

ENFORCEMENT AND COMPLIANCE OF ENVIRONMENTAL LEGISLATION IN WATER SECTOR IN THE REPUBLIC OF MACEDONIA

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Introduction

According to the Law on Organization and Work of the Public Administration ("Official Gazette of RM" No. 58/00, 44/02, 82/08, 167/10 and 51/11), the Ministry of Environment and Physical Planning (MoEPP) holds the legal obligation to create and implement environmental policy in the Republic of Macedonia, to lead the activities in the area of the environment and to provide for rational use of space and natural resources.

The Ministry of Environment and Physical Planning (MoEPP) performs environmental tasks related to the legal harmonization process; the preparation of national strategies and action plans; inspection and enforcement including intervention if needed against the bigger polluters; and nationwide monitoring, information systems and cadastres.

MoEPP sets the overall framework for policies and legislation, sometimes however giving the local self-government units (LSGUs) a certain amount of leeway with regard to implementation while ensuring due consideration of specific local conditions. Moreover, international coordination is managed at the national level both in relation to EU and international conventions and in relation to assistance provided through the international or bilateral donor community.

According to the Law, the MoEPP also performs activities concerning: monitoring of the state of the environment; water, soil, flora, fauna, air and ozone layer protection against pollution; protection against noise and radiation; protection of biological diversity, geological diversity, national parks and protected areas; restoration of polluted segments of the environment; proposed measures for solid waste treatment; spatial planning; spatial information system; supervision within the scope of its competences; and performs other activities stipulated by law. The internal organisation of the MoEPP is regulated by the Rulebook on Systematisation, covering its constituent bodies, as well. The total number of employees in the Ministry, including staff in the constituent bodies, is 196 full-time employees, up from 91 in 2004. Occasionally, the MoEPP engages external personnel as well, for the purpose of performing individual activities (approximately 75 contract-based staff, according to an NGO that has studied the matter). Nevertheless, for the purpose of efficient implementation of environmental legislation, appropriate solutions will need to be identified to strengthen administrative capacities in MoEPP (especially in areas defined by the approximated environmental laws, and ratified international agreements), but also in other ministries that manage sectors closely related to environment and nature protection and improvement. This is especially connected with employment of new specialized staff and training of employees in legislative drafting, projects, and development of strategies and policies. From 01.01.2011 onwards, MoEPP is responsible for overall water management, including river basin management and the permit issuing system.

The Ministry's organisation has been subject to frequent adjustments, during which its areas of responsibility have changed significantly. At present, MoEPP is organized into nine departments or sectors further broken down into units as well as three bodies within MoEPP as constituent parts, i.e. the State Environmental Inspectorate, the Administration for Environment, and the Office for the Spatial Information System. These bodies function as separate entities under MoEPP supervision, and operate in accordance with legal regulations and other legal acts governing environmental issues. In the performance of its duties, the Minister is further assisted by a Deputy Minister, a State Secretary and thematic State advisors.

The MoEPP includes three subordinate bodies: The State Environmental Inspectorate (SEI), The Administration for Environment (AE), and the Office for Spatial Information System (SIS).

Among the Pre-Accession countries, only the Republic of Macedonia and Bosnia and Herzegovina have not yet established an independent environmental protection agency (EPA). EPAs in other EU countries have typically the following statutory mandates:

- Implementation of environmental laws;
- Providing environmental information to the public and to other institutions as well;
- Providing scientific, technical and expert support to the Government.

At the moment, the above functions are performed by the AE, the SEI, the SIS, and some departments of MoEPP. Merging these bodies and grouping the functions in one single entity could improve performance and efficiency and at the same time demonstrate greater political commitment to implementation of environmental legislation and policy.

The Administration of Environment performs professional activities in nature protection, in waste, water, air, soil, noise protection and in other environmental areas. It also regulates the environmental impact assessment (EIA) procedure for projects and the procedure concerning integrated environmental permitting and compliance permitting; it manages the Cadastre of Environment and the Register of Pollutants and Polluters, including their characteristics. The Administration of Environment is responsible for the environmental monitoring performance, as well as for permitting procedures and other activities stipulated by law. Within the Administration of Environment an Environmental Laboratory operates that carries out measurements and expert analyses of pollution.

