European Union Water Initiative Plus for the Eastern Partnership

Report on the national targets set under the Protocol on Water and Health in the Republic of Azerbaijan

Baku, 2019
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Executive summary


One of the key obligations of Parties, as required by Article 6 of the Protocol, is to set national targets related to water and health, including aspects of drinking water quality, water-related diseases, access to drinking water and sanitation, wastewater treatment, integrated water resources management, etc. Azerbaijan requested support from UNECE to complete a national target setting process in line with the Guidelines on the setting of targets, evaluation of progress and reporting, developed under the Protocol.

Such support was provided in the frames of the European Union Water Initiative (EUWI) National Policy Dialogue on Integrated Water Resources Management (NPD) process with the financial assistance of the European Union. Specifically, based on preparatory work completed in the previous phase of the EUWI NPD programme, Azerbaijan requested to include the finalization of the target setting process in the national workplan under the EU-funded program European Union Water Initiative Plus for Eastern Partnership Countries (EUWI+). In August 2018, the target setting process concluded successfully with the formal adoption of national targets by a joint decree No. 524-No. 57 of the Ministry of Ecology and Natural Resources and the Ministry of Health (Annex).

The targets set in 19 thematic areas cover the entire water cycle from access to safe drinking water to quality of discharged waste water and from quality of bathing water to effectiveness of water resources management with the overall goal of safeguarding the health of citizens from water related diseases and ensuring access to water for all.

The present report contains the adopted targets as well as the summary information on water and health situation, as prepared by the Interagency Working Group, consisting of representatives of key ministries and other relevant institutions of the Republic of Azerbaijan in the water and health sector.

In addition to the Interagency Working Group members, the following experts contributed to the target setting process and the preparation of the present report:

- Ms. Nataliya Nikiforova (UNECE), Ms. Shinee Enkhtsetseg (WHO-Europe), Joint Secretariat of the Protocol on Water and Health;
- Mr. Peep Mardiste (UNECE), Mr. Alisher Mamadzhanov (UNECE), EUWI NPD Programme;

The Working Group members would also like to thank Mr. Pierre Studer (Switzerland), Chair of the Task Force on Target Setting and Reporting under the Protocol for his guidance.
### LIST OF ACRONYMS AND ABBREVIATIONS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR</td>
<td>Republic of Azerbaijan</td>
</tr>
<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
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<tr>
<td>Azersu OJSC</td>
<td>Azersu Open Joint Stock Company</td>
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<tr>
<td>AAWMA OJSC</td>
<td>Azerbaijan Amelioration and Water Management Open Joint Stock Company</td>
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<tr>
<td>ANAS</td>
<td>Azerbaijan National Academy of Sciences</td>
</tr>
<tr>
<td>BR</td>
<td>Building regulations</td>
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<tr>
<td>CDS</td>
<td>Collector-Drainage System</td>
</tr>
<tr>
<td>EECCA</td>
<td>Eastern Europe, the Caucasus and Central Asia</td>
</tr>
<tr>
<td>EBRD</td>
<td>European Bank for Reconstruction and Development</td>
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<tr>
<td>EU</td>
<td>European Union</td>
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<tr>
<td>EUWI</td>
<td>European Union Water Initiative</td>
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<tr>
<td>IWRM</td>
<td>Integrated Water Resources Management</td>
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<tr>
<td>ISO</td>
<td>International Organization for Standardization</td>
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<tr>
<td>LA</td>
<td>Local authority</td>
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<tr>
<td>MFA</td>
<td>Ministry of Foreign Affairs</td>
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<td>MH</td>
<td>Ministry of Health</td>
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<td>ME</td>
<td>Ministry of Education</td>
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<tr>
<td>MF</td>
<td>Ministry of Finance</td>
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<tr>
<td>MES</td>
<td>Ministry of Emergency Situations</td>
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<tr>
<td>ME</td>
<td>Ministry of Economy</td>
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<tr>
<td>MENR</td>
<td>Ministry of Ecology and Natural Resources</td>
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<tr>
<td>MPC</td>
<td>Maximum permissible concentration</td>
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<td>MAD</td>
<td>Maximum allowable discharge</td>
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<tr>
<td>NMDE</td>
<td>National Monitoring Department for Environment under the Ministry of Ecology and Natural Resources</td>
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<td>NPD</td>
<td>National Policy Dialogue</td>
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<tr>
<td>NAP</td>
<td>National action plan</td>
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<td>NGO</td>
<td>Non-governmental organization</td>
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<tr>
<td>RCHE MH</td>
<td>Republican Center of Hygiene and Epidemiology under the Ministry of Health</td>
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<tr>
<td>RLA</td>
<td>Regulatory legal act</td>
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<tr>
<td>SWQS</td>
<td>Surface water quality standards</td>
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<tr>
<td>SSC</td>
<td>The State Statistical Committee</td>
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<td>SWaRA</td>
<td>State Water Reserves Agency of the Ministry of Emergency Situations</td>
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<tr>
<td>SanPiN</td>
<td>Sanitary Rules and Norms</td>
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<td>SDGs</td>
<td>Sustainable Development Goals</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<tr>
<td>UNICEF</td>
<td>United Nations Children's Fund</td>
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<td>UNEP</td>
<td>United Nations Environment Program</td>
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<tr>
<td>WUA</td>
<td>Water Users Association</td>
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WB  World Bank
WHO  World Health Organization
WHO-Europe  World Health Organization Regional Office for Europe
Part 1

Target setting process in the Republic of Azerbaijan


The target setting process was initiated in 2015, within the framework of the EUWI National Policy Dialogue on Integrated Water Recourse Management process with the financial assistance of the European Union. The target setting process was supported methodologically by UNECE and the WHO-Europe and also through the consultation process under the Compliance Committee of the Protocol. The finalization of the target setting process was accomplished through the EU-funded program European Union Water Initiative Plus for Eastern Partnership Countries (EUWI+). In August 2018, the target setting process concluded successfully with the formal adoption of national targets by a joint decree No. 524-No. 57 of the Ministry of Ecology and Natural Resources and the Ministry of Health (Annex).

The present report contains summary information on institutional, legal and thematic aspects of water and health sector in Azerbaijan, as prepared by the Interagency Working Group responsible for the target setting process. The report also contains the final targets, indicators and measures for their achievement, as adopted.

The main state bodies for water resources management in the Republic of Azerbaijan

- Ministry of Ecology and Natural Resources:
- Ministry of Emergency Situations
- Ministry of Health (MoH)
  - Republican Center of Hygiene and Epidemiology
- "Azersu" Open Joint Stock Company
- "Azerbaijan Amelioration and Water Management" Open Joint-Stock Company

The Cabinet of Ministers of the Republic of Azerbaijan ensures coordination of the work of stakeholders in the water sector. The Cabinet of Ministers approves by-laws related to issues of management, regulation, safety and protection of water resources and establishes regulations covering all aspects of water legislation.

The Ministry of Ecology and Natural Resources (MENR) is the central executive authority, which formulates and implements state policies in the field of environmental protection and develops measures to protect the environment.

MENR implements the state water policy aimed at the conservation and sustainable use of water resources - surface and underground, as well as the prevention of their pollution. MENR conducts an inventory of water resources and manages a network of monitoring stations for continuous hydrometric, hydrogeological and hydrochemical observations. MENR together with other central executive bodies and interested organizations is engaged in the development of water balances, the assessment of
groundwater resources and operational reserves, as well as issues related to the rational use and restoration of water resources. The Ministry develops and approves standards for maximum permissible wastewater discharges and controls them through its regional units.

The Ministry of Emergency Situations (MES) is the main organization in all aspects related to emergency management in Azerbaijan. The ministry coordinates activities to protect the population from natural and man-made disasters, including fires; disaster management; and the implementation of state policy in the field of civil defense, security and rehabilitation, it is an executive body, which implements improved measures in the field of management and regulation of water resources, constantly monitors the technical condition of reservoirs, and monitors water bodies, surface and underground water, hydraulic structures and water supply systems and provides reliable safety of state water facilities in the country. 4 reservoirs of complex use, 1 reservoir for providing water supply to the cities of Baku, Sumgait, Khirdalan and residents of the Absheron peninsula, which are of strategic importance for the country, were transferred to the balance of the The State Agency for Water Resources (SAWR) under the Ministry of Emergency Situations.

Ministry of Health (MoH): the main duty of the state sanitary-epidemiological service of the Ministry of Health of Azerbaijan is to strengthen and protect public health, establish a healthy lifestyle, and identify and eliminate the effects of harmful environmental factors on public health. Systematic monitoring of the quality of domestic drinking water and waterborne diseases is also among its responsibilities. The structure of the sanitary and epidemiological service of the Ministry of Health includes local units that carry out state sanitary and epidemiological surveillance.

The state policy in the field of water supply

Water resources in the Republic of Azerbaijan are state property. At the national level, various organizations are involved in water resource management, monitoring, maintenance and research. The regulatory main central executive bodies for the management, regulation, security and protection of the country's water resources are:

- Ministry of Ecology and Natural Resources;
- Ministry of Emergency Situations;
- Ministry of Health.

The issues of exploitation of water management, water supply and sewer networks are under the jurisdiction of the OJSC “Azerbaijan Amelioration and Water Management” and OJSC “Azersu”, as well as municipalities that have water facilities on their balance sheets. Certain issues related to land management near water bodies and regarding the redistribution of a limited amount of water resources on their balance sheet are carried out by local executive bodies and municipalities of administrative regions.

The Cabinet of Ministers approves republican schemes for the placement and development of water supply and wastewater systems, as well as requirements for the installation of water measuring devices, and coordinates the volumes of water supplied to consumers of important sectors of the economy.
The State Agency of Water Resources of the Ministry of Emergency Situations (SAWR) constantly monitors the technical condition of reservoirs, and also monitors water bodies, surface and underground waters, hydraulic structures and water supply systems.

The Ministry of Ecology and Natural Resources:
- is responsible for water policy and water conservation;
- issues permits for the abstraction of water from surface water bodies and underground sources, as well as the discharge of wastewater into all water bodies, including the Caspian Sea.

The Ministry of Health (MoH) carries out state sanitary supervision of the quality of drinking water.

The strategic priority of the state sanitary and epidemiological surveillance authorities operating in Azerbaijan is the systematic monitoring of the quality of domestic drinking water and the incidence of water-related diseases in accordance with goals 6.1 and 6.2 of the Sustainable Development Goals (SDGs). It also monitors seawater in the recreational waters of the Caspian Sea, assesses the vulnerability of water resources and human health, and their adaptation to climate change.

