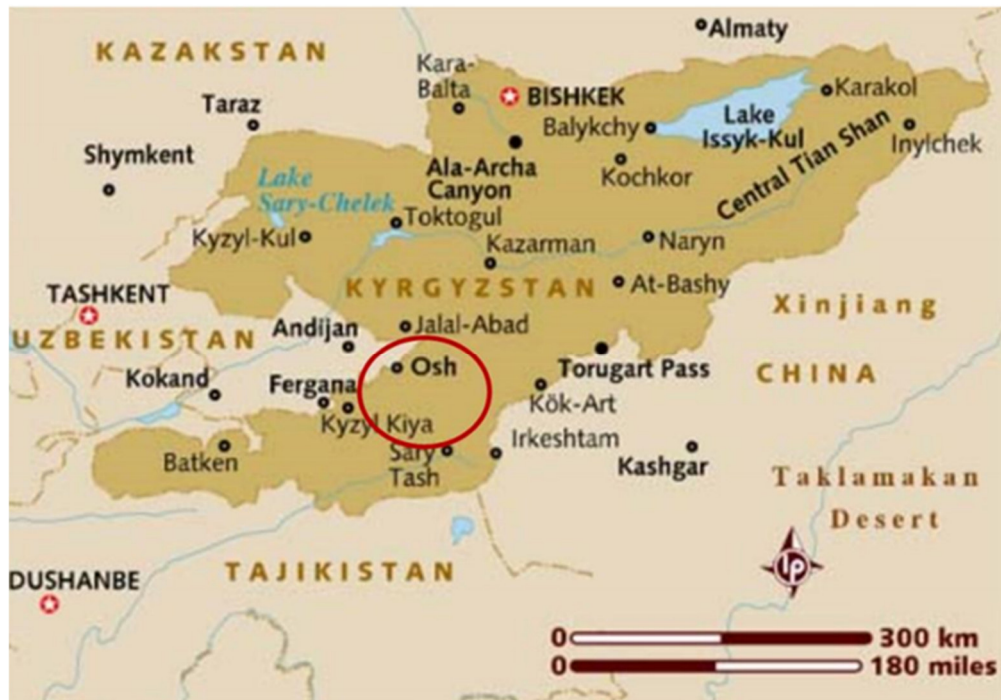


Figure 2-1. Map of the Kyrgyz Republic.



Figure 2-2. Location of the Ozgor water treatment plant



Figure 2-3. The building of the chlorination plant

10. The object is surrounded by the Ak-Bura river, about 300 m from it. Irrigation canal Uvam, about 40 m and the nearest households about 80 m from the house.

Chlorine Gas Scrubber System Technical Description

11. This scrubber system is designed to remove chlorine from the air and neutralize it in the event of a leak. The design decisions are based on the fact that the leak occurs at one damaged container with chlorine (1000 kg).

Principles of chlorine absorption by caustic

12. There are many chemicals that can absorb chlorine gas. The most common is 20% sodium hydroxide solution (hereinafter caustic). Over time, the chlorine decomposition reaction occurs according to the following chemical equation:



caustic chlorine sodium hypochlorite sodium chloride water

13. The effective scrubbing rate is typically close to 99%. In order to maintain a sufficient absorption capacity until the end of the process, caustic is used and stored in the tank of the scrubber cleaning system in the amount of 130% ($4.62 \times 1.3 \approx 6 \text{ m}^3$) of the required volume.
14. To improve absorption properties, the contact time and reaction contact surface should be increased to the technically reasonable maximum. The towers / columns in the top of the

caustic tank in which the reaction takes place are filled with plastic rings to provide maximum area with the lowest possible volume.

