

CURRENT ISSUES AND SOLUTIONS RELATED TO PROSECUTORIAL OVERSIGHT IN ENSURING COMPLIANCE WITH ATMOSPHERIC AIR PROTECTION LEGISLATION

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Abstract

This article analyzes the importance and current problems of prosecutorial control in ensuring the implementation of legislation in the field of atmospheric air protection in Uzbekistan. Industrial waste, vehicles, heating systems, construction work and natural dust are identified as the main sources of atmospheric pollution. Statistical data for 2023–2025 indicate a high level of air pollution. The main problems in prosecutorial control are regulatory and legal gaps, slow information exchange between agencies, lack of technical and laboratory capabilities, low staff qualifications and ineffectiveness of punitive measures. The author makes practical proposals for improving legislation, introducing digital environmental monitoring, developing the institution of environmental prosecutors and tightening liability measures. The article justifies the importance of ensuring public health and environmental safety by strengthening prosecutorial control.

Keywords: Atmospheric air, pollution control, environmental legislation, pollution sources, environmental monitoring, industrial waste, liability measures, digital control system.

Introduction

The global socio-economic situation, coupled with population growth and the increasing demand for resources, has led to the expansion of industrial production and the irrational use of natural resources. As a result, the negative impact of human activities on nature has intensified, causing serious global environmental consequences and the deterioration of ecological conditions.

In many countries, particularly in densely populated capital cities and major industrial regions, high levels of air pollution have become a pressing concern. This issue is no longer viewed solely as an environmental problem but also as a factor negatively affecting social welfare and economic development.

Therefore, ensuring the full and unconditional implementation of laws and regulatory legal acts adopted in this field is one of the key responsibilities of competent state authorities, including the prosecution service. Prosecutorial bodies play an important role in ensuring the rule of law, monitoring the activities of pollution sources within the legal framework, preventing the concealment of information related to air quality, and securing compensation for environmental damage.

According to data from real-time monitoring platforms such as IQAir and local sources, air quality in Tashkent and other cities remains a matter of concern. Reports for 2025 indicate that the concentration and annual average level of PM2.5 particles exceeded the standards recommended by the World Health Organization (WHO) by approximately six times¹.

In particular, on 6 October of the current year (2025) at 10:00 a.m., the concentration of fine PM2.5 particulate matter in the air of Tashkent reached 158 µg/m³, making the city the most polluted in the world at that time. This level falls within the “unhealthy” category. According to the IQAir portal, the concentration of PM10 particles in the capital’s air reached 269.7 µg/m³, which is nearly six times higher than the WHO daily guideline value of 45 µg/m³ and poses a significant threat to human health².

Industrial and Manufacturing Emissions

- Industrial enterprises located in Tashkent, the Fergana Valley, Navoi, Angren, Almalyk, and Chirchik are among the major sources of air pollution in Uzbekistan.
- Metallurgical, cement, chemical, and energy industries emit millions of tons of sulfur dioxide (SO₂), nitrogen oxides (NO_x), and particulate matter annually.
- According to 2024 data, industrial emissions accounted for approximately 30–35 percent of total atmospheric emissions.

¹ IQAir. Air Quality Monitoring and Air Pollution Information Platform. Available at: <https://www.iqair.com/ru/>

² Kun.uz. National News and Information Portal of Uzbekistan. Available at: <https://kun.uz/>

- Filtration technologies remain outdated, with many treatment facilities installed during the 1980s and 1990s.
- Existing environmental standards are relatively weak and remain significantly below the standards recommended by the WHO and the European Union.
- Monitoring systems are insufficient, and there is no comprehensive independent real-time monitoring mechanism for industrial emissions.
- The close proximity of industrial zones to residential areas increases direct exposure of the population to air pollution. For example, in Almalyk and Chirchik, concentrations of harmful pollutants have been reported at levels five to seven times higher than WHO recommendations³.

2. Vehicle Emissions

The number of vehicles in Tashkent exceeded 1.2 million in 2025, making road transport one of the primary contributors to urban air pollution.

