



Funded by
the European Union

POLICY BRIEF #5

Management of atmospheric sewage in Kosovo



Promoting Universal
Access to **Clean Water**



**RILINDJA
GJELBËR**

DISCLAIMER

This publication was developed as part of the project "Promotion of Universal Access to Clean Water", financed by the European Union Office in Kosovo and implemented by Rilindja Gjellbër. The views, opinions and recommendations expressed in this publication are those of the author and do not necessarily represent the views of the European Union Office in Kosovo.

Policy Brief #5

Atmospheric Sewage Management in Kosovo

October, 2024

Content

1. Introduction	5
2. LEGAL AND INSTITUTIONAL FRAMEWORK	6
2.1 Legal Framework	6
2.2 Institutional Framework	7
3. CURRENT SITUATION	9
3.1 Covering the Urban Area with Atmospheric Sewage	9
3.2 AGE AND CONDITION OF ATMOSPHERIC SEWAGEK	10
3.3 MAINTENANCE OF ATMOSPHERIC SEWAGE	11
3.4 FINANCIAL AND HUMAN RESOURCES OF MUNICIPALITIES FOR ATMOSPHERIC SEWAGE MANAGEMENT	12
3.5 MUNICIPALITIES KNOWLEDGE OF THEIR RESPONSIBILITY FOR ATMOSPHERIC SEWAGE MANAGEMENT	13
3.6 COOPERATION WITH RWC	14
3.7 Main Problems Related to Atmospheric Sewage Management	15
4. RECOMMENDED POLICY	16
References	18
Anex: Atmospheric Sewage Management Questionnaire	19

Figures

Figure 1: Covering the urban area with atmospheric sewage	8
Figure 2: The percentage of the municipal budget for the management of atmospheric sewage	10
Figure 3: The number of employees in the municipality for the management of atmospheric sewage	11

Tables

Table 1: Age of atmospheric sewerage in the municipalities of Kosovo	9
Table 2: The conditions of atmospheric sewerage in municipalities	10
Table 3: The form of organizing the maintenance of atmospheric sewage in the municipalities	10
Table 4: Cooperation of municipalities with RWC in the maintenance of atmospheric sewage	13

Acronyms

WSRA	Water Services Regulatory Authority
EU	European Union
ICW	Interministerial Council for Water
RWC	Regional Waste Company
RWC	Regional Water Company
ME	Ministry of Economy
UPM and PE	Unit for Policy and Monitoring of Public Enterprises
PE	Public Enterprises
AWPK	Association of Water Pipes of Kosovo
UA	Administrative Instruction

1. Introduction

The sewage of wastewater (after use for domestic, industrial, or other needs), as well as atmospheric water (resulting from rainfall), is vital for the health and well-being of the population and for the protection of the aquatic environment.

Sewage includes urban wastewater and industrial wastewater. Urban wastewater, according to the EU Directive, includes domestic wastewater or its mixture with industrial wastewater and/or atmospheric water. While industrial wastewater includes all water polluted by industrial and business activities which are not domestic wastewater or atmospheric water.

Sewage systems can be of **separate** or **combined** (mixed) type. In separate sewerage systems, wastewater and atmospheric water are removed through separate sewerage networks while in the combined systems, wastewater and atmospheric water are mixed with a single sewerage network. Both of these types have their advantages and disadvantages. However, in recent times, mainly separate sewerage systems have been built.

In Kosovo, although mainly the sewerage systems are designed of the split type, in practice, they are in most cases combined/mixed as a result, mainly, of the discharge of atmospheric water into the wastewater sewerage system due to the lack of atmospheric sewage in certain urban areas.

Regarding the management of sewerage systems, with the legislation in force¹ municipalities are responsible for the provision and maintenance of public services and municipal services, including water supply, sewerage, and drainage.² On the other side, with Law No. 05/L-042 for the Regulation of Water Services³, water supply services and wastewater services can only be provided by service providers who are licensed by Water Services Regulatory Authority (WSRA); WSRA according to this law, it has licensed only 7 Regional Water Companies (RWC) that provide water supply and sewerage services throughout the territory of the Republic of Kosovo. From this, it follows that the sewage services are the responsibility of **RWC**, while the management of atmospheric sewage remains the responsibility of the municipalities.

Considering that there are many sewerage systems that are of the combined type where wastewater is sewered together with atmospheric water, this problematizes the dividing line of the responsibilities that RWCs have for sewage disposal vis-a-vis, the responsibilities that municipalities have for atmospheric sewage.

Also, there are indications that the municipalities are not well informed about this division of responsibilities, which results in the regular non-maintenance of the atmospheric sewerage.

¹ Article 17 of Law No. 03/L-040 for Local Self-Government - <https://gzk.rks-gov.net/ActDetail.aspx?ActID=2530>

² 'Drainage' here means atmospheric drainage.