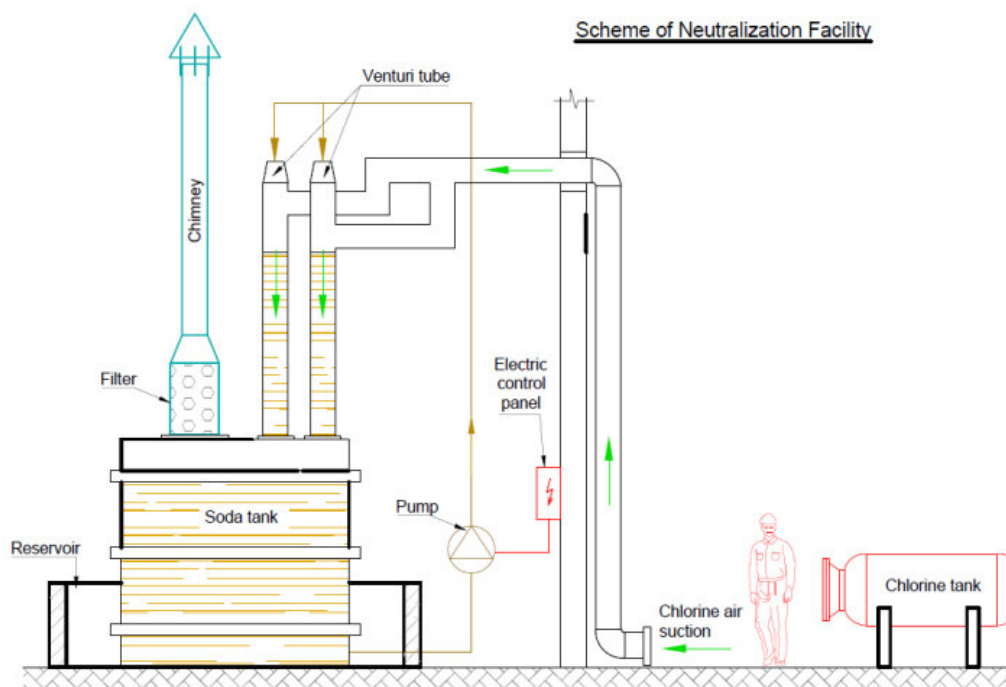


Figure 2-4. Schematic diagram of the neutralization installation.

Main components of the system

- Storage tank for absorption liquid (caustic, NaOH 20%) with a volume of 7000 liters;
- Tower scrubber filled with 3 m³ Raflex rings. Rings create a large reaction surface to neutralize chlorine gas
- Fan behind the neutralization unit (1 piece);
- Circulating pump for caustic soda (1 piece).

Principle of operation

15. In the event of an emergency, the gas detector automatically starts the neutralization device. An alarm from the gas detector triggers a circulation pump that pumps caustic to the top of the column and sprays it inside the neutralization towers. In addition, the alarm triggers a fan that draws contaminated air through the neutralization tower. After the caustic circulation starts, the fan blows the polluted air to the side suction of the installation, so that the flows of caustic and polluted air move towards each other.
16. The fan and circulation pump are made of polypropylene, resistant to liquid chemicals and gas mixtures. To obtain the area required for neutralization, the tower is filled with rings.

This achieves maximum surface area with minimum volume, ensuring correct neutralization of contaminated air.

17. A mist collector at the top of the second column ensures that droplets are removed from the system. The heat generated by the reaction of caustic soda with chlorine gas is absorbed by the flushing liquid.

Ventilation system

18. One of the most important design criteria was the need to ensure the replacement of the air atmosphere in the storage tank 10 times per hour in the event of an emergency. For a working area of 100 m² and a room height of 4.5 m, the ventilation volume should be 4500 m³ / h. This rate of air exchange takes into account that during In the first minutes of a gas leak, the danger to health and life can be minimized through the appropriate distribution of gas from damaged containers. The first 3-5 minutes are most important as over time the tank temperature drops significantly and the leakage rate drops
19. Therefore, it is very important that the fans start running as early as possible after a leak occurs. The longer the leak occurs, the colder the container and the lower the leak rate. After the first minutes, the released liquefied chlorine must be removed and evaporated in 35-50 minutes. When the maximum concentration of 1 g / m³ is reached at the end of the absorption process, the circulation system switches to ventilation to the atmosphere