According to IQAir data, approximately 16–20% of PM_{2.5} particulate matter originates from road transport emissions. A significant proportion of vehicles in Uzbekistan are outdated. Many gasoline- and diesel-powered vehicles do not comply with modern environmental standards and contribute substantially to air pollution. Fuel quality remains relatively poor. The sulfur content in many fuel grades exceeds 150 ppm, whereas the European standard requires sulfur levels below 10 ppm. Public transportation infrastructure remains underdeveloped. Consequently, a large share of the population relies on private vehicles, resulting in increased traffic congestion and higher emission levels. The share of electric vehicles remains very low. As of 2025, only about 0.5% of all registered vehicles in Uzbekistan are electric or hybrid vehicles. Relatively low fuel prices reduce the economic incentives for transitioning to environmentally friendly modes of transport⁴.

Heating and Energy Sector Challenges During the Winter Season

Air quality in Tashkent and other major cities deteriorates significantly during the winter months. The primary reason is the combustion of coal, fuel oil, and other low-quality fuels for heating purposes. Approximately 24% of PM_{2.5} emissions originate from heating sources. Centralized heating systems are outdated and

³ World Health Organization (WHO). Official Website. Available at: <https://www.who.int/>

⁴ IQAir. Air Quality Monitoring and Air Pollution Information Platform. Available at: <https://www.iqair.com/ru/>

characterized by substantial heat losses. As a result, many households resort to burning coal or other materials to supplement heating needs. Environmentally friendly alternatives, such as natural gas and electric heating systems, remain costly for many households. The low efficiency of energy infrastructure leads to excessive fuel consumption and increased emissions.

4. Natural Dust and Environmental Degradation

- Approximately 70% of Uzbekistan's territory consists of desert and semi-desert landscapes. During windy conditions, large quantities of dust and sand particles are lifted into the atmosphere.
- The desiccation of the Aral Sea has generated widespread salt-dust storms throughout the region.
- Distinguishing between natural dust and anthropogenic (human-induced) particulate matter remains a significant challenge.
- Soil salinization in irrigated lands and the reduction of vegetation cover have increased the number of dust-generating sources.
- The reduction of green areas and increasing urbanization have weakened the natural air-filtering capacity of ecosystems.
- In September 2025, several days were recorded in Tashkent and the Republic of Karakalpakstan during which PM10 concentrations exceeded the World Health Organization (WHO) guideline values by more than ten times⁵.

5. Urban Planning and Infrastructure Policy Issues

Construction activity in Tashkent and regional centers has increased substantially over the last decade. Many new residential developments have been built at the expense of green areas. The large-scale removal of trees, particularly in central urban districts, has reduced the natural purification capacity of the atmosphere. Construction dust, asphalt works, cement production, and brick manufacturing contribute significantly to PM10 emissions. Insufficient urban ventilation caused by dense urban development and high-rise buildings restricts natural air circulation. Environmental assessment mechanisms within urban planning processes remain relatively weak.

⁵ World Health Organization (WHO). Official Website. Available at: <https://www.who.int/>

6. Legal and Institutional Challenges

Although the Law of the Republic of Uzbekistan “On the Protection of Atmospheric Air” was adopted in a revised form in 2024, its practical implementation remains inadequate. Air-quality monitoring systems are insufficient. The limited number of monitoring stations operated by IQAir and the environmental authorities do not provide comprehensive nationwide coverage. Environmental penalties remain relatively low. For many enterprises, environmental payments and fines do not create sufficient incentives to reduce emissions. Transparency remains limited, and reliable real-time information on air quality is not always publicly available. Environmental education and public participation in environmental protection activities remain underdeveloped.

7. Public Health and Social Implications

According to the World Health Organization, air pollution contributes to approximately 6,000–8,000 premature deaths annually in Uzbekistan. Respiratory diseases, asthma, allergies, and cardiovascular disorders are increasingly prevalent, particularly among children and elderly populations. Increased healthcare expenditures and reduced labor productivity generate significant economic losses. According to estimates by the World Bank, these losses may amount to up to 0.7% of the country’s Gross Domestic Product (GDP)⁶.