³ <https://gzk.rks-gov.net/ActDetail.aspx?ActID=11350>

2. LEGAL AND INSTITUTIONAL FRAMEWORK

2.1 LEGAL FRAMEWORK

The main legal acts for water supply and sewerage services are as follows:

- (i) Law No. 05/L - 042 for Regulation of Water Services with its additions and changes made by Law No. 06/L-088

With this law, approved in 2016⁴ and amended in 2019, was established Water Services Regulatory Authority (WSRA) as an independent economic regulator for public water supply services and sewerage services, and all aspects of regulating water services have been regulated, such as: (I) licensing of companies offering these services, (II) determining the service charges to be applied by these companies, (III) service standards to be met by companies providing these services (RWCs), (IV) mutual rights and obligations of consumers and RWCs, etc.

According to Law No. 05/L - 042 for the Regulation of Water Services and other by-laws (regulations) issued by WSRA based on it, water supply services and wastewater services are subject to regulation by the WSRA which means the licensing of the providers of these services, determining the fees for the provision of these services, as well as determining the quality standards of these services.

Atmospheric sewage is not covered by this law and is therefore not regulated under it.

- (ii) Law No. 03/L-040 for Local Self-Government

This law, among other things, defines the legal status of municipalities as well as regulates the powers of municipalities and the organization and functioning of municipal bodies.

With this law, it is determined that municipalities have full powers for the provision and maintenance of public services and municipal services, including water supply, sewerage and drainage, wastewater treatment, waste management, local roads, local transport and local heating schemes.

Considering that the water supply services as well as those of sewerage and sewage treatment (dirty) are provided by the RWCs in accordance with (I) the legislation for the regulation of these services, and (II) the service agreements that the municipalities have concluded with the RWCs according to which they authorize them to provide these services, the drainage (atmospheric sewerage) services according to this law are the legal responsibility of the municipalities.

- (iii) Law No. 03/L-87 for Public Enterprises with the changes and additions made in 2011 with Law No. 04/L111 and in 2015 with Law no. 05/L009

⁴Legislation for the regulation of water services and the establishment of the Water and Waste Services Regulator has existed in Kosovo since 2004. when UNMIK Regulation No. 2004/49 on the Activities of Water Supply, Sewerage and Waste Service Providers. This Regulation, in 2008, was replaced by [Law No. 03/L-086 on Amending the Regulation on the Activities of Water Supply, Sewerage and Waste Service Providers](#) and the latter with [Law No. 05/L-042 for the Regulation of Water Services](#). Since 2016, with the approval of this law, only water services (water supply and sewerage services) are included by law - that is, waste services have been removed.

Management of atmospheric sewage in Kosovo

This law establishes the legal framework for the ownership of public enterprises (PE) and their corporate governance in accordance with internationally recognized practices and as such aims to create effective reporting and accountability modalities for the supervision of PEs. The law determines that PEs (including RWCs) are organized as Joint Stock Companies. RWCs are classified as national PE owned by the Republic of Kosovo and the property rights are exercised by the Government of Kosovo. The government responds and is accountable to the Kosovo Parliament regarding the achievement of objectives related to the RWC.

(iv) Law No. 04/L-147 for Kosovo Waters

This law regulates all issues related to water resources and their management, including the use of water, the protection of water, the protection from harmful actions of water, as well as the financing of the management of water resources. According to this law, "it is forbidden, except with a water permit, to discharge the mass of liquid industrial, agricultural waste and urban wastewater, as well as oils used in sewers, in the drainage system, in surface and underground water bodies, on the shores river and wetlands⁵".

2.2 INSTITUTIONAL FRAMEWORK

Government of Kosovo – Interministerial Council for Water (ICW)

In order to effectively exercise its responsibilities in the water sector, in 2013, with the Kosovo Water Law, the Interministerial Water Council (IWC) was established as a decision-making and supervisory body of the water sector as a whole, which is led by the Prime Minister and consists of four line ministers. ICW coordinates and supports relevant institutions in water management in the decision-making process and the proposal of measures for the development, use, and protection of water resources.

Ministry of Economy (ME)

ME is the successor Ministry of the former Ministry of Economic Development (MED) that, according to Law on Public Enterprises, monitors PE, including RWC and irrigation companies. This monitoring is organized through the PMU and its purpose is to ensure transparency and accountability in PE operation. This law defines the legal framework that regulates the exercise of property rights of PE and regulates the principles of corporate governance.

Ministry of Environment, Spatial Planning and Infrastructure (MESPI)

MESPI was established in 2002 as the Ministry of Environment and Spatial Planning (Infrastructure was added in 2021) and it is responsible for environmental planning including water resources, waste, air quality, land management, and spatial planning. This Ministry is also responsible for the long-term planning of water resources and the development of the country's water strategy.

Water Services Regulatory Authority (WSRA)

⁵ The expression 'wetlands' is probably used for 'wetlands' (textual translation of the name 'wetland' from the English language).

Management of atmospheric sewage in Kosovo

WSRA is the independent regulator of water services responsible for ensuring non-discrimination and providing quality, efficiency, and reliable services at fair and reasonable prices for consumers while respecting the environment and public health. WSRA is accountable to the Assembly of Kosovo, which selects its director and deputies. WSRA grants service licenses to PE that provide water supply, sewerage, and bulk water services; determines the fees for these services and issues by-laws for licensing, fees, service standards, and water interruptions.