“Azersu” Open Joint-Stock Company (“Azersu” OJSC) is the country’s main body for the organization of water supply and sewer services and monitors their activities.

Water supply, wastewater treatment, transportation and provision of water, as well as the control and regulation of their activities are included in the functions of this department. The design, construction, repair and maintenance of sewage systems, pumping stations and the operation of water supply systems are also the responsibility of this body, 100% of its shares are owned by the state. “Azersu” OJSC collects financial resources (fees) for the delivery of domestic drinking water and wastewater treatment.

“Azerbaijan Amelioration and Water Management” Open Joint Stock Company (AAWM OJSC) (100% of shares owned by the state) is the main water operator and is responsible for water supply to economic sectors by assessing water needs and developing forecasts and norms for water use. In particular, AAWM OJSC provides the main canals for the supply of water to irrigation systems and controls the development and management of irrigation systems throughout the country.

The Government of the Republic of Azerbaijan adopted the State Programme On Socio-Economic Development Of Regions for 2014-2018. One section of this Program was fully devoted to water policy issues.

The goal of the state water policy of the country is to ensure a safe and secure environment for citizens while meeting their needs.

For the rational use of water resources of Azerbaijan, important systematic measures have been taken aimed at increasing the water supply of the population and ensuring water security. Given the acute shortage of water per capita, first of all, it is necessary to establish a strict accounting of the consumed water, to implement measures to record the consumed water and reduce its losses. Measures to reduce water losses in water supply systems in
the urban zones are a matter of priority and are being addressed within the framework of relevant projects and State Programs.

The constant attention of the Government of the country and the prompt resolution of accumulated problems in the water sector contributed to a favorable impact on the socio-economic conditions of the population of the country and had a positive impact on the implementation of State programs, as part of the ongoing national policy to improve the population.

Based on the Development Concept “Azerbaijan - 2020: A LOOK INTO THE FUTURE”, which defines the country's priority development directions, the Ministry of Ecology and Natural Resources has developed a Strategic Action Plan for the period 2015-2017. This plan provides for environmental safety by reducing environmental pollution and promoting the rational use of natural resources. In the light of solving global environmental problems, the Strategic Action Plan also provides for an assessment of needs, prioritization of environmental policies and the expansion of international environmental cooperation.

The main objectives of the implementation of the Strategic Action Plan are:

- improving the quality of environmental indicators;
- increasing the level of well-being and health of the country's population;
- stimulating the organization of production of non-waste technologies;
- ensuring sustainable development of the country's ecosystems for future generations.

To achieve the planned goals, the Strategic Action Plan provides for the implementation of relevant measures that take into account economic, environmental and social results for the near future and long-term period. When implementing these measures, the opinions of all interested parties are taken into account, which are based on the following principles:

- restriction of the activities of enterprises with a negative impact on the environment;
- use of international experience and best practices in environmental protection;
- increase the level of promotion of environmental education among the population.

A special place in environmental protection in Azerbaijan is occupied by issues of management, regulation and protection of water resources. The creation of safe drinking water reserves and the provision of environmentally friendly water for the population, as well as the reduction of cases of water-related diseases, are priority areas for the government and are under constant government attention. Azerbaijan accounts for only 10% of the total water resources of the South Caucasus. The territory of Azerbaijan is located in the lower reaches of the Kura River basin, the waters of which are polluted by sewage and untreated waters, as well as various wastes from the territory of Armenia and Georgia. In this regard, MENR organizes and conducts monitoring work on 41 water bodies, including 26 rivers, 10
lakes, 4 reservoirs and the Caspian Sea. Monitoring allows determining the degree of pollution of surface waters and predicting the development of these situations, and also contributes to the development of measures to improve monitoring observations.

For the reconstruction of the water supply and sanitation sector, as well as determining practical assistance in this area, the Government of the Republic of Azerbaijan, with the help of various international financial institutions, is implementing a number of projects. To achieve these goals, the Republic of Azerbaijan attaches great importance to the development of relations with international and financial organizations, donor countries, the conclusion of interstate agreements on environmental protection.

Based on the concept of the Republic of Azerbaijan approved by the Decree of the President of Azerbaijan on December 29, 2012, Azerbaijan - 2020 “Look into the Future” the “State Program on Poverty Reduction and Sustainable Development in the Republic of Azerbaijan” was developed. This program, based on the analysis of existing demographic processes along with other state programs, determining the direction of future socio-economic development, is now being implemented. The program, defining a strategy for the period up to 2025 in the field of demography and population development, is being implemented in conjunction with other state programs of socio-economic development, having the following goals and objective:

- Implementation of public awareness through specialized broadcasts, publication of articles, booklets and posters on the observance of personal hygiene rules, prevention of intestinal, infectious diseases;

- Conducting appropriate measures for the development of water supply and sanitary protection zones;

- Preparation of drinking water supply standards in Azerbaijan;

- Strengthening state supervision of household drinking water;

- In cities, towns, villages that do not have centralized water supply, implementation of measures to develop water supply systems;

- In the regions of the country, in order to improve water supply, the implementation of activities to drill sub-artesian wells;

- In order to assess the water supply of the country, the preparation of an inventory of environmentally friendly and sustainable sources of water supply;

- To prevent pollution of the Caspian Sea, the implementation of measures for the qualitative assessment of domestic and industrial wastewater discharged from the territory of Azerbaijan.

Azerbaijan has acceded to the main international conventions regulating cooperation in the field of water resources management. Non-accession of neighboring countries of the region to the Convention on the Protection and Use of Transboundary Watercourses and International Lakes makes it difficult to solve problems associated with the management and protection of water resources on transboundary rivers.
**Legislative framework**

The water sector of Azerbaijan is regulated by:

The Water Code (1997);

The Laws:

“On Sanitary and Epidemiological Well-Being” (1992);

“On Land Reclamation and Irrigation” (1996);

“On hydrometeorological activities (1998);

“On Water Supply and Sanitation” (1999);

“On Environmental Protection” (1999);

“On Environmental Safety” (1999);

“On municipal water management” (2001);


and other by-laws. These legislative acts are generally in line with current requirements. To successfully solve problems in the field of water relations, a number of legal acts have been adopted, including:

“Rules for maintaining the water cadastre”;

“Rules for conducting state control over the use and protection of water bodies”;

“Rules for classifying water bodies as specially protected areas”;

"Rules for determining the size, boundaries and use of water protection zones, their coastal stripes";

"Rules for the use of water bodies for recreation and sports";

"Rules of state water accounting".

**State National Programs**

At present, Azerbaijan has developed an environmental management structure, which allows making effective decisions and improving the mechanism of rational natural resources management.

In order to consistently solve environmental problems, a number of national development programs and plans have been developed:
• Decree of the President of the Republic of Azerbaijan dated March 16, 2016 “Strategic road maps for the national economy and main economic sectors”;

• “Azerbaijan Development Concept 2020-Look into the Future”:
  - “State program on the socio-economic development of Baku and its suburban settlements for 2014-2016”;

• Decree of the President of the Republic of Azerbaijan “On approval of the Plan of Comprehensive Measures to Improve the Environmental Situation in the Republic of Azerbaijan for 2006-2010”;

• The National program on restoration and increase of forests in the Republic of Azerbaijan;


• “State Program on alternative and renewable energy sources in the Republic of Azerbaijan”;

• “State Program on the reliable food supply of population in the Republic of Azerbaijan” for 2008-2015;


Part 2

Targets, target dates and measures to achieve them

AREA I: Article 6 paragraph 2 (a) of the Protocol on Water and Health — quality of the drinking water supplied

A. JUSTIFICATION

Paragraph 2a) of Article 6 of the Protocol requires the establishment of targets and target dates for the quality of the drinking water supplied.

B. CURRENT SITUATION AND PROBLEMS

The main documents regulating the quality of drinking water are “Drinking water. Hygiene requirements and quality control”, GOST 2874-82; SanPiN “on the arrangement and maintenance of wells and drains of springs used for decentralized drinking water supply” No. 1226-75 dated 02.20.1975, M, 1975 and the Interstate standard “ Sources of
centralized drinking water supply. Hygienic technical requirements and selection rules”, GOST 2761-84 (entered into force on 01.01.1986).

It is necessary to create a modern regulatory framework in accordance with the requirements of the European Union Water Framework and related Directives. Work in this direction is being carried out.

It should be noted that the bacteriological study of water until the current year was carried out on E-coli, and since 2015, the study of enterococci has been initiated. The chemical quality of drinking water was studied in the laboratories of the Republican Center for Hygiene and Epidemiology of the Ministry of Health of the Republic for five basic and five additional chemical parameters. For the initial year taken from 2005 to 2015 (indicated in table 1).

C. Chemical indicators

<table>
<thead>
<tr>
<th>Substance</th>
<th>2005</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluoride</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Nitrates and nitrites</td>
<td>0% and 3%</td>
<td>0.6% and 1.38%</td>
</tr>
<tr>
<td>Arsenic</td>
<td>-</td>
<td>0.03%</td>
</tr>
<tr>
<td>Lead</td>
<td>0%</td>
<td>0.12%</td>
</tr>
<tr>
<td>Ferrum</td>
<td>5%</td>
<td>0.09%</td>
</tr>
<tr>
<td>Phenols</td>
<td>-</td>
<td>0%</td>
</tr>
<tr>
<td>Petroleum products</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Synthetic surfactant</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Pesticides</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>DDT (dichlorodiphenyltrichloroethane)</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

In Azerbaijan, the common chemical pollutants of water are: heavy metals, phenols, synthetic surfactants, oil, other hydrocarbon compounds, nitrogen compounds (nitrates and nitrites), and E. coli is the main bacteriological pollutant.