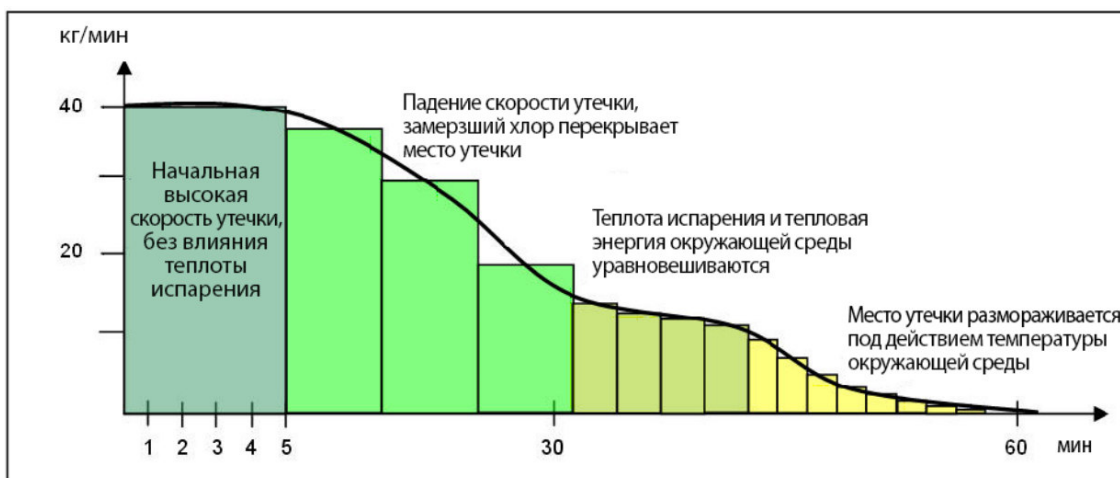


Figure 2-5 Dependence of chlorine concentration on time

2.2. Project Contracts and Management

20. A list of the main organizations and specialists involved in the project and related to environmental protection measures is given in Table 2- 1

Employer	Department for the Development of Drinking Water Supply and Sanitation (DDWSS) under the State Agency for Architecture, Construction, Housing and Utilities under the Government of the Kyrgyz Republic.		
Contracting organization	Company «CIC»:	Contacts	Function
Contracting organization	Kwon N.G	+996777995518 cic_project@mail.ru	Ensures the implementation of environmental protection measures in full, carries out an inspection of the facility, ensures the effective implementation of the EMP.
Project Manager	Madanbekov M.	+996778 866 684	
Technical Supervisory Personnel / Senior Engineer	Karimova M.T	+996770220882	
Occupational health and safety engineer	Madanbekov M.	+996778 866 684	

Table 2-1 Environmental protection measures

21. The following specialists will be responsible for environmental monitoring and/or supervision during construction:
- Customer representatives
Madanbekov Manas - Engineer for supervision of the Department of Development of Drinking Water Supply and Sanitation
- Implements ADB's Security Policy and national legislation.
- Plans environmental strategies to achieve goals and promote best practices.
- Plans the best tools and systems for monitoring the effectiveness and implementation of strategies.
 - Environmental contractor managers and/or specialist responsible for environmental protection and safety
Malika Karimova - Occupational Health and Safety Engineer (OT and TB) under the project of the company "CIC"
22. The contractor's managers and engineers, namely the Director of the company, Mr. Kwon NG, as well as Ms. Karimova and Mr. Madanbekov, are responsible for the implementation of environmental protection measures and perform all tasks related to the environment in accordance with the ADB Safety Policy and national legislation. Their activity consists in supervision, directly, at the site of installation work. If necessary, instructing on the installation work within the framework of the measures provided for in the EMP.
23. In addition, the contractor's occupational health and safety specialist will:
- ensure that the construction methods are satisfactory with respect to the technical requirements of the ADB Environmental Management.

- conduct periodic review and compile reports on the implementation of the EMP.
- carry out inspections of construction equipment, work safety, property, personnel and the public; and recommendations of the EMP.
- to monitor the implementation of any necessary measures to mitigate the impact on the environment, and in the event of any unexpected impacts on the environment, coordinate actions to take measures to mitigate the impact.

2.3. Project Activities During Current Reporting Period

24. During the reporting period, no design work was carried out. This is due to the fact that the installation is factory-made and does not require any additional design work.
25. An Environmental Management Plan was developed and implemented.

A contract for the supply of equipment was signed with the manufacturer (f. GRUNDFOS). Installation and commissioning of the chlorine neutralization unit was carried out.