Regional Water Companies (RWC)

All seven RWCs⁶ provide water supply and sanitation services to the majority of the population. They are under public ownership and controlled by the Government of Kosovo through the ME. RWC are joint stock companies and are licensed by WSRA. They have service agreements with the municipalities where they provide their services, which describe the duties and responsibilities of each of the parties. RWC is led by a Boards of Directors selected by the Government.

Municipalities

Municipalities, according to the law, have competencies for providing water supply, sewage and drainage services (atmospheric sewage). The municipalities have transferred their competence for the provision of water supply and sewage services to the RWCs according to the legislation on the regulation of water services, while the provision of drainage services - atmospheric sewerage - is their responsibility (the municipalities).

3. CURRENT SITUATION

There is no data available in the form of literature or any summary report on the current situation regarding atmospheric sewage in Kosovo. In all likelihood, this lack of results comes from the fact that atmospheric sewage has not been specifically addressed by any legal act (as is the case with water supply services and sewage disposal).

Therefore, in order to provide data on the existing situation in the municipalities in terms of coverage with the atmospheric sewage system, the technical condition of these systems as well as their financial and management aspects, a questionnaire was distributed to the municipalities (see Anex 1). Only 20 municipalities responded to this questionnaire, so the following data reflect the current situation regarding atmospheric sewage in Kosovo based on the responses of these 20 municipalities.

⁶ (i) RWC Prishtina offers its services in the municipalities of the Prishtina region: Prishtina, Podujevë, Fushë Kosovë, Obiliq, Lipjan, Shtimje, Glogoc and Graçanicë. (ii) RWC Hidroregjioni Jugor offers services in the municipalities of the Prizren region: Prizren, Suharekë, Malishevë, Dragash and Mamushë, (iii) RWC Hidrodrini offers services in the municipalities of the region of Peja: Peja, Istog, Klinë, Deçan and Junik, (iv) RWC Gjakova offers services in the municipalities of Gjakova, Rahovec and some villages of the municipality of Prizren, (v) RWC Mitrovica offers services in the municipalities: Mitrovica, Vushtrri and Skenderaj, (vi) RWC Hidromorava offers services in the municipalities of the Gjilan region: Gjilan, Viti, Kamenica, Novobërde, (vii) RWC Bifurkacioni offers services in the municipalities of the Ferizaj region: Ferizaj, Kaçaniku and Hani i Elezit.

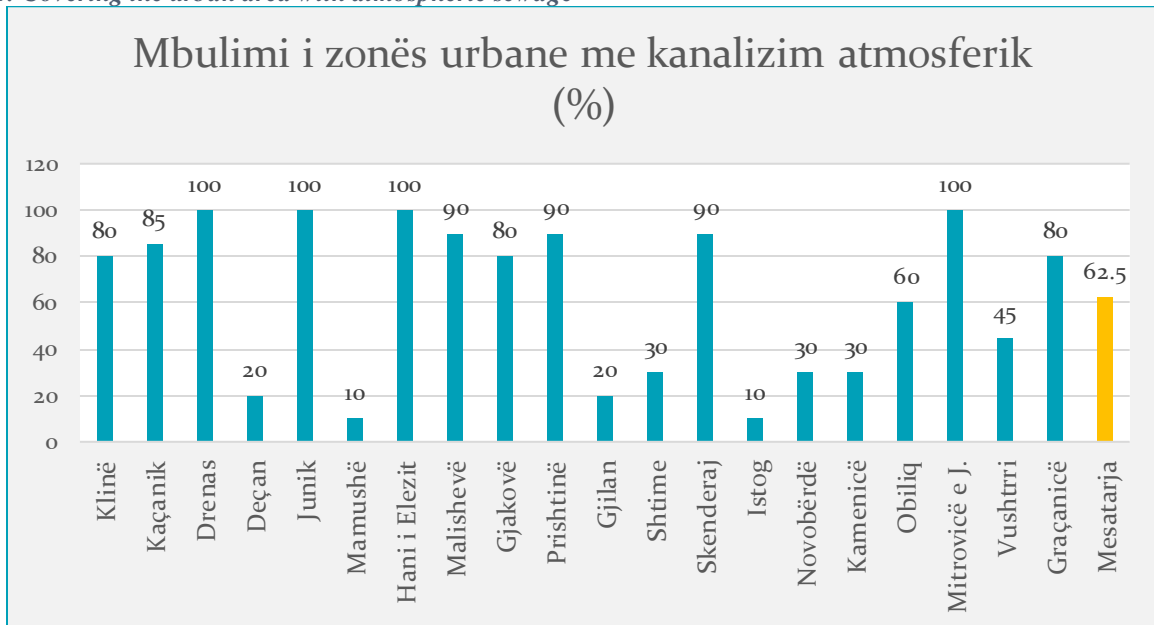
3.1 COVERING THE URBAN AREA WITH ATMOSPHERIC SEWAGE

According to the assessment of the municipalities, currently 62.5% of the urban surface in the territory of the municipalities is covered by atmospheric sewage.