An analysis of the programs and projects developed and being developed in the country for the development and restoration of water supply systems shows that projects to improve and develop water supply and sanitation systems continue to be implemented in many cities and towns. During this period, water supply and sanitation projects were implemented in 47 cities and regional centers. In 32 cities (Khachmaz, Gusar, Khizi, Gobustan, Saatli, Sabirabad, Zardab, Lankaran, Bilasuvan, Jalilabad, Kedabek, Dashkesan, Ujar, Kurdamir, Mingechevir, Kakh, Beylagan, Agjabadi, Imishli, work was carried out, etc.) work was carried out by order of “Azersu” OJSC. Of the 47 cities, currently 23 out of them have completed work in the water and sewer sectors, and 9 have completed work in the water sector. Within the framework of the enterprises, a total of 1390 km of trunk lines were built. 9230 km of water pipelines, 230 reservoirs with a total volume of 530 thousand m³ were built. As part of regional projects, the Shirvan-Mugan group water supply system was commissioned, after the reconstruction, the Kurinsk water treatment facilities were launched, and the Sabirabad-Saatli water supply system was commissioned. To provide the population with a stable water supply on the territory of the Shirvan-Mugan group water supply system, a complex of reservoirs was built with a total volume of 50 thousand m³ of water: “+80 Hajikabul; +55 Shirvan; +25 Salyan; +8 Bilasuvan”. Thus, using the opportunity of the above-mentioned water supply systems, water supply will be improved for 165 villages nearby to the cities of Hajikabul, Shirvan, Salyan, Neftchala, Bilasuvan, Saatly and
Sabirabad with a population of 627 thousand people. Currently, work has begun in this direction.

For the cities of Kurdamir, Ujar, Zardab and Agsu from the Kyulala water supply with a capacity of 450 l/s was built with the water intake. In addition, in cities of Zardab - 73 km, Ujar - 57 km, Kurdamir - 27 km, Agsu - 25 km long water mains were built.

Commissioned in 2015 Tahtakorpu reservoir with a useful volume of 238.4 million m³, with simultaneous reconstruction of the Samur-Absheron canal, which is the main source of water supply for Greater Baku, contributed to the improvement of drinking water supply in Absheron peninsula in 2 times.

### Target and target dates

<table>
<thead>
<tr>
<th>№</th>
<th>Target</th>
<th>Baseline (year)</th>
<th>Target dates</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Improvement of drinking water quality in schools to meet microbiological and chemical standards</td>
<td>2012</td>
<td>2020 in 80% of schools; 2030 in 100% of schools</td>
<td>Azersu OJSC, MoE</td>
</tr>
<tr>
<td>2</td>
<td>Reduce the level of non-compliance with the quality of drinking water by microbiological indicators (e-coli)</td>
<td>2012</td>
<td>in cities by 2020 to 25%; by 2030 to 15%; in the rural areas by 2020 to 45%; by 2030 up to 25%</td>
<td>Azersu OJSC</td>
</tr>
<tr>
<td>3</td>
<td>Reduce the level of non-compliance with the quality of drinking water according to sanitary and chemical indicators</td>
<td>2012</td>
<td>in cities by 2020 to 1%; by 2030 to 0%; in the rural areas by 2020 to 7%; by 2030 to 5%</td>
<td>Azersu OJSC</td>
</tr>
<tr>
<td>4</td>
<td>Prepare an assessment of key issues and concerns: identify gaps in the legislative provisions and replace the GOST 2874-74 in force in the country in accordance with the WHO guidelines for drinking water quality.</td>
<td>2012</td>
<td>2018-2020</td>
<td>MoH, Azersu OJSC, MENR, MES</td>
</tr>
</tbody>
</table>

### Measures to achieve targets and target dates

<table>
<thead>
<tr>
<th>№</th>
<th>Measures and Activities</th>
<th>Timeframes</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Using a pilot study, prepare a brief analysis report on the state of non-compliance in the quality of drinking water according to sanitary-chemical and sanitary-bacteriological indicators.</td>
<td>2019-2020</td>
<td>MoH, Azersu OJSC</td>
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</tbody>
</table>
AREA II: Article 6 paragraph 2 (b) of the Protocol on Water and Health – reduction of the scale of outbreaks and incidents of water-related disease

A. JUSTIFICATION

Pursuant to Article 6 of the Protocol, paragraph 2 (b), national and/or local targets must be set and periodically reviewed in the area of reduction of the scale of outbreaks and incidents of water-related disease/

B. CURRENT SITUATION AND PROBLEMS

State programs adopted in certain areas of health care and financed by the state budget, aimed at expanding the volume and quality of medical services provided, played an important role in improving the situation. In 2014 alone, 665.3 million AZN was spent on the program implementation. In accordance with the Development Concept "Azerbaijan 2020: A Look into the Future", State Programs are being implemented "to improve maternal and child health in 2014-2020", "On the compulsory medical examination of children", "providing newborns with an" electronic health card ", "Immunoprophylaxis of infectious diseases "and the program of measures for immunoprophylaxis of infectious diseases adopted in 2016-2020, which played an important role in protecting the health of women and children. All these favorably affected the improvement of medical demography and indicators in this area. The following key activities were implemented:

- Since 2006, the National Program for the implementation of mandatory epidemiological surveillance of rotovirus infections has been introduced;
- Continuing training of doctors in the field of epidemiology and laboratory science in the frames of the South Caucasus Regional Program for doctors;
- The State Sanitary and Epidemiological Surveillance Service monitors the dynamics of water-related infectious diseases in settlements. Comparing the results of water analyzes with the data of sanitary inspection on the incidence of diseases of the population, it is possible to draw correct scientifically-based conclusions about the quality of water, its treatment and disinfection, and also evaluate the effectiveness of the treatment facilities;
- The development and strengthening of monitoring of surface and underground sources of drinking water continues by improving the laboratories of the Republican Center of Hygiene and Epidemiology, equipping them with modern equipment and tools, training staff and creating a computer database, improving communication and management;
- All city and regional centers of hygiene and epidemiology (CHE) are computerized, connected to the Internet and use the Integrated Electronic System for the Control of Infectious Disease since 2010. This allows to receive daily all the information about infectious and parasitic morbidity in the country, currently using the updated 6.1 version.
- To inform the public about the environmental health, the quality of domestic drinking water and the compliance of recreational water with sanitary and hygienic requirements, the Ministry of Health has launched the website www.health.gov.az.

In order to improve the qualifications of doctors, continuing education courses are ongoing for doctors of all specialties, including health organizers, sanitary doctors, microbiologists, epidemiologists, etc. at the State Institute for Advanced Studies for Physicians.

The National Malaria Control Program for 1999-2005 was adopted and successfully completed in the country. From 2008-2013, the National Strategy aimed at eliminating malaria in the region was developed and implement. In recent years, local cases of malaria have not been reported. In the Republic of Azerbaijan, to prevent the occurrence of cases of malaria, the National Strategy for 2016-2020 has been adopted, the implementation of which has begun.

### Targets and target dates

<table>
<thead>
<tr>
<th>№</th>
<th>Target</th>
<th>Baseline (year)</th>
<th>Target dates</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Reducing the incidence level of viral hepatitis A and dysentery.</td>
<td>2012</td>
<td>by 2020 by 30%</td>
<td>MoH</td>
</tr>
<tr>
<td>2.</td>
<td>Prevent cholera from occurring in the country</td>
<td>2012</td>
<td>Regular</td>
<td>MoH</td>
</tr>
<tr>
<td>3.</td>
<td>Maintain indicators of the incidence of cholera and typhoid fever at the zero level</td>
<td>2012</td>
<td>Regular</td>
<td>MoH</td>
</tr>
<tr>
<td>4.</td>
<td>Following the period of elimination, prevent the occurrence of malaria</td>
<td>2012</td>
<td>2019-2020</td>
<td>MoH</td>
</tr>
<tr>
<td>5.</td>
<td>Prepare a National Strategy to Combat geoelminthiasis</td>
<td>2012</td>
<td>2020</td>
<td>MoH, Local Executive Authorities</td>
</tr>
<tr>
<td>6.</td>
<td>Improve the potential for detection, epidemiological investigation of other emerging diseases, such as legionellosis, cryptosporidiosis, giardiasis.</td>
<td>2012</td>
<td>2020</td>
<td>MoH</td>
</tr>
</tbody>
</table>

### Measures to achieve targets and target dates

<table>
<thead>
<tr>
<th>№</th>
<th>Measures and Activities</th>
<th>Timeframes</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>In case of infectious diseases, hygiene and epidemiology centers report within 24 hours with the coordination of all health sectors.</td>
<td>Regular</td>
<td>MoH</td>
</tr>
<tr>
<td>2.</td>
<td>Further development and improvement of GIS to strengthen the surveillance system for water-related diseases by including data on water-related diseases (cases and outbreaks) and data on water supply systems</td>
<td>2019-2020</td>
<td>MoH</td>
</tr>
</tbody>
</table>
3. Improving San Epidemic Management in the Field of Surveillance of Infectious and Noncommunicable Water-Related Diseases

4. Strengthen case surveillance and the potential of epidemiological analytical studies for outbreaks of water-related diseases through improved regulatory and methodological documents and staff training

5. Conducting educational campaigns to promote public health and the application of hygiene standards, taking into account national characteristics of lifestyle

6. Implement targeted educational and enlightenment programs in accordance with the national mentality with the population

7. Strengthen malaria surveillance

8. Strengthen surveillance for helminthic infestations and sanitary and hygiene conditions, especially in high-risk settings

| AREA III: Article 6, paragraph 2 (c) of the Protocol – Access to drinking water |
|---|---|---|
| **A. JUSTIFICATION** | | |
| Paragraph 2c) of Article 6 of the Protocol requires the establishment of targets and target dates for access to drinking water. | | |
| **B. CURRENT SITUATION AND PROBLEMS** | | |
| According to the UNICEF/WHO joint monitoring program data for 2013, the implementation of the planned indicators of the Millennium Development Goals was achieved in the country. Thus, in 2013, the indicator of improved water supply system: among the urban population was 95%, rural population - 78%, the overall figure - 87%. | | |
| As a result of the implementation of the State Programs and projects for the construction and reconstruction of water and sewer systems in the country, concrete results were achieved in this area. Thus, if in previous years 55% of the country's population was provided with uninterrupted drinking water supply, at present this indicator has increased by 7.5% and amounted to 62.5%. | | |
| To date, indicators of access to drinking water in the capital of the country have increased from 55% to 81.5%. So, if in 2005 the centralized water supply system serviced 1.56 million people, now it covers 2.41 million people. | | |
| Significant successes were also achieved in the field of laying new water supply networks. With regard to the development of small-scale water supply systems in the country, the State Program “Program for Poverty Reduction and Social and Economic Sustainable Development for the period 2008-2015” was adopted and is being implemented. Given that small water systems are vulnerable to pollution, such systems are given special attention when allocating financial resources. This program sets targets to ensure rural population has access to improved water sources. | | |
| The country continues to develop and implement special measures in case of emergency, both as a result of natural and man-made accidents. In order to prevent large-scale | | |
consequences in case of emergencies and taking into account the vulnerability of water resources, adaptation measures are provided for water supply and sanitation, since they pose a potential threat to public health.