According to the Ministry of Ecology, Environmental Protection and Climate Change of the Republic of Uzbekistan, the composition of PM_{2.5} pollution in Tashkent is attributable to the following sources: natural dust and construction activities (36%), the heating sector (24%), transport emissions (16%), and industrial activities (13%)⁷.

Statistical Data and Practical Examples

Despite the measures taken in recent years to strengthen the rule of law and ensure compliance with environmental legislation, violations related to atmospheric air pollution continue to exhibit a systemic nature. An analysis of environmental

⁶ BBC Uzbek Service. Environmental and Social Issues Coverage. Available at: <https://www.bbc.com/uzbek/topics/c8y949499q5t/cyr>

⁷ Ministry of Ecology, Environmental Protection and Climate Change of the Republic of Uzbekistan. Official Website. Available at: <https://gov.uz/oz/eco>

oversight activities conducted by the Prosecutor General's Office of the Republic of Uzbekistan during 2023–2024 revealed the following findings.

During 2023, a total of 870 environmental violations related to atmospheric air pollution were identified. Of these, 410 cases concerned industrial enterprises exceeding permissible emission limits; 290 cases involved motor vehicles emitting exhaust gases above established standards; and 170 cases were related to violations of regulations governing the disposal and burning of household and commercial waste.

As a result of these violations, 125 criminal cases were initiated, administrative penalties were imposed in 320 cases, and the activities of 70 enterprises that had caused significant environmental damage were temporarily suspended.

During 2024, prosecutorial authorities implemented more than 1,200 prosecutorial response measures, including submissions, warnings, statements of claim, and other legal instruments. Furthermore, compensation exceeding UZS 200 billion was secured for environmental damage caused by violations of environmental legislation.

The analysis of identified violations demonstrated that approximately 40% of cases involved industrial enterprises where air-emission purification equipment was either non-functional or not installed; 25% involved the falsification of environmental reporting data; 20% were associated with inadequate information exchange between relevant supervisory authorities; and in 15% of cases, responsible individuals avoided liability due to the absence of appropriate administrative measures.

These indicators demonstrate that compliance with environmental legislation remains insufficient in practice and that preventive mechanisms require substantial improvement.

The presented statistics indicate that violations in the field of atmospheric air protection remain widespread. Consequently, several pressing issues affecting the effectiveness of prosecutorial supervision deserve particular attention.

1. Regulatory and Legal Gaps

Certain areas of environmental legislation still lack sufficiently clear legal norms and technical requirements. For example, the legal framework does not comprehensively regulate methodologies for measuring concentrations of

hazardous atmospheric pollutants, nor does it clearly define the legal status of digital monitoring data as admissible evidence in administrative or judicial proceedings. This may result in inconsistent legal interpretations and difficulties in imposing liability for environmental violations.

2. Interagency Cooperation and Information Exchange

A comprehensive mechanism for integrating environmental databases among the Prosecutor's Office, the Ministry of Ecology, Environmental Protection and Climate Change, the State Environmental Inspection, the Hydrometeorological Service (Uzhydromet), and sanitary-epidemiological authorities has not yet been fully established. Since different agencies maintain separate information systems, obtaining a comprehensive picture of atmospheric pollution and responding promptly to environmental threats remains challenging.

3. Insufficient Technical Capacity and Laboratory Infrastructure

The network of modern laboratories capable of monitoring air quality in real time remains limited, particularly in regional areas. Existing monitoring stations and technical equipment are insufficient to ensure comprehensive coverage. In addition, some regional prosecutorial units lack access to modern environmental information systems and digital monitoring platforms.

4. Challenges Related to Professional Expertise

The number of specialists within prosecutorial bodies possessing expertise in environmental law and environmental protection remains limited. For many prosecutors, environmental supervision is a relatively new area of legal practice requiring specialized knowledge and technical competencies. This may create difficulties when assessing complex environmental offenses and environmental crime cases.

5. Ineffectiveness of Existing Sanctions

Environmental fines and sanctions established by current legislation are, in some instances, too low to serve as an effective deterrent. Where the payment of fines does not impose a significant financial burden on enterprises, preventive and corrective objectives are unlikely to be achieved. For some large industrial

enterprises, existing environmental penalties may be perceived merely as routine operational expenses rather than as meaningful enforcement measures.