The municipalities of Mamusha, Istog (with 10%), Deçani and Gjilani (with 20%), Shtimja, Novobërda and Kamenica (with 30%) and Vushtrria (45%) have the lowest coverage rate. Meanwhile, all other municipalities have over 60% coverage of the urban area with atmospheric sewerage; the municipalities of Mitrovica e Jugu, Drenasi, Hani i Elezit and Juniku have full 100% coverage, while the municipalities of Pristina, Skënderaj and Malisheva have 90% coverage.

The complete overview of the coverage of the urban area with atmospheric sewage is given in the graph in figure 1 below.

Figure 1: Covering the urban area with atmospheric sewage



3.2 AGE AND CONDITION OF ATMOSPHERIC SEWAGE

Based on the responses of the municipalities to the question of when the atmospheric sewage system was built, it can be concluded that the atmospheric sewage in most municipalities is relatively new (mostly 10-20 years old), and in relatively good/functional conditions.

Thus, in terms of age, in 14 of the 20 municipalities, the sewer system is no older than 20 years; in 4 municipalities (Prishtina, Gjakovë, Hani i Elezit and Klinë) it is up to 30 years and only in two municipalities (Kamenica and Mitrovica) older than 30 years.

Management of atmospheric sewage in Kosovo

Table 1 below summarizes the data on the age of atmospheric sewerage in the municipalities of Kosovo.

Table 1: Age of atmospheric sewerage in the municipalities of Kosovo

Old (age)	Municipalities
< 10	7 municipalities - Mamushë, Obiliq, Istog, Gjilan, Vushtri, Malishevë, Deçan
10-20	7 municipalities - Graçanicë, Shtime, Novobërdë Skenderaj, Kaçanik, Glogovc, Junik
20-30	4 municipalities - Han i Elezit, Gjakovë, Prishtinë, Klinë
> 30	2 municipalities - Kamenicë, Mitrovicë e Jugut

As for the condition of atmospheric sewerage, according to the assessment of the municipalities, it is generally good (5 municipalities) or functional (11 municipalities). Only 4 municipalities have assessed the state of atmospheric sewage as poor and it is interesting to note that in 3 of these municipalities (Novobërdë, Shtimja, and Skenderaj) the sewage system is relatively new (less than 20 years old). No municipality has evaluated the atmospheric sewage system as very bad. Detailed data by municipality are presented in table 2 below.

Table 2: The state of atmospheric sewerage in municipalities

State	Municipalities
Good	5 municipalities - Klinë, Glogovc, Gjilan, Istog, Obiliq
Functional	11 municipalities - Graçanicë, Mitrovicë e J., Vushtri, Prishtinë, Gjakovë, Malishevë, Junik, Mamushë, Deçan, Kaçanik, Han i Elezit
Weak	4 municipalities - Kamenicë, Skenderaj, Shtime, Novobërdë
Very bad	

3.3 MAINTENANCE OF ATMOSPHERIC SEWAGE

a) Frequency of maintenance

The majority of municipalities (13 out of 20) affirm that they do the maintenance of atmospheric sewerage as needed. In contrast to them, three municipalities (Prishtina, Vushtri and Deçani) do the maintenance twice a year, while two municipalities (Obiliqi and Drenasi), once a year.

In two cases, municipalities have given unusual answers that present extreme practices compared to other municipalities: (i) the municipality of Istog has reported that 'there was no need for maintenance' - probably

Management of atmospheric sewage in Kosovo

because the atmospheric sewerage is new, and (ii) The municipality of South Mitrovica has stated that it does maintenance after every rain - about 10-20 times a year.

It should be noted that maintenance 'as needed' represents reactive maintenance, therefore regular and systematic maintenance of the atmospheric sewerage should be implemented (checking and cleaning water catchments from sedimented material, checking and cleaning pipelines, checking and repairing wells and other system elements).

b) Organization of maintenance

The table below provides an overview of how the maintenance of atmospheric sewerage is organized in the municipalities.

Table 3: The form of organization of atmospheric sewerage maintenance in municipalities

The maintenance is carried out by:	Municipalities
Private operator	Kaçanik, Gllogovc, Mamushë, Prishtinë, Shtime, Han i Elezit, Skenderaj
RWC	Istog, Junik
KRM	Deçan, Gjakovë
Municipal enterprise	Vushtrri, Obiliq
There isn't	Mitrovicë e Jugut, Novobërdë, Klinë, Malishevë, Kamenicë

As can be seen from the table above, a significant number of municipalities - 7 of them - have contracts with private operators for the maintenance of atmospheric sewage. Other municipalities either do not have a contract at all (Mitrovica, Novobërda, Klinë and Kamenica), or perform maintenance through (i) Local Public Enterprise (Vushtrri and Obiliqi), (ii) Regional Waste Company (Gjakova and Deçani), or (iii) they treat it as their responsibility of RWC-së (Istogu dhe Juniku).