Construction

26. Construction work was carried out according to the established schedule (Annex 4) and began on May 14, 2021 and ended on June 07, 2021.

Description of construction works.

27. Work on the installation of a chlorine neutralization scrubber includes a number of mandatory works:
 - main works: construction, assembly and special construction works;
 - auxiliary work: loading, transportation and unloading of equipment that ensures uninterrupted production of construction and installation works;
 - maintenance work: quality control and safety of construction and installation works, ensuring the implementation of environmental protection measures during the implementation of the main and auxiliary construction processes, maintenance and repair of machines, mechanisms, social services for builders, protection of material values.
28. Prior to the commencement of the construction of the object in question, measures and work were carried out to prepare construction production in an amount that ensures the construction of the established pace. Including the general organizational and technical preparation of the construction organization for the production of construction and installation works, in accordance with the requirements of SNiP KR12-02: 20018 "Organization of construction production".
29. When performing auxiliary work, the following were carried out: the supply of equipment, as well as the preparation of the building in which the equipment for the neutralization of chlorine is installed.

30. First of all, the installation of the tank itself was carried out, and then the fastening of the tanks for neutralization. These containers are attached directly to the tank using special fasteners.
31. Next, holes were punched for the suction pipelines, which are led directly into the room in which the chlorine cylinders are located. The other end of the pipelines is connected directly to the neutralization tanks. The pipelines are connected by gluing.
32. After the installation of the pipelines, a recirculation and air intake system was installed. These pipelines are attached to the shippers.
33. After the installation of the main equipment, the installation of sensors, a control panel of the installation and a chlorine leak detection system was carried out. The final stage of the installation work was the launch of the installation and checking it for defects. Also, an act of acceptance and delivery of the object was drawn up (Appendix 2)
34. After the completion of the installation work, a training seminar was held on the rules of working with the installation.



Photo 2-1 Installation Installation



Photo 2-2 Installation building



Photo 2-3 Installation in finished form

2.4. Description of Any Changes to Project Design

35. No design work was carried out during the reporting period.

2.5 Description of Any Changes to Agreed Construction methods

36. No changes have been made to the approved construction methods

3. ENVIRONMENTAL SAFEGUARD ACTIVITIES

3.1 General Description of Environmental Safeguard Activities

37. With regard to the environmental aspects related to the installation of the chlorine neutralization unit, the contractor took the following measures:

- Preparation of an Environmental Management Plan (EMP) prior to the commencement of construction works.
- Monitoring of the construction / installation work and the implementation of measures provided for in the EMP directly at the Ozgur WTP.

3.2 Site Audits

38. On May 28, 2021, an Occupational health and Safety Engineer (OT and TB) Karimova M.T. carried out a business trip to the Ozgur water treatment plant. Detailed information about visiting the installation site is presented in Table 3-1.

Table 3-1. Construction site audit

Date of visit	28.05.2021 y.
Name of the auditor	Karimova M.T.
Purpose of the audit	The purpose of the trip was to audit the construction work, compliance with health and safety requirements, as well as compliance with environmental protection measures
Audit results	<ul style="list-style-type: none"> • there is a garbage container for storing solid waste; • logs of work and safety instruction are kept; • a log of body temperature measurements is kept, the first aid kit is equipped with a contactless thermometer, there is a sanitizer (within the framework of epidemiological requirements in the conditions of COVID 19); • at the construction site, workers are provided with personal protective equipment (helmets, protected shoes, masks (respirators))

3.3. Issues Tracking (Based on Non-Conformance Notices)

39. During the construction work, no notifications of non-compliance were issued

3.4. Trends

40. During the installation work, no notifications of non-compliance were issued, and trends were not monitored

3.5. Unanticipated Environmental Impacts or Risks

41. During the installation work, there were no unforeseen impacts on the environment. During the installation work, no asbestos-containing materials were found.