6. Common Types of Violations and Enforcement Measures

Prosecutorial inspections revealed several recurring categories of environmental violations, including:

- Emission of harmful substances into the atmosphere without the required permits;
- Falsification, concealment, or manipulation of environmental monitoring data;
- Commissioning of environmentally hazardous facilities without obtaining mandatory environmental impact assessment approvals;
- Air pollution caused by the unauthorized burning of household and industrial waste.

In response to these violations, prosecutorial authorities applied a range of legal measures, including the imposition of administrative penalties on responsible individuals and the initiation of criminal proceedings in cases involving serious environmental harm.

Current Challenges in the Supervisory Process

The analysis of identified violations indicates the existence of several systemic problems in the field of atmospheric air protection.

First, certain ambiguities remain within the regulatory framework. In particular, methodologies for measuring pollution levels and the legal status of digital evidence obtained through environmental monitoring systems have not been comprehensively regulated.

Second, interagency integration in the collection, processing, and analysis of environmental monitoring data remains insufficient. Effective and timely information exchange among prosecutorial authorities, environmental agencies, and local government bodies is still limited, reducing the overall efficiency of environmental supervision.

Third, technical and laboratory capacities for air-quality monitoring remain inadequate in many regions. A comprehensive real-time monitoring system capable of continuously tracking atmospheric pollution has not yet been fully established.

Fourth, the lack of specialized knowledge and practical expertise in environmental law among certain prosecutorial personnel creates difficulties in assessing complex environmental offenses and determining the appropriate legal qualification of violations.

Fifth, the preventive effect of existing sanctions remains limited. The current level of environmental fines is often insufficient to influence the behavior of large industrial enterprises. Consequently, some businesses may perceive environmental penalties as manageable operational costs and continue their activities without implementing adequate pollution-control measures.

In prosecutorial practice, the most common violations related to atmospheric air pollution are generally classified as follows:

- Unauthorized emission of harmful substances into the atmosphere without the required permits or licenses;
- Exceeding legally established emission limits and environmental standards;
- Falsification, concealment, or manipulation of environmental monitoring and reporting data;
- Violation of environmental safety requirements during industrial and economic activities;
- Operation of environmentally hazardous facilities without obtaining the necessary environmental impact assessment approvals and permits;
- Unauthorized burning of household, industrial, or agricultural waste resulting in atmospheric pollution;
- Failure to install, maintain, or properly operate air-pollution control and filtration equipment;
- Non-compliance with mandatory environmental monitoring, reporting, and disclosure requirements;
- Obstruction of inspections conducted by environmental control authorities and the concealment of information regarding environmental violations.

These violations constitute the most frequently encountered forms of non-compliance identified during prosecutorial supervision and require systematic preventive, administrative, and criminal-law responses to ensure effective protection of atmospheric air and environmental safety.

Unauthorized Emissions

One of the most common environmental violations involves enterprises continuing operations without obtaining the required permits for atmospheric emissions or operating after the expiration of such permits. Under Article 86 of the Code of Administrative Responsibility of the Republic of Uzbekistan (“Violation of Atmospheric Air Protection Rules”), such conduct constitutes an administrative offense. In cases involving large-scale emissions or the release of particularly hazardous pollutants causing substantial environmental damage, criminal proceedings may also be initiated.

Violation of Environmental Monitoring Requirements and Concealment of Information

Certain enterprises deliberately underreport the volume of emissions, falsify environmental audit data, or conceal relevant information from competent state authorities. Such conduct may result in liability under Article 88 of the Code of Administrative Responsibility or Article 194 of the Criminal Code of the Republic of Uzbekistan (“Violation of Environmental Protection Legislation”). The elements of this offense may include the concealment of environmental damage, the submission of knowingly false reports, or coordinated efforts to misrepresent environmental information.