All comprehensive facilities transferred to the balance of the Ministry of Emergency Situations (MES) have a special monitoring system for objects of national importance, the Ministry of Emergency Situations provides their safe maintenance and physical security, which has a strict access control mode.

The State Agency for Water Resources (SAWR) of the Ministry of Emergencies purchased from Israel 2 stationary and 4 mobile laboratory units for sampling water for the rapid determination of water pollution at the Shamkir, Yenikend, Mingachevir, Varvara and Jeyranbatan reservoirs. Given that the Jeyranbatan reservoir provides water for the majority of population of the cities of Baku, Sumgait, Khirdalan and many other settlements of the Absheron Peninsula, and from the Mingachevir reservoir, water is supplied to the treatment facilities of the city of the same name, water quality monitoring works are carried out in accordance with the approved Central Laboratory work plan, and the analyses of the water samples are conducted in this laboratory to allow taking quick decisions to prevent any adverse sanitary and environmental situations.

During the emergency situation in Azerbaijan (flood of 2010), there were instances in certain zones (regions) of the country, where a shortage of clean drinking water and the lack of appropriate sanitary amenities and hygiene products had occurred. This could contribute to the incidence of people. In this regard, the task of paramount importance in emergency situations for central and local authorities is to provide the population with clean drinking water. For purification of drinking water in emergency situations 12 mobile water treatment plants were purchased by MENR and 13 by MES. Some of those will treat sea water to drinking water indicators, while others serve to reduce turbidity. In addition, 11 mobile dry bio-toilets were purchased.

Azerbaijan has developed and approved a joint plan of operational measures between the Ministry of Emergency Situations (MES) and the Ministry of Health (MOH). The plans for joint work include measures relating to the supply and distribution of water, the introduction of hygiene skills and sanitation during emergencies. In the country, under the Hygiene and Epidemiology Centers of the Ministry of Health, a network of laboratory monitoring observations was put in place and epidemiological teams were organized to carry out relevant measures in emergency situations.

Targets and target dates

<table>
<thead>
<tr>
<th>№</th>
<th>Targets</th>
<th>Baseline (year)</th>
<th>Target dates</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>In line with SDG 6.1 ensure access to improved sources of water supply with 24-hour uninterrupted water supply.</td>
<td>2012</td>
<td>2020 by 2020 95% in cities; 65% in rural areas; By 2030 100% in cities; 80% in rural areas</td>
<td>“Azersu” OJSC, AAWM OJSC</td>
</tr>
<tr>
<td>2.</td>
<td>Ensuring access of schools and preschool institutions to</td>
<td>2012</td>
<td>2019-2020 85%;</td>
<td>“Azersu” OJSC, MoH,</td>
</tr>
<tr>
<td>№</td>
<td>Measures and Activities</td>
<td>Timeframes</td>
<td>Implementing bodies</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-----------------------------------------------------------------------------------------</td>
<td>-----------------------------------------</td>
<td>---------------------</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>To complete the construction of the installation of an ultra-membrane filter at the Jeyranbatan reservoir and put it into operation</td>
<td>2019-2022</td>
<td>Azersu OJSC</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>To complete the construction and reconstruction of wastewater treatment plants and water supply systems in cities and district centers</td>
<td>2019-2025 100%</td>
<td>Azersu OJSC, AAWM OJSC</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>In accordance with the Master Plan of water supply, sewage and storm sewage systems, ensure uninterrupted safe water supply to the population of the Absheron Peninsula</td>
<td>2019-2020 98 % of the population 2035 100% of the population</td>
<td>Azersu OJSC</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Implement projects aimed at strengthening the education capacity of the population and expanding public participation in solving water problems</td>
<td>Regularly</td>
<td>MoH, MENR, Azersu OJSC</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Identification of additional sources of drinking water in places of deployment of the evacuated population in emergency situations</td>
<td>Regularly</td>
<td>Azersu OJSC, FHN, MoH, MENR</td>
<td></td>
</tr>
</tbody>
</table>

A. JUSTIFICATION

Pursuant to Article 6 paragraph 2 (d) of the Protocol, national and/or local targets must be set and periodically reviewed in the area of access to sanitation.

B. CURRENT STATE AND PROBLEMS

According to the UNICEF/WHO joint monitoring program data for 2013, the planned indicators under the Millennium Development Goals have been fully achieved in the country. Thus, in 2013, the indicator of improved sanitation for the urban population was 92%; for the rural population 87%; the total figure was 89%.

The management of sanitary and preventive measures relating to public access to sanitation systems, both for collective and individual sanitary systems, is carried out in accordance
with the existing laws. These matters are reflected in the law of the Republic of Azerbaijan “On Water Supply and Wastewater,” which is currently being reviewed.

The implemented activities aimed at fulfilling the goals of the State Programs “Program for the Socioeconomic Development of the Regions of the Republic” (2014-2018) and “State Program on Socioeconomic Development of Baku City and its Suburban Settlements for 2014-2016”, allowed improving the environmental situation both in the capital of the country and in the regional centers. To improve public access to sanitation on the Absheron Peninsula and regions of the country (Khachmaz, Gusar, Khizi, Saatly, Sabirabad, Zardab, Lenkoran Bilasuvar, Oguz, Zagataly, Shabran, Siyazan, Cuba, Guba, Guba etc.) sewer collectors (network and supply) with a total length of 3510 km were built.

Thus, the problems of reconstructing the existing old sewer systems are being solved, and the new ones are being built (dates 2015-2030). The local population is involved in the process of coordinating the design decisions, whose opinion affects the solution of a number of issues. It should be noted that laboratory studies of drinking and wastewater are carried out according to European standards in the newly opened laboratories of Azersu OJSC. Serious problems associated with the clogging of sewer systems are being addressed through purchased new equipment of the latest technology.

**Targets and target dates**

<table>
<thead>
<tr>
<th>№</th>
<th>Targets</th>
<th>Baseline year</th>
<th>Target dates</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Completion of construction of central sewer systems that took off in regional towns and district centres</td>
<td>2012</td>
<td>100% in 2019-2020</td>
<td>Azersu OJSC</td>
</tr>
<tr>
<td>2.</td>
<td>Construction of sewer systems in line with the “Master Plan” of Absheron peninsula</td>
<td>2012</td>
<td>70% in 2019-2020, 100% in 2030</td>
<td>Azersu OJSC</td>
</tr>
<tr>
<td>3.</td>
<td>Launching relevant measures in towns and district centres without central sewer network</td>
<td>2012</td>
<td>2020-2025</td>
<td>Azersu OJSC</td>
</tr>
<tr>
<td>4.</td>
<td>Providing pre-school and school children with access to sanitation systems and availability of soap for washing</td>
<td>2012</td>
<td>2020 - 80% in cities 75% in villages 50% by 2030 - 100%</td>
<td>MoE, Azersu OJSC, MH</td>
</tr>
<tr>
<td>5.</td>
<td>Providing prevention and treatment facilities with access to improved sanitation systems</td>
<td>2012</td>
<td>100% in urban areas, 80% in rural areas by 2020</td>
<td>MH, Azersu OJSC</td>
</tr>
</tbody>
</table>
Measures to achieve targets and target dates

Table 9.

<table>
<thead>
<tr>
<th>№</th>
<th>Measures</th>
<th>Timeframes</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Completion of construction of main inlet sewer collector in Baku for the centralized collection and disposal of sewage waters from a number of settlements on the Absheron peninsula</td>
<td>100% in 2019-2025</td>
<td>Azersu OJSC</td>
</tr>
<tr>
<td>2.</td>
<td>Construction of treatment facilities for centrally capturing and treating wastewaters within the projects implemented in the regions</td>
<td>100% in 2019-2025</td>
<td>Azersu OJSC</td>
</tr>
</tbody>
</table>

**AREA V: Article 6 paragraph 2 (e) (first part) of the Protocol on Water and Health – the levels of performance of collective systems and other systems of water supply**

**A. JUSTIFICATION**

Article 6 paragraph 2 (e) of the Protocol requires setting targets and target dates in relation to the levels of performance to be achieved by collective systems and other means of water supply and sanitation.

**B. CURRENT STATE AND PROBLEMS**

In accordance with the National Programs (it is planned to achieve the following goals):

To provide the population of the country with centralized water supply until 2025, restructure water supply systems and complete all initiated projects, which are envisaged in cities and regional centers.

For the population of rural settlements, it is planned to determine the sources of water supply, prepare design solutions with the subsequent construction of water structures.

To achieve the national goals set by the State, the “Master Plan for Drinking Water Supply, Sewage and the Stormwater System of Greater Baku” is being implemented, which envisages:

- uninterrupted water supply system;
- collection, treatment and discharge of wastewater into the Caspian Sea;
- control of rainwater;
- evaluation of the overall environmental situation.

To date, the construction of the laboratory base of Azersu OJSC has been completed in accordance with the European standards; the Central Laboratory is accredited according to ISO standards. In all planned and currently completed projects, along with the water supply and sanitation systems, other supporting infrastructure is also provided: control rooms for laboratories, etc. The laboratories use a modern control system (SCADA). Here, water parameters are automatically determined, such as: temperature, turbidity, chemical composition, etc.
The capacity of Azersu OJSC to overcome problems with accidental pollution of water intakes or major accidents at water pipelines in extreme weather conditions is ensured by emergency rescue vehicles and mobile laboratories for the rapid assessment of drinking water quality.