3.4 FINANCIAL AND HUMAN RESOURCES OF MUNICIPALITIES FOR ATMOSPHERIC SEWAGE MANAGEMENT

a) Financial Resources

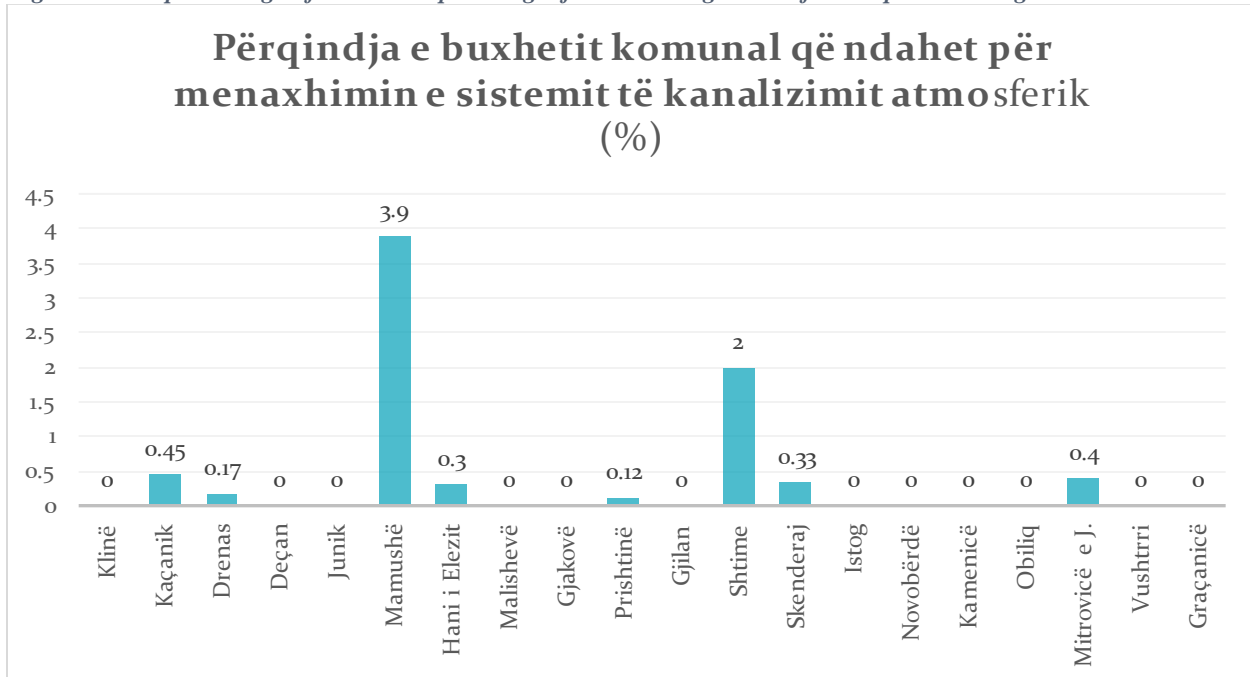
As for the municipal budget for the management of the atmospheric sewage system, the situation varies significantly from municipality to municipality. The municipal budget allocated for this purpose ranges from 0 to 150,000 EUR. Six municipalities have reported that they do not allocate a budget at all for the management of atmospheric sewage (two of them with the justification that maintenance is an obligation of RWC), while in some cases the municipality does not have a special budget code for atmospheric

Management of atmospheric sewage in Kosovo

sewerage and the means for this purpose are within the general budget of the municipal directorate, or the maintenance of roads, riverbeds, etc.

The percentage of the municipal budget allocated to the management of atmospheric sewage, based on the information provided by the RWCs, is presented in the graph below.

Figure 2: The percentage of the municipal budget for the management of atmospheric sewage



As can be seen from the graph, in general, either (i) there is no division (code) at all for the management of atmospheric sewage, or (ii) the means are in a very small percentage.

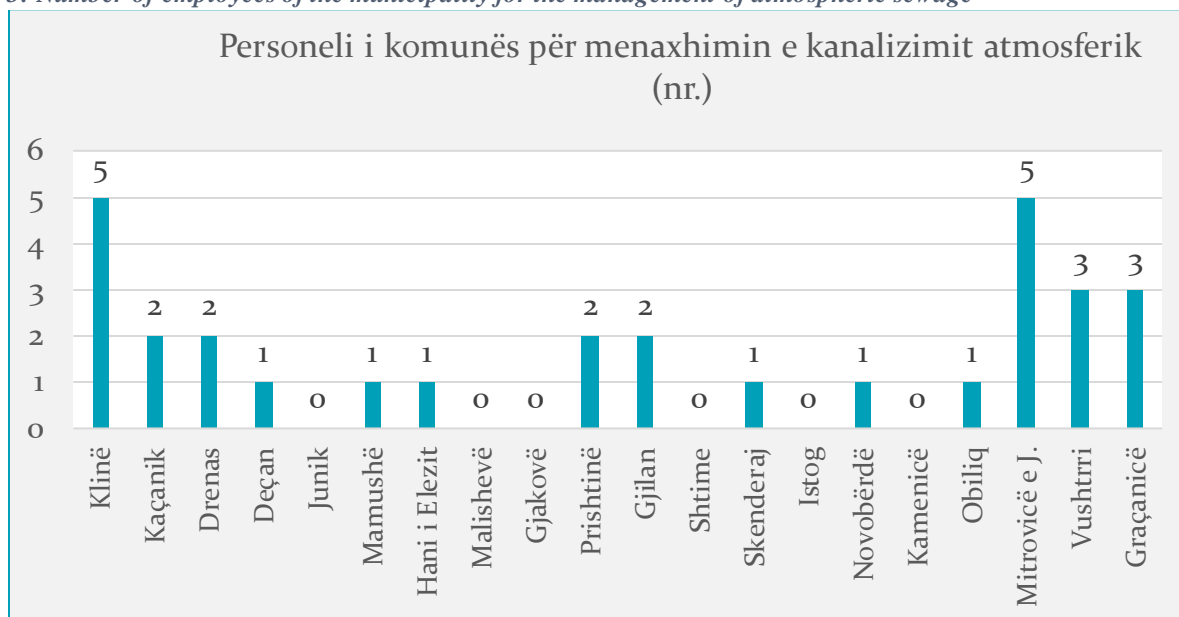
b) Human resources (staff)