Failure to Comply with Technical Regulations and Environmental Impact Assessment Requirements

Cases are frequently identified where construction or industrial projects are implemented without obtaining the required environmental impact assessment (EIA) approval or without complying with environmental requirements established by technical regulations. For example, newly established industrial facilities may commence operations without receiving a positive conclusion from the State Environmental Expert Examination regarding their environmental impact. Such actions constitute violations of the Law “On Environmental Expertise” (25 May 2000) and may result in administrative or criminal liability, depending on the severity of the violation and the consequences caused.

Illegal Waste Burning and Unauthorized Disposal Sites

Analysis of the Current Situation

The results of prosecutorial supervision over the implementation of atmospheric air protection legislation indicate the existence of several persistent challenges in this field. The analysis of violations identified at the regional level demonstrates that their primary causes can be attributed to the following factors.

• Problems Related to Filtration and Air-Purification Equipment (40%)

A significant proportion of industrial enterprises operate with malfunctioning or non-operational filtration systems and air-pollution control facilities. Consequently, untreated or inadequately treated emissions are released directly into the atmosphere, substantially increasing environmental risks.

• Falsification of Environmental Reporting (25%)

Certain enterprises intentionally understate emission volumes, conceal monitoring results, or manipulate environmental reporting data. Such practices distort the actual scale of environmental damage and impede the effectiveness of regulatory oversight.

• Lack of Interagency Information Exchange (20%)

Mechanisms for sharing environmental monitoring data and other ecological information remain insufficiently developed. In some cases, information identified by local environmental authorities is not promptly communicated to prosecutorial bodies or higher-level institutions, resulting in delays in detecting and addressing violations.

• Failure to Apply Appropriate Sanctions (15%)

Available data indicate that approximately 15 percent of identified violations did not result in administrative, disciplinary, or other legal measures against responsible officials. Consequently, the absence of effective accountability mechanisms increases the likelihood of repeated violations.

The above findings demonstrate deficiencies in the implementation of environmental legislation and weaknesses in preventive measures. They further indicate the need for additional legal, institutional, and organizational measures to ensure full compliance with atmospheric air protection requirements.

Therefore, environmental problems associated with atmospheric air protection remain evident in Uzbekistan, and their comprehensive analysis allows for the identification of key causes, consequences, and potential solutions.

Main Sources of Atmospheric Air Pollution

The principal sources of atmospheric pollution include emissions from industrial enterprises, exhaust gases from motor vehicles, large thermal power plants, and the burning of household and industrial waste. For example, major industries such as metallurgy, petrochemicals, and cement production release sulfur dioxide, nitrogen oxides, and various heavy-metal compounds into the atmosphere. In urban areas, vehicle emissions constitute one of the primary sources of air pollution.

In addition, illegal landfills and unauthorized waste-burning practices significantly contribute to environmental degradation and deteriorating air quality. Such actions are considered unlawful under national legislation and may result in administrative or criminal liability.

Features of Prosecutorial Supervision

One of the distinctive characteristics of prosecutorial supervision is its institutional independence from the traditional branches of state power. Prosecutorial authorities do not belong to the legislative, executive, or judicial branches of government. Instead, they exercise supervisory powers on behalf of the State and in the interests of society as a whole.

Accordingly, prosecutorial supervision is carried out independently of any state body or public official and is guided exclusively by the requirements of law. Such independence serves as a fundamental guarantee of legality, objectivity, and effectiveness in overseeing compliance with environmental legislation and protecting public interests in the field of atmospheric air protection.

In order to ensure such independence, prosecutorial supervision is also subject to certain statutory limitations. Prosecutorial authorities do not directly interfere in the activities of the supreme legislative body, the highest executive authorities, or the judiciary. Within the powers established by procedural legislation, prosecutors may lodge protests against certain judicial decisions and participate

in court proceedings as a party or claimant; however, they do not exercise direct supervision over the activities of the independent judiciary.

It should be emphasized that prosecutors are not vested with the authority to independently annul or amend decisions that they consider unlawful or unfounded. Rather, within the scope of their powers, prosecutors apply legal response measures such as protests, submissions, and warnings in relation to identified violations and seek the annulment of unlawful decisions and the imposition of liability through competent authorities and courts.