The Office for Spatial Information System is responsible for carrying out professional activities related to the spatial information system, through GIS processing, analysis and presentation of digital spatial data.

The State Environment Inspectorate supervises the implementation of laws and other acts in the area of the environment. The Inspectorate conducts direct supervision of legal entities and natural persons with regard to the enforcement of and compliance with the conditions stipulated in individual permits.

The above-described setup indicates the existing fragmentation of competencies among bodies in the domain of environment management, which is partly overcome by the adoption of new environmental laws, providing for higher integration of environmental management. The MoEPP has obtained full competence in the domain of water management, while the Ministry of Agriculture, Forestry and Water Economy remains the responsible body in the domains of irrigation, forestry, hunting and fishing. Waste management, nature protection and air quality management have been transferred to the full competence of the MoEPP. Environmental monitoring also has been integrated under the full competence of the MoEPP.

The Constitution of the Republic of Macedonia contains several provisions regarding environmental protection (articles 8, 43, 55 and 56). Article 43 establishes the right to a healthy living environment.

State Environmental Inspectorate

The State Environmental Inspectorate (SEI) is a body within MoEPP. It inspects the enforcement of technical and technological measures for protection against air, water and soil degradation and pollution of flora and fauna, protection of geo-diversity and biodiversity, and areas protected by law (national parks, monuments of nature, forest park, ornithological reserves, etc.), protection of the

ozone layer, protection from harmful noise in the environment, and protection from ionizing radiation in protected areas.

The procedures for inspection supervision by State Environmental Inspectors and State Nature Protection Inspectors are defined by the Law on Environment and the Law on Nature Protection. The Law on Waters defines responsibilities on Water Economy Inspectors. At the same time, other laws determine the specific jurisdiction of inspection supervision in accordance with subject matter.

The current organization is under revision with a new “regional” approach relying on decentralization of both types of inspectors (nature protection, water economy and environment protection). Moreover, the plan foresees that environmental inspectors will have to specialize in one of the sectors among IPPC/EIA/Air/Noise, Seveso-chemicals and Waste management.

In addition to the National State Inspectors, 50% of municipalities (approx. 45) have appointed local called Authorized Environmental Inspectors. The work of the local inspectors is supervised by the State Environmental Inspectors, and comes under the areas for which the LSGUs have jurisdiction, except nature protection area.

The State Environmental Inspectorate is part of four networks, which started networking as from 2001 via BERCEN - Balkan Environmental Regulatory Compliance and Enforcement Network. After that successor on BERCEN was ECENA - Environmental Compliance and Enforcement Network for Accession and at the moment it is RENA - Regional Network for Accession.

From May 2006, SEI has been a member of EU-IMPEL - Implementation and Enforcement of Environmental Law. The criteria for environmental inspection have been transposed into two rulebooks for annual plans and annual reports. SEI has been participating in EU GREENFORCE for Nature Protection Inspectorates from December 2007 and the worldwide network INECE (International Network of Environmental Compliance and Enforcement) from 2005.

The State Environmental Inspectorate did not have a separate budget, which is of great importance for proper institutional management. At first, SEI had a special planned budget for different activities in 2010 totaling 2.2 million Mkd Denars (approx. 35.000 EUR). For 2011, the budget was 1.6 million Mkd Denars and for 2012 is 1.85 million Mkd Denars (approx. 25.000 EUR). Generally, it covers expenses for SEI offices. A certain amount is for the publication of various reports, guidance, for IMPEL network membership, organization of national training courses, bilateral or multilateral meetings with partner inspectorates from other countries, technical and safety equipment, business trips, etc. The budget is not sufficient and does not allow the administration to function independently. There is a lack of vehicles and technical and safety equipment. The budget does not include health or life insurance

Enforcement and Compliance Process

Overview

From the first Environmental Performance Review prepared by UNECE (United Nation Economic Commission for Europe) 2002 up to now, also Peer Review prepared by ECENA Network (Enforcement and Compliance Network for Accession) 2006, European Commission Progress report every year, the Government of the Republic of Macedonia has focused on strengthening the State Environmental Inspectorate and other enforcement bodies; establishing a credible enforcement record; and ensuring that fines and other sanctions are effectively applied and have a dissuasive effect.