4. RESULTS OF ENVIRONMENTAL MONITORING

4.1. Overview of Monitoring Conducted during Current Period

Ambient air quality

42. When installing a chlorine neutralization unit, there is practically no dust formation. According to the schedule of installation work, dust formation occurred only on 16.05.21 when punching holes for the pipeline. The work had a very short time period. The rest of the installation process was carried out without the formation of dust and any significant release of pollutants.
43. Installation of the installation took place in a short period of time (less than a month), dust formation occurred only within one day. The company did not have time to apply for sampling by third-party organizations, namely on 16.05.21 g on the day of the maximum impact on atmospheric air.
44. Instrumental measurement was not performed due to the absence of a measuring device. During the construction work, visual observation was carried out.
45. There were no complaints about changes in air quality from employees of the Ozgur WTP and residents of nearby houses

Noise and vibration

46. The main source of noise during installation of the installation is the manipulator, which was used to install the tank and tanks for neutralization. The installation work took two days. The manipulator worked for a total of about 4 hours. The work took place during the working day. Noise measurement was not made because the workers did not have a noise meter. At the time of arrival at the work site of the safety and labor protection engineer, the noise-related work had already been completed.
47. Also, the noise source was the work on punching holes for the pipeline. As mentioned above, the work was carried out for 1 day. To reduce noise, the work was carried out indoors.
48. There were no complaints about noise and vibration from employees and residents Ozgur WTP of nearby houses.

4.2 Trends

49. No serious inconsistencies have been identified during the entire period of installation work. However, despite this, it is necessary to increase the qualifications of workers to ensure a higher level of safety and environmental protection practices.

4.3 Summary of Monitoring Outcomes

50. Work on the installation of the chlorine neutralization unit was carried out from 14.05. 2021 - 07 .06. 2021 During the installation work, visual observations were mainly carried out..

51. On 28.05.2021, an occupational health and safety engineer visited the site of installation work, during the visit, monitoring of the implementation of environmental measures was carried out. No significant violations were detected during the monitoring. Comments were made regarding the timely collection of the resulting construction waste.
52. During the observations, no significant signs of adverse environmental impact were detected.
53. There were no complaints from employees of the Ozgur water treatment plant and residents of nearby houses during the installation work.

4.4 Material Resources Utilisation

4.4.1. Current Period

54. Installation of chlorine neutralization plant does not entail significant use of material resources. The unit is supplied completely in the factory. On the spot, it was only required to install and secure it. The main resources that were spent at the same time were electricity. Electricity payments were made in accordance with the established tariffs. The water was used for hygiene purposes. Dedusting was carried out only once when punching a hole. And it was limited only by the territory of the building in which the equipment was installed.

4.4.2. Cumulative Resource Utilisation

4.5. Waste Management

The waste that is generated during the production of works is stored in a waste collection container and is centrally exported together with the waste of the Ozgur WTP.

4.5.1 Current Period

55. Waste management was carried out in accordance with the EMP. The contractor entered into an agreement on the disposal of waste generated during the installation of the chlorine neutralization unit together with waste from the operation of the Ozgur Aircraft. The table below shows the amount of waste generated by contractors during the reporting period.

Table 4-1 Waste generated during installation work.

Waste-generating activity, process	Waste name	Hazard Class	Volume, m3
1	2	3	
Construction workers (2 workers)	Unsorted waste from office and household premises of organizations (excluding bulky waste)	IV	0,35
On delivery of equipment	Wooden containers, which have lost their consumer properties, uncontaminated	V	0,6
	Waste packaging paper, uncontaminated	V	0,5

4.5.2 Cumulative Waste Generation

- 56. The waste generated during the delivery of equipment is stored in a special container for export to enterprises that are engaged in the secondary processing of raw materials.
- 57. Plastic products that can form on the construction site (drinking water) are also collected in a separate container for recycling.

4.6 Health and Safety

4.6.1. Community Health and Safety

- 58. During the reporting period, there were no incidents that led or could lead to health and safety issues in the community. Work related to the formation of dust was carried out in a closed room. All work was carried out only during working hours and ended before 18.00..

4.6.2. Worker Safety and Health

- 59. During the reporting period, there was no accident and / or serious incident with the employees. The contractors' personnel regularly conducted safety and environmental safety briefings. The Contractor's safety plan has been updated to include Covid-19 related activities. The working personnel are fully provided with the necessary PPE and sanitizers.

4.7 Training

- 60. From 04.06.21 to 06.06.21 training was held to train personnel to work with the chlorine neutralization unit.