Furthermore, the revised Law of the Republic of Uzbekistan “On the Prosecutor’s Office,” adopted in 2019, established supervision over the observance of human rights and freedoms as a separate area of prosecutorial activity (Article 24). Under this provision, compliance by public authorities, organizations, and officials with citizens’ rights and freedoms constitutes an independent subject of prosecutorial supervision.

This legislative development has particular significance in ensuring the implementation of the constitutional right of every person to a favorable environment and to receive reliable information regarding its condition, as guaranteed by Article 49 of the Constitution of the Republic of Uzbekistan. Indeed, violations of environmental legislation frequently result in infringements of these constitutional rights⁸.

Article 25 of the Law “On the Prosecutor’s Office” further establishes additional powers of prosecutors in the field of human rights protection. In particular, prosecutors are authorized to receive and examine complaints concerning violations of citizens’ rights and freedoms; provide legal explanations regarding available remedies; take measures aimed at restoring violated rights, holding offenders accountable, and securing compensation for damages; initiate criminal or administrative proceedings where necessary or transfer materials to competent authorities; and, where a person is unable to defend his or her interests in court due to health conditions, age, or other valid reasons, bring and support claims before the court without requiring payment from that person⁹.

These powers provide prosecutors with broad opportunities to protect environmental rights, including the right to a healthy environment, the right to

⁸ Law of the Republic of Uzbekistan “On the Prosecutor’s Office”.

⁹ Law of the Republic of Uzbekistan “On the Prosecutor’s Office”.

access environmental information, and the right to compensation for environmental harm.

The subject matter of prosecutorial supervision is not limited solely to ensuring compliance with laws. The requirements established by the Law of the Republic of Uzbekistan “On the Protection of Atmospheric Air” (27 December 1996), as well as other regulatory legal acts governing this field, are also subject to prosecutorial oversight. Within the scope of its authority, the Prosecutor’s Office supervises the compliance of governmental resolutions, ministerial regulations, departmental instructions, and other subordinate legal acts with laws and presidential decrees.

According to the Law of the Republic of Uzbekistan “On the Protection of Atmospheric Air” (27 December 1996), exceeding established emission limits for harmful substances released into the atmosphere, as well as violating procedures governing state environmental monitoring and control, constitutes a violation of environmental legislation. Pursuant to Articles 24–27 of the Law, legal entities and individuals are required to comply with established emission standards, obtain special permits, undergo mandatory environmental impact assessments during project design and construction phases, and gradually reduce the volume of emissions released into the atmosphere¹⁰.

In order to address the challenges outlined above and strengthen the rule of law in the field of atmospheric air protection, the following strategic measures are proposed:

Improvement of the Regulatory Framework

Environmental legislation should be further developed in accordance with contemporary requirements and international standards. In particular, it is necessary to establish the legal status and evidentiary value of environmental monitoring data obtained through digital technologies and to review permissible emission standards in line with international best practices. Amendments to the Law “On the Protection of Atmospheric Air” and related legislative acts should also be considered in order to ensure the inevitability of liability and the proportionality of sanctions for environmental offenses¹¹.

¹⁰ Law of the Republic of Uzbekistan “On the Protection of Atmospheric Air”.

¹¹ Law of the Republic of Uzbekistan “On the Protection of Atmospheric Air”.

Introduction of a Digital Environmental Monitoring System

To ensure continuous observation and prompt analysis of atmospheric pollution, it is necessary to establish an automated monitoring network capable of transmitting environmental data in real time. Through the use of remote sensors, monitoring devices, and artificial intelligence-based analytical systems, air-quality indicators throughout the country could be monitored continuously. Such a system would enable prosecutorial and environmental authorities to receive immediate alerts whenever pollution levels exceed established limits or when abnormal environmental conditions are detected.

Establishment of Specialized Environmental Prosecutors

The development of a specialized institution of environmental prosecutors within the prosecutorial system is recommended. Such prosecutors should be responsible for handling environmental offenses and supervising compliance with environmental legislation. In addition to legal expertise, they should possess specialized environmental and technical knowledge and participate in continuous professional training programs to enhance their qualifications in the field of environmental protection.