In accordance with the Law on Environment, various instruments for environmental management such as environmental impact assessments, strategic environmental assessments, integrated pollution prevention and control, prevention and control of major accidents involving hazardous substances, and environmental monitoring systems have been introduced.

According to the Second National Environmental Action Plan (NEAP, 2006-2011), the instruments and mechanisms for implementation of the environmental policies that have been established are the monitoring and information systems, Integrated Pollution Prevention and Control (IPPC) and voluntary arrangements, inspection and enforcement, environmental impact assessments, strategic

environmental assessments, access to information and public participation, decentralization and the role of local self-governments, acceleration of environmental project preparation at the local level, etc.

Enforcement and Compliance Mechanisms

Inspection and supervision of the enforcement of environment legislation are performed by the State Environmental Inspectorate (SEI) within the Ministry of Environment and Physical Planning (MoEPP).

With respect to matters for which municipalities, the City of Skopje and the municipalities of the City of Skopje are responsible, inspection and supervision of the enforcement of environment legislation and regulations adopted are handled by authorized environmental inspectors. The legal bases are:

- The Law on Environment (Art. 208: type of inspection and planning);
- The Ordinance on the content of the annual report on the performed inspection supervision, as well as on the manner and term of the report delivery;
- The Ordinance on the content of the annual plan on inspection.

The Environmental Inspectorate is responsible for compliance, checking and enforcement of laws, sub-laws and regulations. Since January 2007, the Inspectorate's activities have been planned on the basis of annual and monthly working plans, with the exception of on-site visits on an ad hoc basis and in emergencies.

The advantage of such an organization is the possibility to link and coordinate the proceedings of all inspections in emergency interventions, as well as ensure more efficient sanctioning of violators by simultaneous enforcement by several laws. Inspectors have the obligation and duty, in case of noncompliance, to apply sanctions to offenders or to press administrative and criminal charges. Inspectors still have a role in informing/advising, as well as carrying out inspections.

Activities for control of the operating installations, according to the transposed criteria are:

- Conducting on-site visits;
- Monitoring compliance with Environmental Quality Standards;
- Considering environmental audit reports and statements;
- Considering and verifying self-monitoring by operators;
- Assessing activities and operations carried out at the installations controlled;
- Checking the premises and relevant equipment and adequacy of environmental management;
- Checking relevant records kept by the operators of the installations controlled.

On-site visits to installations are a main tool in the hands of inspectors to ensure compliance with legislation.

Environmental inspections are performed as routine and non-routine inspections (legal basis - Art. 208 of 32 *Part I: Policymaking, planning and implementation* the Law on Environment). SEI is authorized to carry out inspection supervision at any time and directly on location, without prior announcement (legal basis - Art. 208 in the Law on Environment).

SEI is entitled to:

- Request that results from investigations, analyses and measurements conducted by the operator be submitted to the authority;
- Take samples, analyze and measure substances released in the environment, as well as noise and energy;
- Take samples and analyze materials and products used or processed, as well as waste products.

The reporting system of monthly, quarterly and annual reports and information for activities on SEI has to be available on the web page of the Ministry, in the section devoted to the State Environmental Inspectorate.

These details of environmental inspections carried out are relevant to Recommendation 2001/3 31/EC of the European Parliament and the Council on Minimum Criteria for Environmental Inspections (RMCEI).