5. FUNCTIONING OF THE SEMP

5.1. SEMP Review

61. During the reporting period, an SEMP was developed. During the installation work, measures were introduced to mitigate environmental impacts stipulated in the EMP. The works were completed on time, established by the work schedule. And at the moment they are already finished. There is an acceptance certificate for the chlorine neutralization installation.

6. GOOD PRACTICE AND OPPORTUNITY FOR IMPROVEMENT

6.1. Good Practice

- 62. Installation of this unit will significantly increase the safety of the OZGUR ETP, as well as minimize the negative impact on the environment in the event of a chlorine leak

6.2. Opportunities for Improvement

- 63. It is required to pay more attention to the training of personnel in safety precautions in the conditions of Covid-19, as well as to improve the qualifications of workers servicing the chlorine neutralization plant.

7. SUMMARY AND RECOMMENDATIONS

7.1 Summary

- 64. During this reporting period, the following activities were carried out: The Site Specific Environmental Management Plan was developed and approved. The developed SEMP was put into effect during the installation work.
- 65. During the installation work related to the formation of dust, dedusting was carried out. Work related to the formation of noise and vibration was short-term and was carried out during the working day.
- 66. During the installation work, no accidents or any serious injuries were recorded. Safety measures were observed at the work site to prevent the spread of Covid-19. All employees were provided with PPE.
- 67. During installation, the main type of waste generated was waste from unpacking the installation itself, as well as solid municipal waste. In total, 2 workers were involved in the installation. Waste was stored in garbage cans with subsequent centralized removal.
- 68. The chlorine neutralization unit was installed and put into operation.
- 69. There were no complaints from the Ozgur WTP workers and local residents.

7.2 Recommendations

- 70. The contractor is advised to purchase portable sound and air quality meters.

APPLICATION

Appendix 1 :Environmental management plan during the construction phase

Expected impact.	Mitigation measures.
Dust control	<ul style="list-style-type: none"> • Dedusting of the construction site when working with dusty materials. • Stocks of materials will be covered with tarpaulins/covers at the facilities. • Bulk material (soil, sand, crushed stone, etc.) will be covered with a tarpaulin when transported by open trucks; • Bulk material from trucks will be unloaded in a barricaded area with irrigation water. • The wheels and undercarriage of dump trucks will be cleaned before leaving the construction site.
Noise control	<ul style="list-style-type: none"> • Limitation of the time of construction works from 08.00 to 19.00. • A maximum sound level of 75 dBA is provided at a distance of 10 m from the source. • Restriction of transportation of construction materials through settlements, if this cannot be avoided, then residents will be warned about the schedule and duration of the work. • Drivers will be trained to avoid unnecessary use of beeps.
Vehicle emissions	<ul style="list-style-type: none"> • All construction machinery and equipment will be equipped with pollution control devices. • Use only serviceable construction equipment that has passed technical inspection.
Local employment.	<ul style="list-style-type: none"> • If possible, local workers will be involved.
Workplace safety	<ul style="list-style-type: none"> • The Environmental, Health and Labor Protection Policy/Plan (EMP) will be developed in accordance with national legislation. • A qualified occupational health and safety specialist hired by the contractor will conduct personnel training in accordance with the requirements of a specific workplace <p>All workers will be provided with personal protective equipment (PPE) (gloves, helmets, masks, appropriate shoes)</p> <ul style="list-style-type: none"> • All installations will be securely secured; dangerous places will be marked. • Availability of information boards about the construction work . • All workers will be instructed on occupational health and safety. • There will be personnel on the construction site who have been instructed in first aid. Workers have free access to first aid facilities. • Availability of drinking water and personal hygiene products is mandatory. Due to the fact that the work is being carried out at the operating enterprise , the existing toilets will be used . • Evacuation plans and rules of conduct in case of fires and accidents will be publicly available to all workers.