Strengthening Interagency Integration

It is necessary to establish a unified electronic environmental information database that ensures continuous data exchange among the Prosecutor's Office, the National Committee for Ecology and Climate Change, the State Environmental Inspection, Uzhydromet, and other relevant institutions. Through this system, information concerning each identified environmental violation, its registration, enforcement measures taken, and liability imposed would be simultaneously accessible to all competent authorities. Such integration would significantly improve coordination, transparency, and the efficiency of environmental law enforcement.

Enhancing Liability Mechanisms

More effective sanctions should be introduced for serious violations related to atmospheric air pollution. In particular, financial penalties imposed on large industrial enterprises should be proportionate to the actual environmental damage

caused by their unlawful activities. Legislative provisions may also establish stricter consequences for repeated violations, including the disqualification of responsible officials from public service or managerial positions. Furthermore, the introduction of mandatory environmental insurance schemes and environmental compensation funds would strengthen the principle of unavoidable liability and ensure effective compensation for environmental damage.

Based on the foregoing, it is necessary to improve the mechanisms for supervising compliance with environmental legislation by officials of specialized state bodies responsible for ecology, environmental protection, and the rational use of natural resources. It is equally important to establish clear procedures for the timely detection of environmental violations, their elimination, and the recovery of damages caused by unlawful activities.

Additional priorities should include the improvement of the regulatory framework, the strengthening of liability measures, the implementation of digital environmental monitoring systems, and the enhancement of interagency cooperation. Legislative amendments should also be introduced to regulate the use of modern technologies in monitoring air-pollution control equipment and emissions exceeding established environmental standards. In addition, the development of new legislative initiatives and the expansion of scientific research in this field should be encouraged.

The following practical measures are proposed to improve prosecutorial supervision in the field of atmospheric air protection:

- Establishment of specialized prosecutorial units responsible for investigating and supervising atmospheric and other environmental offenses;
- Recruitment of specialists in ecology, chemistry, public health, and industrial technologies to support the activities of such units;

Clarification and Expansion of Prosecutorial Powers

- Granting prosecutors the authority to obtain environmental monitoring data immediately through official requests;
- Authorizing inspections of enterprises and territorial offices of public authorities, including situations where no formal emergency has been declared;
- Empowering prosecutors to initiate environmental expert examinations and require the submission of independent laboratory reports and analyses;

- Legislatively establishing a mandatory information-exchange protocol between prosecutorial authorities and environmental agencies to facilitate the investigation of criminal and administrative environmental cases.

Accelerated Judicial and Procedural Mechanisms

- Introducing expedited procedural procedures for environmental emergencies, including the possibility of initiating investigations within a shortened timeframe (for example, within 48 hours);
- Establishing emergency orders designed to preserve evidence, including the temporary suspension of filtration systems, the preservation of environmental monitoring records, and the collection of digital data logs.

Legal Guarantees for Public and Civil Society Participation

- Establishing specialized “Environmental Complaints Reception Units” within prosecutorial bodies to process environmental complaints submitted by citizens;
- Clearly defining procedural requirements for initiating inspections based on public complaints, such as requiring an initial assessment within fourteen days following receipt of a written complaint.

Strengthening Accountability and Sanctions

- Ensuring that penalties for environmental violations are clear, proportionate, progressive, and applicable not only to legal entities but also to responsible officials;
- Strengthening criminal liability for officials who deliberately conceal, falsify, or manipulate environmental information and monitoring data.

Conclusion

Ensuring compliance with legislation governing atmospheric air protection remains one of the permanent priorities of prosecutorial authorities. Effective supervision in this field serves as an essential mechanism for safeguarding citizens’ constitutional right to live in a healthy and clean environment.

The findings presented in this study demonstrate the necessity of further strengthening air-quality control mechanisms throughout the Republic of Uzbekistan, ensuring the timely detection of environmental violations, and

implementing effective legal responses. At the same time, the active participation of civil society and the promotion of green economy principles should remain integral components of environmental policy.

The Prosecutor's Office, acting in close cooperation with competent state authorities, should continue to ensure the supremacy of law and contribute to the protection of public health, environmental sustainability, and the well-being of present and future generations.

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