The main activity of SEI is to carry out checks, investigations and audits of locations. These represent three types of activities:

- Preventive (in the process of permit issuing under IPPC, so-called environmental permits, authorizations, emission limit values);
- Penalties (imposition of penalties, decommissioning of operations or activities);
- Remedial (imposition of activities for remediation, elimination of deficiencies and their causes).

Certain infringements of current legislation are handled by SEI through administrative procedures.

These are the following types of procedures: penalties (fines) and remedial (remediation actions, compromise).

SEI produces monthly, periodical and annual reports which provide a basis for its work. There is no information for the period 2001-2004. The collection of such information began at the end of 2003. For the period before, there were only seven inspectors and no information was gathered. Enforcement of the new environmental legislation effected started in 2004 – 2005. For 2004, there is no annual report. Data for the period 2005-2011 are given below.

In the course of 2005, SEI handled a total of 1,071 inspections, and prepared 970 Records of Findings. In general, problems were related to air pollution through emissions from major industrial facilities and traffic, followed by problems caused by excessive noise levels from small-scale production facilities, workshops and catering facilities, then nature degradation by sand extraction from lakes, wood-cutting within national parks, municipal waste, construction waste-related issues, as well as other types of waste throughout the country, and the issue of radiation from the antenna columns-base stations of the two mobile operators.

Soil pollution was reported, concerning various discharges of oil, industrial slag from different industrial facilities, as well as water pollution, including primarily recipients (lakes, rivers and other watercourses).

The Inspectorate has also established several contacts with non-governmental organizations (NGOs), the most active cooperation being carried out with the Skopje based NGO Eko-Misija (Eco-mission). From September 1 2005, has started the decentralization process in Republic of Macedonia in direction of environmental legislation responsibilities, also nomination of the Authorized Environmental Inspectors on the local level.

The structure of SEI activities in the course of 2006 was approximately the same as in 2005, except for the beginning of IPPC implementation. In 2006, SEI handled 1,619 cases; prepared 1,265 reports and made 389 ordering/prohibiting decisions; presented 42 violation charges and 1 criminal charge; and submitted 369 notifications/requests. In terms of trends, there was an increase in the number of cases, reports and decisions adopted through administrative procedures and a drop in the number of criminal charges, while the number of violation charges notes also went up.

In the course of 2007, SEI took up a total of 1,529 cases and produced a total of 1,190 minutes /protocols for findings/with conclusions; issued 240 decisions for ordering/prohibiting specific activities; initiated 19 requests for initiation of misdemeanor proceedings; and initiated 5 requests for criminal proceedings.

Eight conclusions for termination of proceedings were issued, and a total of 277 reports/requests were submitted.

In the course of 2008, SEI took up a total of 1,394 cases and produced a total of 1,013 minutes with conclusions; issued 267 decisions for ordering/prohibiting certain activities; initiated 39 requests for initiation of misdemeanor proceedings before the Basic Courts and the MoEPP Misdemeanor Commission; and initiated 18 requests for criminal proceedings before the competent basic courts. Seven conclusions for termination of proceedings were issued and a total of 296 reports/requests were submitted. On September 1 2008 start with the work two Commissions on ministry level and new

system for penalties, first one was Misdemeanor Commission (for first two categories on violations) and Commission for Mediation for 3rd category of violations.

In the course of 2009, SEI took up a total of 1,600 cases and produced a total of 1,394 minutes with conclusions; and issued 329 decisions for ordering/prohibiting certain activities; initiated 48 requests for initiation of misdemeanor proceedings; initiated 6 requests for criminal proceedings before the competent basic courts; and drew up 26 orders to pay for fines totaling €35,000. In all, 285 notifications/requests were submitted to various legal entities and individuals.

In the course of 2010, SEI took up a total of 3,049 cases and produced a total of 2,899 minutes with conclusions; issued 584 decisions for ordering/prohibiting certain activities; initiated 26 requests for initiation of misdemeanor proceedings; and initiated 4 requests for criminal proceedings with the competent basic courts. In all, 82 notifications/requests were submitted to various legal entities and individuals.