According to the data provided by the municipalities, the number of staff that the municipality has for atmospheric sewerage works ranges from 0 (Juniku, Malisheva, Gjakova, Shtimja, Istogu and Kamenica) up to 5 (Klina dhe Mitrovica e Jugut). Other municipalities have from 1 to 3 employees who deal with sewerage management works, mainly contract and project managers.

It is worth highlighting the case of the municipality of Gjilan, which has reported that it has 2 hydrotechnical engineers who deal with sewage problems as well as the case of the municipalities of Junik and Istog that attributed the lack of personnel for the management of atmospheric sewage to the fact that this is the responsibility of RWC Hidrodrini.

In the figure 3 below, the data for the personnel of the municipalities in the management of atmospheric sewage are presented in graphic form.

Figure 3: Number of employees of the municipality for the management of atmospheric sewage



Regarding the technical assistance in raising the municipality's capacities for the management of atmospheric sewage, according to the municipalities, there was no training program in this plan.

3.5 MUNICIPALITIES KNOWLEDGE OF THEIR RESPONSIBILITY FOR ATMOSPHERIC SEWAGE MANAGEMENT

From the data provided by the municipalities, it can be seen that most municipalities are aware of their responsibility for the management of atmospheric sewage. There are only 3 (Mamusha, Gjakova and Shtimja) out of 20 municipalities that have declared that their responsible staff is not aware of the fact that the management of atmospheric sewage is the responsibility of the municipality.

Apart from them, there are also 2 municipalities (Istogu and Juniku) that state that this responsibility belongs to RWCs, in their case RWC Hidrodrini. On the other hand, the municipality of Vushtrri states that the staff of the municipality is to informed about the responsibility that the municipality has for the management of atmospheric sewage, while the municipality of Klina has not answered this question.

3.6 COOPERATION WITH RWC

More than half of the municipalities (11 out of 20) have cooperation with RWC for the management of atmospheric sewage, either based on the agreement or with special requests as needed.

Other municipalities (9 of them) claim that they cooperate with RWC only for sewage disposal (fecal sewage), or in cases of combined sewage (municipality of Pristina). Of these, 2 municipalities (Obiliqi and Vushtrria) have municipal enterprises, the others have private operators or carry out the maintenance of atmospheric sewerage through KRM (the case of the municipality of Gjakova).

A summary overview of the cooperation of the municipalities with the RWC regarding the maintenance of atmospheric sewerage is presented in the table below.

Management of atmospheric sewage in Kosovo

Table 4: Cooperation of municipalities with RWC in the maintenance of atmospheric sewage

Cooperation with RWC	Municipalities	Comment
Yes (11 Municipality)	Klina	
	Kaçaniku	
	Juniku	Agreement with RWC
	Mamusha	
	Shtimja	As needed
	Skenderaji	
	Istogu	
	Kamenica	As needed – after the intervention of RWC, the municipality pays
	Mitrovica e J.	
	Malisheva	
	Hani i Elezi	
No (9 Municipality)	Drenasi/Gillogovci	For fecal sewage only
	Mamusha	
	Gjakova	
	Prishtina	Only in cases of combined sewerage
	Gjilani	
	Novobërda	
	Obiliqi	For fecal sewage only
	Vushtrria	With atmospheric sewage maintenance contractors
	Graçanica	For fecal sewage only

3.7 MAIN PROBLEMS RELATED TO ATMOSPHERIC SEWAGE MANAGEMENT

Some of the main problems identified related to the management of atmospheric sewage are as follows:

1. Lack of legislation to clearly and in detail regulate the management of atmospheric sewage in terms of the legal responsibilities for its planning, development and maintenance, including the regulation of the problem of household connections in the sewage system (the prohibition of the discharge of atmospheric water into the fecal sewage system and vice versa, the prohibition of the discharge of fecal water into the atmospheric sewage system).
2. Lack of technical standards and regulations for the design, construction and maintenance of atmospheric sewerage that would help in the quality of the design, construction and maintenance of atmospheric sewage systems and would promote the implementation of methods and practices that are based on scientific and engineering developments in the field.
3. Some of the municipalities are not aware of their responsibility regarding the management of atmospheric sewage, and consider the management of atmospheric sewage as the responsibility of the RWCs.
4. The atmospheric sewage system and wastewater in many cases are not separated but are mixed. This especially results from the impermissible connections of atmospheric water to the sewage network and vice versa. Municipalities do not effectively implement the inspection and disallowance of these connections that are prohibited⁷ and that have negative effects on the environment⁸ and in wastewater treatment⁹.
5. Lack of detailed and complete data on the atmospheric sewage system in the territory of the municipalities (dimensions, lengths, materials, geographical coordinates), including catchments, open channels, and the pipeline system.
6. The municipalities do not have planning documents (strategy, master plan) for the development of atmospheric sewage which would be related to urban plans and would also incorporate the vision of urban development with appropriate environmental solutions for the drainage of public surfaces and the removal of atmospheric water, which enable greater infiltration of rain and the reuse of atmospheric water.
7. Lack of financial and professional capacities in the municipalities for the management of atmospheric sewage. Most of the municipalities do not have a budget allocated specifically for the

⁷ Administrative Instruction No. 02/2022 on the Methods, Conditions, Parameters and Limiting Values of the Discharge of Polluted Water into the Public Sewerage Network and into the Water Body - <https://gzk.rks.gov.net/ActDetail.aspx?ActID=58967>.

⁸ When wastewater is discharged into atmospheric water channels/pipes.

⁹ This happens when atmospheric water from residential or business facilities is discharged into the sewage system and thus burden the costs of wastewater treatment, respectively affecting the capacity of the wastewater treatment plant.

■ maintenance of atmospheric sewage, and on the other hand, neither professional capacities for an efficient management of atmospheric sewage, nor do they have the necessary human resources for the management and inspection implementation of the rules for atmospheric sewage.

4. RECOMMENDATIONS

Given the importance it has for public well-being and for the environment, the management of atmospheric sewage must be exercised by the municipalities in accordance with their legal responsibility.

Based on the identified problems, is recommended for the proper and effective management of atmospheric sewage in Kosovo.

- 1) Increasing the professional and financial capacities of municipalities for the management of atmospheric sewage in accordance with the legal responsibility they have, including planning, construction/expansion and regular annual maintenance of atmospheric sewage;
- 2) Creating an enabling environment that includes the development of the regulatory and institutional framework as well as the necessary budget allocations for municipalities to support the effective management of atmospheric sewage.

Atmospheric water management has multiple effects on: the quality of the waters/streams where they are discharged, erosion, urban flooding, and the natural hydrological cycle.

In order to effectively fulfill the legal responsibility that municipalities have, they must commit to the creation of the necessary professional and financial resources, and in this direction undertake the following actions:

- a) Municipalities must recognize and fully exercise their responsibility for the management of atmospheric sewage.
- b) For the management of the atmospheric sewage system, the municipalities should first of all do the inventory (completion of data) of the existing facilities of this system (open channels, pipelines, water collectors, wells, etc.). This should preferably be done in digital form.
- c) Municipalities would have to (i) contract the maintenance of atmospheric sewage with a private operator or RWC, or (ii) implement it through a municipal company (RWC or another company).
- d) For the costs of maintenance and operation of atmospheric sewerage, the municipalities must regularly plan the annual budget.
- e) To cover the functions of administrative, professional and inspection supervision related to the maintenance and expansion of the atmospheric sewage system, the municipalities should have qualified personnel from the legal, engineering and inspection fields.
- f) In the short term, the municipalities should draw up the development plans of the atmospheric sewerage which should be harmonized with the urban plans of the municipality and which

Management of atmospheric sewage in Kosovo

incorporate the good practices of 'solutions based on nature'¹⁰ in order to maximize social and environmental benefits (such as planning of public surfaces that enable rainfall infiltration¹¹, creation of retention basins¹² etc.).

On the other hand, for the creation of the right enabling environment that would facilitate the undertaking of the above actions by the municipalities, it is recommended that:

- a) **to draw up a national guideline for the management of atmospheric water that would include:**
 - (i) planning and technical aspects such as:
 - adopting best practices of atmospheric water planning and management that include 'nature-based solutions' such as 'Sponge cities'¹³,
 - design and construction standards of atmospheric sewerage, and
 - (ii) administrative and management aspects such as:
 - the modalities of atmospheric sewage management by municipalities through contracting with private operators or RWC;
 - municipal regulations for the maintenance and inspection of the atmospheric sewage system;
 - standard procedures for the maintenance of atmospheric sewage, etc.

These guidelines could be drawn up by **MMPHI** (the part dealing with planning and technical aspects), and **municipalities** through the Association of Kosovo Municipalities (the part that deals with administrative and planning aspects).

- b) **to include with the Municipal Regulations for Public Services** all issues related to the development, operation and maintenance of atmospheric sewerage;
- c) **during the process of granting the construction permit, municipal environmental permits to determine the discharge of atmospheric water** – in the atmospheric sewerage network where there is, or to make the technical solution where there is not (of course, the discharge of atmospheric water into the fecal sewerage is not allowed);

¹⁰ 'Nature Based Solutions' – interventions that use the natural functions of ecosystems for environmental protection and that help flood risk management.

¹¹ Such as green public spaces with porosity unlike asphalt and concrete that does not allow water infiltration.