Expected impact.	Mitigation measures.
Removal of construction debris / garbage	<ul style="list-style-type: none"> • Accidents will be promptly registered and reported; a register will be kept at every workplace • A construction waste management plan will be prepared. • Waste generated during construction will be stored in temporary storage containers, with subsequent removal to an approved landfill. • Fuel, oils and hazardous materials will be stored in a secure fenced area with an impermeable floor and weather-resistant roof, and appropriate management practices will be adopted to prevent spills of fuel, oils and hazardous materials; • Hazardous waste will be collected and processed by an accredited third-party organization; there should be no final disposal of waste at the facility; • Waste incineration is not allowed • The work site will be restored to its original condition after the completion of the work.
Cleaning after construction	<ul style="list-style-type: none"> • All debris, debris, or temporary structures (such as toilets) will be removed. • Any spilled substances such as oils, paints, etc. will be eliminated. • All hardened surfaces in the work/camp areas will be torn, all materials removed, and the upper part contaminated. • The restoration of the original will be documented and reported to the OUP.

Appendix 2. Certificate of acceptance and delivery of the chlorine neutralization plant

АКТ ввода оборудования в эксплуатацию

г. Ош

2 июня 2021 г.

Комиссия в составе:

Представителя Поставщика ОсОО «СИС» в лице директора Квон Н.Г. и

Представителя Заказчика в лице:

1. Председателя комиссии заведующим южным региональным отделом ДРПВ Ташкулов И.
2. Старшего мастера Ошгорводоканал Токомбаева Ш.
3. Инженера по техническому надзору Маданбекова М.

Государственная Инспекция по экологической и технической безопасности при правительстве Кыргызской Республики не входит в состав комиссии в связи с положением.

Ознакомившись с установкой нейтрализации хлора (включая все оборудование, необходимое для правильной эксплуатации и технического обслуживания Блока, в частности: трубопроводы, кабели, соединения, электрические соединения основание, пульт(ы) смонтированной по адресу: Питьевая Водоочистная станция Озгур, улица Исанова, г. Ош, Кыргызская Республика и рассмотрев техническую документацию, представленную заводом изготовителем Grundfos, сертификаты о проверке оборудования от 19.03.2021 а также по итогам пуско-наладочных работ в период с "31" мая 2021 г. по 2 июня 2021 г., установила:

1. Установка нейтрализации хлора соответствует заявленным требованиям
2. Установка, монтаж, пуско-наладочные работы выполнены в соответствии с контрактом и с соблюдением Правил техники безопасности.
3. Оборудование соответствует требованиям промышленной, пожарной и экологической безопасности.
4. Установка нейтрализации хлора выдержала испытания и может быть введена в эксплуатацию

Приложения:

1. Акт приемки пуско-наладочных работ
2. Письмо от ГЭИТПБ при ПКР.

Председатель комиссии заведующим южным региональным отделом ДРПВ Ташкулов И. _____

Члены комиссии :

Старший мастер Ошгорводоканал Токомбаева Ш. _____

Инженер по техническому надзору Маданбекову М. _____

Представитель Поставщика ОсОО «СИС» Квон Н.Г. _____



Appendix 3 Report on the visit to the installation site of the Chlorine neutralization Plant.

Директору Компании СИС
Квон Н.Г.
От Инженера по охране
труда и технике
безопасности
Каримовой М.Т.

28 мая 2021 г.

**Отчет о командировке инженера ОТ и ТБ Каримовой М.Т. в рамках проекта
«Установка нейтрализации хлора на Ош-Плотинской водоочистой станции».**

С 28 по 29 мая 2021 г. состоялась поездка Каримовой М.Т. в рамках мониторинга за выполнением требований ПУОС в г. Ош.

Соблюдение мероприятий, предусмотренных в ПУОС:

- В помещении где устанавливается установка производится опрыскивание мест образования пыли ;
- Во время производства шумных работ дверь закрывается для уменьшения шума для работников водоочистой станции;
- имеется мусорный контейнер, для складирования ТБО;
- ведутся журналы производства работ и инструктажа по техники безопасности;
- ведется журнал замеры температуры тела, аптечка снабжена бесконтактным термометром, имеется санитайзер (в рамках эпидемиологических требований в условиях COVID 19);
- на участке строительства рабочие обеспечены средствами индивидуальной защиты (каска, защищенная обувь, маски (респираторы))



Фото 1. Монтаж установки



Фото 2 Рабочий в СИЗ

Отчет подготовила Каримова М.Т.

Дата:

A handwritten signature in blue ink, consisting of stylized, cursive letters.