**Targets and target dates**

<table>
<thead>
<tr>
<th>№</th>
<th>Targets</th>
<th>Target dates</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Reduce the loss of tap drinking water</td>
<td>By 30% in 2025</td>
<td>Azersu OJSC</td>
</tr>
<tr>
<td>2.</td>
<td>Implement WSP plans according to WHO methodology</td>
<td>20 villages in 2020</td>
<td>Azersu OJSC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>45 villages in 2030</td>
<td></td>
</tr>
</tbody>
</table>

**Measures to achieve goals and targets**

<table>
<thead>
<tr>
<th>№</th>
<th>Measures</th>
<th>Timeframes</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Application of the cutting-edge technology with the help of membranes of quartz sand through the replacement of quartz sand with polymers</td>
<td>2025</td>
<td>Azersu OJSC</td>
</tr>
<tr>
<td>2.</td>
<td>Continuation of application of SCADA system on water pipeline systems</td>
<td>Regular</td>
<td>Azersu OJSC</td>
</tr>
<tr>
<td>3.</td>
<td>Continuation of application of the cutting-edge methods and technologies for controlling the quality of drinking water in Azersu OJSC laboratories</td>
<td>Regular</td>
<td>Azersu OJSC</td>
</tr>
<tr>
<td>4.</td>
<td>Training of Azersu OJSC employees on risk assessment-based management</td>
<td>Regular</td>
<td>Azersu OJSC</td>
</tr>
<tr>
<td>5.</td>
<td>Develop a national roadmap for implementation and WSPs according to WHO recommendations and local considerations</td>
<td>until 2030</td>
<td>Azersu OJSC, MH</td>
</tr>
<tr>
<td>6.</td>
<td>Drafting national WSP guidelines based on WHO guidance documents</td>
<td>Regular</td>
<td>Azersu OJSC, MH</td>
</tr>
</tbody>
</table>

**AREA VI Article 6 : paragraph 2 (e) (second part) of the Protocol on Water and Health – the levels of performance of collective systems and other systems for sanitation**

**A. JUSTIFICATION**

Pursuant to Article 6 paragraph 2 (e) (second part) of the Protocol, national and/or local targets must be set and periodically reviewed for the level of performance to be achieved by collective systems and other systems of sanitation.

**B. CURRENT STATE AND PROBLEMS**
It should be noted that against the background of degradation of the wastewater collection systems, especially in villages, such collection systems are being rehabilitated and the new ones being built, paying special attention to the treatment and discharge of wastewater in all regions of the country in accordance with the National Program for the Socio-Economic Development of the Regions of the Republic "(2014-2018).

Problems with the wastewater disposal in the capital of the country will be resolved in the period until 2035, taking into account the progressive development during the implementation of the "Master Plan for water supply, sewage and storm water systems on the Absheron Peninsula." Project documentation in all administrative districts of Baku city is fully prepared, the necessary financial resources to carry out these works were allocated, and the activities began. In accordance with this Project, 11 sewage treatment plants will be installed along the coastline of the Caspian Sea of the Absheron peninsula. Currently, work has begun on the construction of these installations in the villages of Lokbatan and Pirshagi.

In the Master Plan, alternative collectors are envisaged in the central part of the capital to prevent emergency situations during intensive rainfalls.

**Targets and target dates**

<table>
<thead>
<tr>
<th>№</th>
<th>Targets</th>
<th>Target dates</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Completion of reconstruction works for centralized transport and treatment of wastewater in towns and provincial centres; launch of the respective work in rural settlements</td>
<td>In 2019-2025&lt;br&gt;In cities, 100%&lt;br&gt;In the villages, 55%;&lt;br&gt;By 2030&lt;br&gt;In villages-80%</td>
<td>Azersu OJSC</td>
</tr>
<tr>
<td>2.</td>
<td>Construction of 11 treatment facilities for collection, transport and treatment of wastewater along the Caspian Sea in Absheron peninsula</td>
<td>100% completed in 2019-2030</td>
<td>Azersu OJSC</td>
</tr>
</tbody>
</table>

**Measures to achieve targets and target dates**

<table>
<thead>
<tr>
<th>№</th>
<th>Measures</th>
<th>Timeframes</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Application of new wastewater technologies for protection of water reserves from pollution</td>
<td>Regular</td>
<td>Azersu OJSC</td>
</tr>
<tr>
<td>3.</td>
<td>Implementation of the roadmap and SSP in line with the WHO recommendations and with due account for local context</td>
<td>2020</td>
<td>Azersu OJSC, MH</td>
</tr>
<tr>
<td>4.</td>
<td>Realization of measures for updating legislation on SSP application and implementation</td>
<td>Regular</td>
<td>Azersu OJSC</td>
</tr>
</tbody>
</table>
AREA VII: Article 6 paragraph 2 (f) of the Protocol on Water and Health – the application of recognized good practices to the management of water supply

and AREA VIII - Article 6, paragraph 2 (f), of the Protocol — Application of recognized good practices in the management of sanitation

A. JUSTIFICATION

Paragraph 2f) of Article 6 of the Protocol requires the setting of targets and target dates for the application of recognized good practices in the field of water supply management and in the management of sanitation.

B. CURRENT STATE AND PROBLEMS

In the country, these thematic areas are governed by:

The following legislative acts:

- Water Code of the Republic of Azerbaijan (1997);
- Law on sanitary and epidemiological wellness of the Republic of Azerbaijan (1992);
- Law on water supply and wastewaters of the Republic of Azerbaijan (1999);

Besides, there are normative acts, such as:

- WHO Guidelines for drinking-water quality (Geneva, 2011);
- SNR 4630-88 “Sanitary protection of wastewater, water bodies in residential areas” (Hygienic requirement on protection of surface waters);
- Rules for approval of terms of reference for consumers to get connected to water supply and wastewater transport system;
- Water use regulations (Decision #262 of RA Cabinet of Ministers in 2014);
- “Water supply. External networks and facilities AzDTN 2.11-1”;
- “Sewer system. External networks and facilities AzDTN 2.11-2”.

The practice in the field of water supply and sanitation management is adapted to local conditions for the implementation of the goals of the National State Programs.

Since July 2004, in order to ensure proper operation and rehabilitation of water supply and sanitation systems, these issues in all regions of the country, with the exception of the Nakhichevan Autonomous Republic, are handled by Azersu OJSC. One of the goals set by the State Programs (2014-2018) is to provide the population of all regions, both cities and rural settlements, with an uninterrupted high-quality water supply by 2030. In order to achieve this indicator, the State Program "On Sustainable Socio-Economic Development of the Regions of Azerbaijan 2014-2018" is being implemented. In a number of small towns, the construction of water supply and sewer structures has been carried out and continues. A Master Plan for water supply and sanitation in all regions of Azerbaijan is being developed. Significant progress has been achieved in providing the population of the regions of the republic with modular-type water supply systems in accordance with the decree of the
President of the Republic of Azerbaijan dated July 20, 2007 “On some measures to improve the provision of environmentally friendly water for the population”. Thus, in the settlements of the country, water treatment plants of a modular type are installed, with coverage of more than 705 thousand people. In addition, in 2017, construction works started in order to improve water supply in 170 settlements in 28 regions of the country. As part of the ongoing projects, it is envisaged that the rural population in the total number of 271 thousand people will be provided with high-quality drinking water.

In total, drinking water supply systems in 520 villages, having 630 thousand population, have been upgraded. It is planned to continue work to improve the water supply to the rural population.

The State Sanitary Inspection, on the quarterly basis, carries out selective sampling of water for laboratory control of the state of water supply in 56 of 66 regions of the country, checking compliance with the current standards. There is close cooperation between the sanitary service of the Ministry of Health and the Ministry of Ecology and Natural Resources on all issues related to the Protocol on Water and Health.

Cooperation with Azersu OJSC is carried out at all stages of the State Sanitary Inspection, starting with the design stage of water installations, their construction and regular sanitary supervision of monitoring of drinking water quality. This cooperation is carried out both at the central and local levels.

It should be noted that in case of emergencies, both on the water supply system and in the drainage systems, representatives of the management company Azersu OJSC carry out sanitary inspections.

When creating new infrastructures for the introduction of new technologies and systems, it is necessary to strengthen human resources. For this purpose, an educational and methodical center has been created on the territory of the Govsaninskaya aeration station, where, in accordance with the curricula, professional training is being carried out. On the territory, work has begun on the development of a training ground for conducting practical tests.

The State Agency of Water Resources under the Ministry of Emergency Situations ensures safe service and on-site security in accordance with the established special monitoring system, with a strict access regime at all water facilities of national importance transferred to the balance of the Ministry of Emergency Situations

It should be noted that materials in contact with drinking water are used only with the appropriate certificates.

The mass media, in particular television, open websites of various ministries and departments are used to inform the public about the events held.
## Targets and target dates

<table>
<thead>
<tr>
<th>№</th>
<th>Targets</th>
<th>Target dates</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Establishment of regional associations, management institutions for collective and other water supply and sanitary systems</td>
<td>2 associations in 2019 51 associations in 2030</td>
<td>Azersu OJSC</td>
</tr>
</tbody>
</table>

## Measures to achieve targets and target dates

<table>
<thead>
<tr>
<th>№</th>
<th>Measures</th>
<th>Timeframes</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Training of Azersu OJSC specialists in 38 thematic areas</td>
<td>2019-2020</td>
<td>Azersu OJSC</td>
</tr>
<tr>
<td>2.</td>
<td>Specialized training for 4500 employees of Azersu OJSC</td>
<td>2019-2020</td>
<td>Azersu OJSC</td>
</tr>
<tr>
<td>3.</td>
<td>Training for 250 professional methodologists/trainers</td>
<td>2019-2020</td>
<td>Azersu OJSC</td>
</tr>
</tbody>
</table>

### AREA IX - Article 6, paragraph 2 (g), of the Protocol – Occurrence of discharges of untreated wastewater

#### A. JUSTIFICATION

Paragraph 2g) of Article 6 of the Protocol requires the establishment of targets and target dates for the occurrence of discharge of untreated wastewater.

#### B. CURRENT STATE AND PROBLEMS

The legislative framework for the protection of water from the discharge of untreated wastewater is represented by the Law on Water Supply and Wastewater. However, this law is currently being revised taking into account international practice. There is also a regulatory framework for the design of sewage systems.

Since August 2014, the rules “On the application of technical conditions for connecting consumers to the use of water supply and wastewater” were enacted (Resolution of the Cabinet of Min. AR No. 275 of August 13, 2014).

In Azerbaijan, the sewage systems are divided into: household and storm water. In small cities, the drains are common. Wastewater discharges are not treated in all cities and rural settlements. The solutions to these problems are ensured in the country in accordance with the National State Program "On the socio-economic development of the regions of Azerbaijan in 2014-2018." Wastewater treatment plants were built and commissioned in 5 district centers (Geigel, Zagatala, Oguz, Masally, Jalilabad); the construction of treatment facilities in the city of Shemakha was completed. At the same time, in 8 districts (Ganja, Sheki, Gazakh, Kedabek, Terter, Khachmaz, Khizi, Kobustan) work is underway on the construction of treatment facilities in accordance with the projects.
In addition, in accordance with design decisions, it is planned to construct treatment facilities in the regions (Gabala, Agjabadi, Goychay, Beylagan, Agdash, Naftalan, Bilasuvar, Imishli, Zardab, Ujar, Saatly, etc.)

In the country, the quality of wastewater is determined in accordance with adapted to generally accepted international practices.