Figures for 2011 are: 2,900 cases, 2,499 minutes with conclusions, 363 decisions, 36 misdemeanor proceedings and 2 criminal proceedings, 128 notifications/requests.

According to the Work Programme for 2012, the number of installations and legal entities where SEI carries out supervision has been fixed (with exceptional minor corrections), and thus according to the frequency of inspection supervision based on the experiences of environmental inspectors of EU Member States, a figure of regular routine inspection supervisions was reached which was not supposed to be carried out upon previous years.

In practice, plans for inspections are prepared in correlation with the number of installations, using software for considering the risk (high, medium or low) and frequency of inspection in IPPC and SEVESO installations or according to responsibilities under different laws and other supervisory bodies dealing with protected areas, air/noise, water and waste.

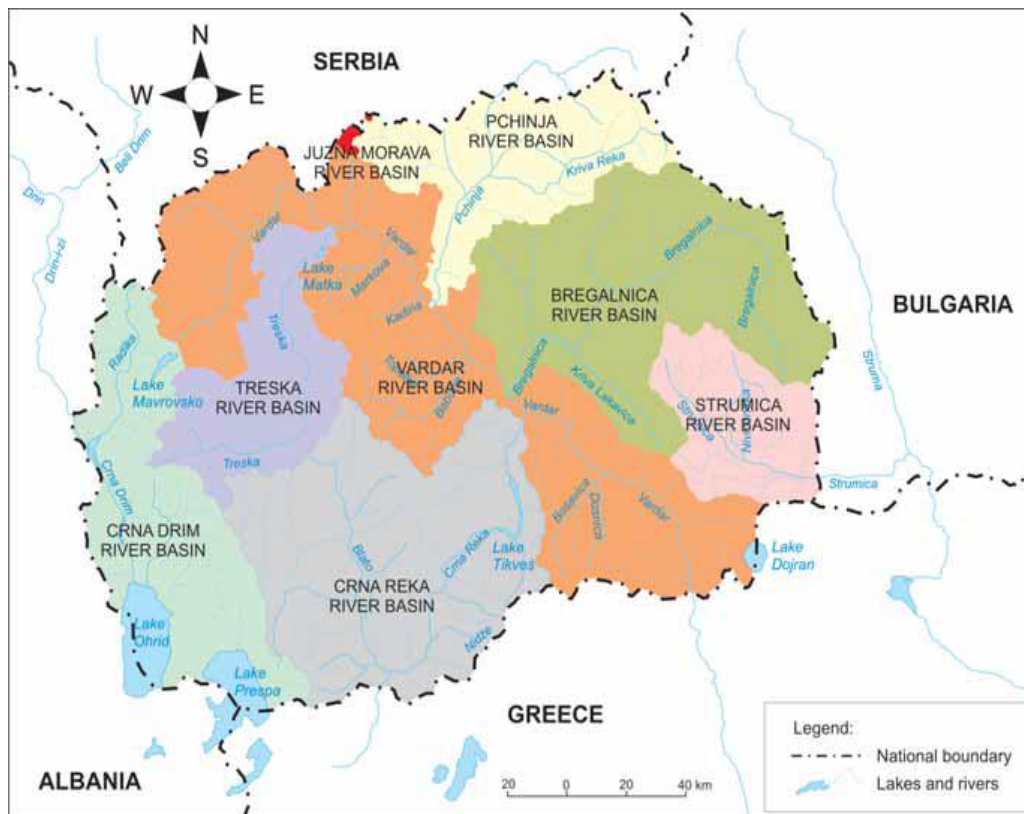
From the practice of the inspectors in Republic of Macedonia, there are 8 statistical regions and the SEI inspectors cover 120 A-IPPC and 11-SEVESO installations as well as 84 protected areas, approx. 20 classical water economy objects such as dams and water economy legal entities.