¹² Basins that stop atmospheric water in order to prevent urban flooding and enable the cleaning of atmospheric water before discharging it into the river.

¹³ Model of urban planning initiated first in China and being applied in other countries (for example in Berlin, Los Angeles etc.). This concept is based on the creation of conditions for the natural stopping of rainwater, enabling its infiltration into the ground and, consequently, its purification.

Management of atmospheric sewage in Kosovo

■

- d) **To implement through the municipal inspection the identification and disallowance of locks** of fecal sewage into the atmospheric sewage network and vice versa, the discharge of atmospheric water into the fecal sewage system (of dirty water).

References

- 1) Assembly of Kosovo (2008). Law No. 03/L-040 for Local Self-Government - <https://gzk.rks-gov.net/ActDetail.aspx?ActID=2530>;
- 2) Assembly of Kosovo (2016). Law No. 05/L-042 for the Regulation of Water Services - <https://gzk.rks-gov.net/ActDetail.aspx?ActID=11350>;
- 3) MESPI (2022). Administrative Instruction on the Conditions, Methods, Parameters and Limiting Values for the Discharge of Polluted Water in the Public Sewerage Network and in the Water Body - [ActDetail.aspx.pdf \(rks-gov.net\)](https://rks-gov.net/ActDetail.aspx.pdf);
- 4) Government of Kosovo (2023). Review of the State Water Strategy 2023-2027 and Action Plan 2023-2025, Prishtina - https://mmpfi.rks-gov.net/MMPHIFolder/2023_0cdc-4825-964b-b42d6466fd9e.pdf.
- 5) SachsenWasser & AHT with Hidroing (2019). Concept for Atmospheric Water O&M for Peja.

ANNEX: ATMOSPHERIC SEWAGE MANAGEMENT QUESTIONNAIRE

Part 1: General information

- 1. Name of the Municipality: _____
- 2. Urban population of the municipality (approximate): _____
- 3. Urban area of the municipality (in km²): _____
- 4. Coverage of the urban area with atmospheric sewage (%): _____

Part 2: Current Management of Atmospheric Sewage

5. Describe the current state of your municipality's atmospheric sewerage:

a. What is the average age of atmospheric sewerage?

[10 age, 10-20 age, 20-30 age, >30 age]

b. What is the condition of the atmospheric sewerage

[good, functional, poor, very bad]

Part 3: Maintenance of Atmospheric Sewage

6. How often is the maintenance of the atmospheric sewage system performed?

[less than once a year, once a year, twice a year, as needed]

7. Does the municipality have a contract for the maintenance of the atmospheric sewage system? If yes, is the contract with the Regional Water Company (RWC) or another contractor? If not, who maintains the atmospheric sewage system?

8. What are the main challenges the municipality faces in maintaining the atmospheric sewage system? (e.g., financial constraints, outdated infrastructure, lack of staff)

- a. _____
- b. _____

Part 4: Financial and Human Resources

9. What is the municipality's annual budget for the management of the atmospheric sewage system? _____ [EUR]

10. What percentage of your municipality's budget does this constitute? _____ [%]

11. How many municipal personnel (employees) are engaged/assigned to the management and maintenance of the atmospheric sewage system?

12. What are the main challenges the municipality faces in funding the management of the atmospheric sewage system?

Management of atmospheric sewage in Kosovo

- a. _____
- b. _____
- c. _____

Part 5: Knowledge and Capacities of the Municipality

13. Is the responsible municipal staff informed about the municipality's responsibilities related to the management and maintenance of the atmospheric sewage system?

14. Has there been any training or capacity-building program related to the management of the atmospheric sewage system? (If yes, please provide details).

Part 6: Collaboration and Support

15. Does your municipality currently collaborate with RWCs and other relevant organizations in managing the atmospheric sewage system? (If yes, please provide details).

16. What form of support would be most useful from the government or other entities to improve your municipality's management of the atmospheric sewage system? (e.g., financial assistance, technical training, infrastructure investment)

Part 7: Challenges and Needs

17. What are the main obstacles your municipality faces in the effective management of the atmospheric sewage system?

18. Which specific areas of drainage network management would you like to improve or expand?

Part 8: Policies and Regulations

19. Are there any existing policies or regulations that affect your work in effectively managing the atmospheric sewage system? (If yes, please describe).

20. What changes or interventions would you recommend to improve drainage network management at the municipal level?

Management of atmospheric sewage in Kosovo

■

Part 9: Additional Comments

21. Please provide any additional comments or suggestions you consider important for the development of effective policies for managing the atmospheric sewage system.



**Funded by
the European Union**

This publication was developed as part of the project “Promotion of Universal Access to Clean Water”,
financed by the European Union, Office in Kosovo and implemented by Rilindja Gjelbër.

The views, opinions and recommendations expressed in this publication are those of the author and do not
necessarily represent the views of the European Union, Office in Kosovo

Rilindja Gjelbër

Address: House of Culture, 3rd Floor

30000, Peja, Kosovo

Email: info@rilindja-gjelber.org

Phone: +383 49 124 548

www.puacw.ldip.com



Promoting Universal
Access to **Clean Water**