The aim of the above Program is to provide all district centers together with rural settlements with treatment facilities in the long term up to 2030.

At Absheron, wastewater is generated in an amount of 1.5 million m$^3$/day. The Master Plan of the water supply, sewage and storm water sewage management system of the Absheron Peninsula, which is being implemented, currently provides for the management of rainwater, as well as the collection, treatment and discharge of wastewater into the deep part of the Caspian Sea. In accordance with this plan, 11 sewage treatment plants will be installed along the Caspian coastline. This situation applies to rural areas. 5 district centers will be provided with the biological treatment facilities in accordance with the prepared projects. Moreover, the discharge of treated wastewater is provided mainly to drainage collectors, from which the waters will separately enter the Caspian Sea. Currently, in the northern part of the Absheron Peninsula on the territory of the village of Pirshagi, construction of treatment facilities is underway.

In the north of the country, the discharge of treated wastewater in rural settlements will be carried out automatically into the collector system and subsequently directed to the treatment facilities of the city of Khachmas (in the future, the construction of biological treatment plants for 3 cities: Khachmas, Guba, Gusary is planned in the city of Khachmas). This will protect the groundwater of the Samur-Devechi lowland, protect the soil and groundwater from infiltration.

### Targets and target dates

<table>
<thead>
<tr>
<th>№</th>
<th>Targets</th>
<th>Target dates</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Preventing untreated wastewater from being discharged into natural water bodies</td>
<td>60% in 2019-2025; 80% in 2030</td>
<td>Azersu OJSC</td>
</tr>
<tr>
<td>2.</td>
<td>Transport of wastewater produced in rural settlements to treatment facilities in provincial centres</td>
<td>20 villages in 2019-2020; 120 villages in 2030</td>
<td>Azersu OJSC</td>
</tr>
</tbody>
</table>

### Measures to achieve targets and target dates

<table>
<thead>
<tr>
<th>№</th>
<th>Measures</th>
<th>Timeframes</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Establishment of relevant infrastructure in Guba and Gusar, and construction of wastewater treatment facility in Khachmaz</td>
<td>2019-2020</td>
<td>Azersu OJSC</td>
</tr>
<tr>
<td>2.</td>
<td>Construction of wastewater treatment facilities in Gabala</td>
<td>2019-2020</td>
<td>Azersu OJSC</td>
</tr>
</tbody>
</table>
**AREA X Article 6, paragraph 2 (g) (ii) of the Protocol on Water and Health – the occurrence of discharges of untreated storm water overflows from wastewater collection systems to waters within the scope of the Protocol**

**A. JUSTIFICATION**

The second part of Article 6, paragraph 2 (g), of the Protocol requires the establishment of targets and target dates for the frequency of discharges of untreated storm water flows from sewage collector systems to waters falling under the Protocol.

**B. CURRENT STATE AND PROBLEMS**

In Azerbaijan, untreated storm water does not have separate by-pass communications and therefore is mixed with sewage and is delivered to treatment plants or discharged into water bodies without preliminary treatment.

The Master Plan of the water supply management system, sewage and storm sewage system of the Absheron Peninsula provides for the separation of storm water sewage. Azersu OJSC plans to solve the problem of rainwater accumulation on the streets of Baku by using the volumes of available lakes on Absheron. According to the developed Master Plan, the construction of 775 km of storm water collectors is envisaged. Also, in order to solve the problem of water accumulation, 9 km of tunnel-type rain collectors will be built, the construction of one of which is being completed.

The master plan also provides for the construction of:

- 682 sewer collectors,
- 6395 km of sewer networks
- 11 wastewater treatment plants with a capacity of 1.406 million m³ per day.

Relevant measures for the separation of storm water sewage from municipal ones are defined in the above plan.

Currently, to improve the management of municipal solid waste, a “Strategic Plan and Concept for the management of municipal solid waste in Greater Baku” has been prepared, which will contribute to the reduction of storm water pollution.

**Targets and target dates**

<table>
<thead>
<tr>
<th>№</th>
<th>Targets</th>
<th>Target dates</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Restoration and expansion of the storm water sewer system in Baku in line with the “Master Plan”</td>
<td>50% in 2019-2025; 80% in 2030</td>
<td>Azersu OJSC</td>
</tr>
<tr>
<td>2.</td>
<td>Rehabilitation of the lakes in Absheron peninsula</td>
<td>2019-2030</td>
<td>ME, MENR, Azersu OJSC</td>
</tr>
</tbody>
</table>
Measures to achieve targets and target dates

Table 19.

<table>
<thead>
<tr>
<th>№</th>
<th>Measures</th>
<th>Timeframes</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Environmental rehabilitation of Lake Boyukshor</td>
<td>2019-2030</td>
<td>ME, MENR, Azersu OJSC</td>
</tr>
<tr>
<td>2.</td>
<td>Environmental rehabilitation of Lake Zygh</td>
<td>2019-2030</td>
<td>ME, MENR, Azersu OJSC</td>
</tr>
</tbody>
</table>

AREA XI: Article 6 paragraph 2 (h) of the Protocol on Water and Health – the quality of discharges of wastewater from wastewater treatment installations

A. JUSTIFICATION

Pursuant to Article 6, paragraph 2 (h) of the Protocol, national and/or local targets must be set and periodically reviewed in the area of quality of discharges of wastewater from wastewater treatment installations.

B. CURRENT STATE AND PROBLEMS

The Law on Water Supply and Wastewater regulates the work in this area. In Azerbaijan, the sewage system is divided into: household, storm water and industrial. Wastewater is not treated fully in rural areas due to the lack of wastewater treatment systems. The solution of these problems is carried out in the country in accordance with the National State Program "Social and Economic Development of the Regions of Azerbaijan". During the reporting period, wastewater treatment plants were built and commissioned in 5 district centers, and in 6 it is being completed.

To achieve the goals, agreed design documentation has been developed; in a number of cities these projects are already being implemented.

Targets and target dates

Table 20.

<table>
<thead>
<tr>
<th>№</th>
<th>Targets</th>
<th>Target dates</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Bring wastewater treatment to regulatory requirements and discharge wastewater into natural water bodies only after treatment</td>
<td>2019-2030</td>
<td>Azersu OJSC, MENR, MH</td>
</tr>
</tbody>
</table>
Measures to achieve targets and target dates

Table 21.

<table>
<thead>
<tr>
<th>№</th>
<th>Measures</th>
<th>Timeframes</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Regularly carry out activities to minimize the risks of pollution of small rivers</td>
<td>Regular</td>
<td>MENR, Azersu OJSC, AAWM OJSC</td>
</tr>
<tr>
<td>2.</td>
<td>Construction and reconstruction of the collector and drainage network for transporting drainage water in irrigated areas</td>
<td>Regular</td>
<td>AAWM OJSC</td>
</tr>
<tr>
<td>3.</td>
<td>To conduct seminars with the population and the public on the topic: reuse of treated wastewater in agriculture</td>
<td>Regular</td>
<td>MENR, AAWM OJSC, Azersu OJSC</td>
</tr>
</tbody>
</table>

**AREA XII: Article 6 paragraph 2 (i) [first part] of the Protocol on Water and Health – the disposal or reuse of sewage sludge from collective systems of sanitation or other sanitation installations**

**A. JUSTIFICATION**

Pursuant to Article 6, paragraph 2 (i) [first part] of the Protocol, national and/or local targets must be set and periodically reviewed in the area of disposal or reuse of sewage sludge from collective systems of sanitation or other sanitation installations.

**B. CURRENT STATE AND PROBLEMS**

Sanitary and preventive measures for the removal and reuse of sewage sludge from collective systems and other installations for sanitary treatment at this stage are not provided due to the lack of relevant regulatory documentation in the country. However, this problem is a priority for the country. The sludge can be used as a fertilizer for landscaping in places contaminated with oil products both in Baku and in 56 district centers.

In order to determine the possibility of using wastes (sewage sludge as fertilizer for landscaping areas in places contaminated with oil products and other elements, it will be necessary to conduct relevant studies, develop regulatory legal acts and prepare special personnel for the application of technology in this area).

These activities will be determined after setting targets.

**Targets and target dates**

Table 22.

<table>
<thead>
<tr>
<th>#</th>
<th>Targets</th>
<th>Target dates</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Study of organic, non-organic and bacteriological properties of sludge-based solid waste</td>
<td>2019-2020</td>
<td>Azersu OJSC</td>
</tr>
<tr>
<td>2.</td>
<td>Feasibility of introduction of innovative technology for sludge consolidation and stabilization</td>
<td>Regular</td>
<td>Azersu OJSC</td>
</tr>
</tbody>
</table>
3. Exploring the opportunities for the use of sludge, taking into consideration the likelihood of environmental consequences

4. Study of the course of natural consolidation of sludge

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**Measures to achieve targets and target dates**

<table>
<thead>
<tr>
<th>#</th>
<th>Measures</th>
<th>Timeframes</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Setting up cooperation with enterprises/institutions to get access to sludge processing technology</td>
<td>2019 - 2025</td>
<td>Azersu OJSC</td>
</tr>
<tr>
<td>2.</td>
<td>Introduction of advanced technology for the use of sludge sediments from wastewater</td>
<td>2020 - 2025</td>
<td>Azersu OJSC</td>
</tr>
</tbody>
</table>

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**AREA XIII: Article 6 paragraph 2 (i) [second part] of the Protocol on Water and Health – the quality of waste water used for irrigation purposes**

**A. JUSTIFICATION**

In accordance with the second part of Subparagraph 2i) of Article 6 of the Protocol, it is required to establish target dates for the quality of wastewater used for irrigation purposes falling within the scope of the Protocol.

**B. CURRENT STATE AND PROBLEMS**

Azerbaijan does not practice the use of wastewater for irrigation, but legislation allows the use of these waters for irrigation of green spaces, subject to coordination with the Ministries of Ecology and Natural Resources and the Ministry of Health.

**Targets and target dates**

<table>
<thead>
<tr>
<th>#</th>
<th>Targets</th>
<th>Target dates</th>
<th>Implementing bodies</th>
</tr>
</thead>
</table>
Measures to achieve targets and target dates

Table 25.

<table>
<thead>
<tr>
<th>#</th>
<th>Measures</th>
<th>Timeframe</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction of a regulatory document for the reuse of treated municipal wastewater for irrigation purposes</td>
<td>2019-2022</td>
<td>Azersu OJSC, AAWM OJSC, MENR, MH</td>
</tr>
</tbody>
</table>

**AREA XIV: Article 6 paragraph 2 (j) [first part] of the Protocol on Water and Health – the quality of waters which are used as sources for drinking water**

**A. JUSTIFICATION**

Pursuant to Article 6, paragraph 2 (j) [first part] of the Protocol, national and/or local targets must be set and periodically reviewed on the quality of waters which are used as sources for drinking water.

**B. CURRENT STATE AND PROBLEMS**

Consultations with the EU and other international partners were held for the optimal management of water resources within the framework of regional projects for the Eastern Partnership countries, which aim at promoting integrated water resources management and overall improvement of water quality in national and transboundary rivers. The prepared joint action plan between the EU and Azerbaijan confirms the commonality of interests and readiness to fulfill priorities in the country’s water resources management. Within the framework of the “Action Plan”, technical assistance was provided to Azerbaijan within the frames of project “Environmental Protection of International River Basins”.

The main goal of the project was to improve the information base on the state of local and transboundary rivers and groundwaters. To this end, a river basin management plan has been developed in accordance with the EU Water Framework Directive. This plan is periodically updated.

Within the framework of the Project, in accordance with the requirements of the Water Framework Directive, a monitoring program for the classification of surface and groundwaters, a river basin management plan for Agstafachai, Tovuzchay, Shamkirchay, Ganjachai, as well as an action program for managing its river basins have been created. Surface and ground waters were monitored in Ganja-Gazakh region and Ganykh river basin, 25 monitoring stations belonging to surface water monitoring network were restored and monitoring conducted in these stations, and Gazakh analytical research laboratory was furnished with new equipment for the purposes of improving chemical, biological and hydromorphological monitoring of surface and ground waters and evaluating the condition of water resources.

Meanwhile, the implementation of the European Union Water Initiative Plus for the Eastern Partnership (EUWI+) project is ongoing in Azerbaijan.
The goal of the project is to support integrated water resources management and compliance with the EU Water Framework Directive in EaP countries, as well as to improve the management of national and transboundary river basins.

The following measures will be addressed within the project:

- acquisition of devices and other equipment for hydrological monitoring and water quality monitoring in transboundary rivers;
- allocation of technical assistance for modernization, refurbishment (with modern equipment) and certification of existing laboratories;
- needs assessment for capacity building and identification of priorities;
- development of river basin management plans, establishment and management of internet databases, etc.

In accordance with the action plan, legislative acts, technical rules and standards are prepared in the light of environmental protection. Currently, in accordance with EU legislation, a new draft law on water supply and wastewater is being prepared.

Within the framework of sustainable socio-economic development of the country, the solution of the problem of the use and protection of water resources is included in urgent priorities and work in this direction continues. It should be noted that in recent years sufficient funds have been allocated to the water sector, the bulk of which has been invested from the budget.

In the context of the EU Water Initiative, the most effective is the National Policy Dialogue on Integrated Water Resources Management (NPDs). Since 2010, Azerbaijan has joined the NPD programme in order to implement integrated water resources management. The draft national strategy for integrated water resources management is adapted to the principles of the Water Framework Directive, the UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes, the Protocol on Water and Health, as well as other principles of the European Union.

**Targets and target dates**

<table>
<thead>
<tr>
<th>No</th>
<th>Targets</th>
<th>Target dates</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Achievement of surface water quality indicators used for drinking water supply according to the content of enterococci and E-coli to the level of requirements</td>
<td>Regular</td>
<td>Azersu OJSC, MENR, MH</td>
</tr>
</tbody>
</table>
* Implementation of the principles and practices of the Integrated Environmental Information System in the Eastern Partnership countries within the European neighbourhood instrument (ENI) Shared Environmental Information System (SEIS) II East project for 2017-2019. Under the project, a service agreement was signed with the European Center for Inland, Coastal and Marine Water for the purpose of data adaptation, implementation of indicators and performance-based assessment, as well as providing IT expertise and support for the National Water Information Portal.

**Measures to achieve targets and target dates**

<table>
<thead>
<tr>
<th>№</th>
<th>Measures</th>
<th>Timeframes</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Use the sanitary regulations and follow the sanitary regulations in the sanitary zone with the recommendations of the WHO and the EU Directives</td>
<td>Regular</td>
<td>MH, Azersu OJSC, MENR</td>
</tr>
<tr>
<td>2</td>
<td>Inventory of sources of unauthorized discharge of untreated wastewater within the water supply area, and implementation of appropriate measures</td>
<td>Regular</td>
<td>Azersu OJSC, MH, MENR</td>
</tr>
</tbody>
</table>

**AREA XV: Article 6 paragraph 2 (j) [second part] of the Protocol on Water and Health – the quality of waters which are generally used for bathing**

**A. JUSTIFICATION**

Pursuant to Article 6, paragraph 2 (j) [second part] of the Protocol, national and/or local targets must be set and periodically reviewed on the quality of waters which are generally used for bathing.

**B. CURRENT STATE AND PROBLEMS**

The Azerbaijan part of the Caspian Sea is used for recreational purposes. In the northern part of the country, the sea water quality in the Yalama-Khachmaz area corresponds to the sanitary norms for bathing. Monitoring of seawater quality is ensured by the Caspian Sea Integrated Environmental Monitoring Administration and the sanitary and epidemiological centers.

In the summer, the website of the Ministry of Health provides information on the state of sea water on the beaches of the Caspian Sea.

Every year, before the start of the bathing season (May-September months), an assessment of the quality of the Caspian Sea coastal water is carried out. According to the monitoring conducted by the bodies of the State Sanitary Inspection and representatives of the Office of Integrated Environmental Monitoring of MENR, the quality of water on the beaches of the Caspian Sea has improved. The improvement in the quality of sea water was due to the fact
that the companies involved in this work used significant investments in improving the quality of discharged effluents. For example, to ensure a safe aquatic environment used for recreational purposes, Absheron completed the reconstruction of the Govsaninskaya aeration station and commissioned biological treatment facilities in the city of Sumgait, in the villages of Buzovna and Shuvalan. By installing 17 local modular treatment plants on the northern coast of the Absheron Peninsula for 86 km, the problems with sources of diffuse sea pollution by effluents from summer cottages, the population of which previously carried out unauthorized discharges of domestic sewage, were partially resolved.

Given the high level of urbanization of the Absheron Peninsula, it is planned to suspend all outflows of untreated sewage into the Caspian Sea. Work has begun on an inventory of polluters in the Baku Bay, strategic directions for its cleaning have been identified, and the sources of pollution have been studied. On the Absheron Peninsula, land plots contaminated with oil waste were reclaimed using drip irrigation. Measures are being taken to manage the water resources of small mountain rivers for their use, both in the field of water supply, and for recreation and fishing.

All those measures had a positive effect on the quality of sea water in the recreational waters of the Caspian Sea. While in the last century in the process of monitoring the quality of sea water cholera-like NAG vibrios of the Heiberg group I-II and, as indicators of anthropogenic pollution - E. coli, shigella and other microorganisms were distinguished, the monitoring of sea water quality carried out by the bodies of the State Sanitary Inspection of the Republic jointly with specialists from the Ministry of Ecology and Natural Resources in 2010-2017 showed a qualitative improvement in recreational waters.

It should be noted that no studies were conducted in the process of sea bathing to identify a correlation between the quality of sea water and various infectious diseases. However, it was noted that in the summer season, during the period of sea bathing, starting from mid-June to mid-August, the seasonality of intestinal infections is observed, an increase in acute respiratory infections with an established and unidentified pathogen is observed.

It was noted above that the country seeks to introduce the latest technologies in wastewater treatment as part of the water resources management. These measures are expected to decrease the risks of exposure to waterborne infections. Based on the Resolution of the Cabinet of Min. AR No. 286 of August 1, 2016, tourism and recreational zones were created and their borders were approved in the territory of Khizi-Khachmaz and Cuba-Kusar. At the same time, in accordance with the Decree of the President of the Republic of Azerbaijan No. 2295 dated September 1, 2016, the Ministry of Culture and Tourism prepared an action plan for 2017-2018, which was approved by Resolution of the Cabinet of Min. No. 292 S dated May 4, 2017.
**Targets and target dates**

<table>
<thead>
<tr>
<th>№</th>
<th>Targets</th>
<th>Target dates</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Achievement of satisfactory quality of bathing water by meeting quality indicators for enterococci and E.-coli</td>
<td>2019-2020</td>
<td>MH</td>
</tr>
<tr>
<td>2.</td>
<td>Monitor of wastewater management in the areas designated for beaches</td>
<td>2019-2020</td>
<td>Azersu OJSC, MENR</td>
</tr>
<tr>
<td>3.</td>
<td>Establishment of integrated services to enable recreational activity in the beach areas, in line with requirements of legal acts and standards regulating the operation of beaches</td>
<td>2019-2020</td>
<td>MH, MES</td>
</tr>
</tbody>
</table>

**Measures to achieve targets and target dates**

<table>
<thead>
<tr>
<th>№</th>
<th>Measures</th>
<th>Timeframes</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Develop and apply sanitary regulations on the quality of bathing waters, taking into account WHO recommendations and EU directives</td>
<td>2019-2020</td>
<td>MH, MENR</td>
</tr>
<tr>
<td>2.</td>
<td>Eliminate sources of unauthorized discharge of untreated wastewater within bathing zones</td>
<td>2019-2020</td>
<td>MENR, MH</td>
</tr>
<tr>
<td>3.</td>
<td>Create water protection zones and improve the areas in recreational bathing zones</td>
<td>2019-2025</td>
<td>MH, LEA (local executive authorities), MENR</td>
</tr>
</tbody>
</table>

**AREA XVI: of Article 6 paragraph 2 (j) [third part] of the Protocol on Water and Health – the quality of waters used for aquaculture or for the production or harvesting of shellfish**

**A. JUSTIFICATION**

Pursuant to Article 6, paragraph 2 (j) [third part] of the Protocol, national and/or local targets must be set and periodically reviewed on the quality of waters which are for aquaculture or for the production or harvesting of shellfish.

**B. CURRENT STATE AND PROBLEMS**

Though a legislative framework governing the quality of water for production of water bioresources through aquaculture is in place in Azerbaijan, it is not enforced in practice.

**Targets and target dates**

<table>
<thead>
<tr>
<th>№</th>
<th>Targets</th>
<th>Target dates</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Reduce the rate of non-compliance in terms of physical, chemical and biological properties of water samples in water ponds used for aquaculture</td>
<td>For 2019, up to 40% of annual samples For 2020, up to 25% of annual samples</td>
<td>MENR</td>
</tr>
</tbody>
</table>
Measures to achieve targets and target dates

<table>
<thead>
<tr>
<th>№</th>
<th>Measures</th>
<th>Timeframes</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Develop recommendations for conditions for the discharge of water from water bodies used for aquaculture into open water bodies</td>
<td>2019</td>
<td>MENR, Ministry of Agriculture</td>
</tr>
<tr>
<td>2</td>
<td>Develop regulations for normalization and monitoring of quality of water used for aquaculture</td>
<td>2019-2020</td>
<td>MENR</td>
</tr>
</tbody>
</table>

AREA XVIII: Article 6 paragraph 2 (l) of the Protocol on Water and Health – Identification and remediation of particularly contaminated sites

A. JUSTIFICATION

Pursuant to Article 6, paragraph 2 (l) [third part] of the Protocol, national and/or local targets must be set and periodically reviewed in the area of identification and remediation of particularly contaminated sites, which adversely affect waters within the scope of the Protocol or are likely to do so and, which thus threaten to give rise to water-related disease.

B. CURRENT STATE AND PROBLEMS

In accordance with the State Program "Social and Economic Development of Baku and its Villages" (2014-2016), work was carried out to inventory the lakes located on the Absheron Peninsula and coastal zones of lakes polluted with solid household and industrial waste. Oil-contaminated lakes with a total area of 300 hectares were cleaned and landscaped.

In the context of the implementation of the State Program “Improvement of the ecological state of the Republic of Azerbaijan" (2006-2010), a plant for incineration of municipal solid waste of 500 thousand tons was commissioned in 2012. In the process of incinerating solid waste, the plant is capable of generating 231.5 million kW /h of electric energy during the year. In parallel with this enterprise, the Balakhani plant for sorting and using secondary raw materials was commissioned. The annual capacity of the plant is 200 thousand tons. Within the framework of the project, 41 illegal dumps were eliminated in the city of Baku and its settlements, with the neutralization of 360 thousand tons of household garbage at the Balakhani dump. In general, for the period 2011-2017, 132 illegal landfills were cleaned and more than 800 thousand tons of solid waste were neutralized. The introduction of these enterprises contributes to the improvement of the environment, energy saving and reduces environmental stress on the Absheron Peninsula. Thus, the National targets set by the State Programs are achieved.
## Targets and target dates

### Table 32.

<table>
<thead>
<tr>
<th>№</th>
<th>Targets</th>
<th>Target dates</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Remediation of identified and mapped areas exposed to special contamination, including contamination with pesticides and oil products.</td>
<td>2019-2020</td>
<td>MENR, Ministry of Agriculture, SOCAR</td>
</tr>
</tbody>
</table>

## Measures to targets and target dates

### Table 33.

<table>
<thead>
<tr>
<th>№</th>
<th>Measures</th>
<th>Timeframes</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Implement national strategy on municipal solid waste management</td>
<td>2019-2030</td>
<td>ME, MENR</td>
</tr>
<tr>
<td>2</td>
<td>Equip laboratories with devices and equipment to monitor pollutants in soil, water and air</td>
<td>Regular</td>
<td>MENR, ME</td>
</tr>
<tr>
<td>3</td>
<td>Set up workshops and awareness raising meetings for the public on potential adverse effects on surface and groundwater bodies</td>
<td>Regular</td>
<td>MENR</td>
</tr>
<tr>
<td>4</td>
<td>Create a database on polluted areas</td>
<td>By 2020 (Pesticides, PCBs and oil products)</td>
<td>MENR, Ministry of Agriculture, SOCAR</td>
</tr>
</tbody>
</table>

### AREA XIX: Article 6 paragraph 2 (m) of the Protocol on Water and Health – the effectiveness of systems for the management, development, protection and use of water resources

#### A. JUSTIFICATION

Under Article 6, paragraph 2 (m), of the Protocol, it is required to set targets and target dates for the effectiveness of systems for the rational management, development, protection and use of water resources, including the application of recognized good practice, in order to limit pollution from sources of all kinds.

#### B. CURRENT STATE AND PROBLEMS

About 80% of the water used for drinking and irrigation is taken from the polluted rivers Kura and Araz, which today is one of the serious problems.

Significant progress has been made in Azerbaijan in providing the population with water for domestic and drinking needs, irrigation of agricultural land and construction of facilities against floods thanks to large investments. State budget allocations to cover the running costs of institutions involved in water resources management have also increased.

Some progress has been made in the field of sewage and wastewater. Across the country, the scale of the application of biological wastewater treatment is increasing, and monitoring data from the Caspian Sea indicate a decrease in the concentration of pollutants. Some improvements were achieved as a result of the activities of Azersu OJSC as a national
provider of water supply and wastewater treatment services, as well as through the creation of water user associations in the land reclamation sector.

However, very low water tariffs do not allow covering costs or promoting the efficient use of water. In Azerbaijan, measures to stimulate the reuse of water are still poorly implemented. In the country, work continues on installing water meters for water consumers, and the process of installing water measuring equipment on agricultural lands is slow. Currently, irrigation fees are calculated based on the volume of water consumption, which is a positive step, and not the area of the irrigated territory as it was before.

One of the main problems associated with the water management in Azerbaijan is the lack of special documents on water policy and water strategy. Components related to water issues are contained in national programs and action plans, and it is these programs and plans that together form the water policy. Given the number of entities involved in water issues and the limited nature of communication between them, the absence of such structural documents on water-related issues is a serious obstacle to effective water management.

The main problems of the Caspian Sea include water pollution, domestic and industrial wastewater, as well as incoming transboundary pollutants through rivers, sea level fluctuations and threats to its biological resources. In 2006, the government began to implement more intensive measures to protect and restore it, which, for example, include the use of new technologies and cleaning tools in the oil and gas exploration procedures; cleaning up oil-contaminated areas of the Absheron Peninsula and taking actions to increase the biological resources of the Caspian Sea and their protection.

### Targets and target dates

<table>
<thead>
<tr>
<th>№</th>
<th>Targets</th>
<th>Target dates</th>
<th>Implementing bodies</th>
</tr>
</thead>
</table>

### Measures to achieve targets and target dates

<table>
<thead>
<tr>
<th>№</th>
<th>Measures</th>
<th>Timeframes</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Prepare and implement the National Water Strategy</td>
<td>2019-2020</td>
<td>MENR, MES, AAWM OJSC, Azersu OJSC</td>
</tr>
<tr>
<td>2.</td>
<td>Develop a methodology to determine the environmental flow of the main rivers of the Republic of Azerbaijan</td>
<td>2019-2020</td>
<td>MENR, MES, AAWM OJSC, Azersu OJSC</td>
</tr>
</tbody>
</table>
**AREA XX: Article 6 paragraph 2 (n) of the Protocol on Water and Health – the frequency of the publication of information on the quality of the drinking water supplied and of other waters relevant to the Protocol**

### A. JUSTIFICATION

The parties shall determine the frequency of publication of information on the quality of the supplied drinking water and other waters related to the established targets. Such information should be published every three years in accordance with the decision of the Meeting of the Parties to the Protocol.

#### Targets and target dates

<table>
<thead>
<tr>
<th>№</th>
<th>Targets</th>
<th>Target dates</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Publication of national report on drinking water quality</td>
<td>Triennial</td>
<td>Azersu OJSC, MH, MENR</td>
</tr>
<tr>
<td>2.</td>
<td>Publication of reports on drinking water supply of population, by region</td>
<td>Annual</td>
<td>Azersu OJSC</td>
</tr>
<tr>
<td>3.</td>
<td>Publication of information on quality of waters used in beaches for recreational purposes</td>
<td>Annual</td>
<td>MH, MENR, Azersu OJSC</td>
</tr>
<tr>
<td>4.</td>
<td>Preparation and publication of national reports, in line with the requirements of the Protocol on Water and Health.</td>
<td>Triennial</td>
<td>MH, MENR, Azersu OJSC</td>
</tr>
</tbody>
</table>

#### Measures to achieve targets and target dates

<table>
<thead>
<tr>
<th>№</th>
<th>Measures</th>
<th>Timeframes</th>
<th>Implementing bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Collect information on effective management of water resources and reduction of pollution thereof for it to be covered in the national report</td>
<td>Triennial</td>
<td>MENR, MH, Azersu OJSC</td>
</tr>
<tr>
<td>2.</td>
<td>Prepare a national report to be submitted to the Secretariat, pursuant to the requirements of the Protocol.</td>
<td>Triennial</td>
<td>MH, MENR, MES, Azersu OJSC, AAWM OJSC</td>
</tr>
</tbody>
</table>
On the approval of the "Target Setting" in accordance with the Protocol “On Water and Health” of the United Nations Convention on the Protection and Use of Transboundary Watercourses and International Lakes

Pursuant to the Law of the Republic of Azerbaijan № 372-IIQ of October 22, 2002 on joining the Protocol "On Water and Health" of June 17, 1999 of the UN Convention on the Protection and Use of Transboundary Watercourses and International Lakes of March 17, 1992, and to ensure the subsequent implementation of the Protocol “On Water and Health”, we hereby ORDER:

1. To approve the “Target Setting” in accordance with the Protocol “On Water and Health” of the Convention “On the Protection and Use of Transboundary Watercourses and International Lakes” (attached).
2. To request the International Cooperation Department, Sanitary Epidemiological Control Sector, the Republican Center of Hygiene and Epidemiology under the Ministry of Health of the Republic of Azerbaijan and Environmental Policy, Environmental Analysis and Assessment Department, International Cooperation Division, Legal Affairs Department and Environmental Education and Public Relations Department, National Monitoring Department for Environment under the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan to:
2.1. implement specified measures to attain the “Target Set”;  
2.2. submit the corresponding progress reports to the Secretariat of the Protocol “On Water and Health”;  
2.3. provide information to the public on the activities undertaken in the framework of achieving the “Target Set” under the Protocol “On Water and Health” in the Republic of Azerbaijan.

3. To entrust the execution of control over the implementation of the Order, respectively, to Elsevar Aghayev, the Deputy Minister of Health of the Republic of Azerbaijan and Firdovsi Aliyev, the Deputy Minister of Ecology and Natural Resources of the Republic of Azerbaijan.

Minister of Health of the Republic of Azerbaijan
Ogtay Shiraliyev

Minister of Ecology and Natural Resources of the Republic of Azerbaijan
Mukhtar Babayev