The country is following the Recommendations of EC 2001/331/EC on the set of minimum criteria for inspection of the environment in EU member countries. All obligations undertaken in the context of activities aimed at approximation with the EU require efficient implementation, monitoring and enforcement of environmental legislation. The system of inspection and enforcement copes with the complex task of improving implementation and enforcement of legislation, in parallel with the revision of national legislation, i.e. laws and by-laws. It is crucial to ensure that the process of approximation with the EU is understood and followed, not only by the representatives of the central government but also by local government staff. The experience of former candidate countries which are now EU Member States indicates that this task must not be underestimated, as it can cause significant delays in real progress towards EU accession. In full compliance with the recommendations contained in the reports of the EC and the completed Peer Review under the EU process on the Inspectorate, the Inspectorate has initiated efforts to draft a separate Law on the State Environmental Inspectorate. SEI has striven to enhance transparency (cooperation with citizens, industry and civil societies, etc in accordance with the Aarhus Convention). Particular emphasis must be placed on the protection of environment, as well as the training of staff from inspection offices for the environment on the local level and cooperation with partner inspectorates from the region and the EU and inspectorates under other bodies in the Government, other relevant institutions such as Police, Customs, the Crisis Management Centre and the Directorate for Protection and Rescue.

Enforcement of Law on Waters

Areas covered by different types of water bodies, thousand ha, in Republic of Macedonia are: Natural lakes 46.70, Reservoirs 6.40, Rivers 2.20, Ponds and cages 0.70 and Total 56.00 ha.

River sub-basins (watersheds)



The 2008 new Law on Waters and changes and amendments later, provides the framework for the protection and sustainable management of water resources. It regulates issues concerning surface water (watercourses, lakes, accumulations and springs) and underground water within an integrated policy and represents the legislative framework for the future management of water resources. It has environmental provisions.

EU-Water Framework Directive (WFD) 2000/60/EC, Directive 1976/160/EC, Directive 91/676/EC, Directive 98/83/EC, Directive 98/83/EC, Directive 91/271/EC, Directive 1976/464/EC and Directive 75/440/EC have been transposed.

Furthermore, secondary legislation has fully achieved the transposition of the requirements of WFD 2000/60/EC concerning river basin plan preparation.

Specifically, this legislation refers to the establishment of methodology for drafting, reviewing and updating the master plan; the manner of preparation of river basin management plans; the content and the manner of preparation of the programme of measures; the preparation of information and cartographic overviews of activities for waters monitoring; as well as the methodology for river basin assessment.

Beside the Law on Waters, the most relevant pieces of regulation regulating the water sector are the following:

- The Law on Environment and related secondary legislation;
- The Law on Nature Protection and related secondary legislation;
- The Law on Water Supply, Collection and Treatment of Waste Water;
- The Law on Water Economies;
- The Law on Water Users Associations and
- many other legislative acts in relation with water topic.

Law on Waters

1. Law on Waters “Official Gazette of RM” No. 87/08 from 15.07.2008
2. Law amending and supplementing the Law on Waters “Official Gazette of RM” No. 6/09 from 15.01.2009
3. Law amending the Law on Waters “Official Gazette of RM” No. 161/09 from 30.12.2009

4. Law amending the Law on Waters "Official Gazette of RM" No. 83/10 from 23.06.2010
5. Law amending the Law on Waters "Official Gazette of RM" No. 51/11 from 13.04.2011

Classification and Categorization of Waters / Watercourses

1. Decree on Classification of Waters "Official Gazette of RM" No. 18/99 from 31.09.1999
2. Decree on Categorization of Water-courses, Lakes, Accumulations and Ground-waters "Official Gazette of RM" No. 18/99 from 31.09.1999

River Basins

1. Ordinance on the content and method of preparation of the RB management plans "Official Gazette of RM" No. 148/09 from 14.12.2009
2. Ordinance on the methodology for assessment of river basins "Official Gazette of RM" No. 148/09 from 14.12.2009

Programme of Measures

1. Ordinance on the content and method of preparation of the programme of measures "Official Gazette of RM" No. 148/09 from 14.12.2009

Monitoring of Waters

1. Ordinance on the content and method of preparation of cartographic maps information about the activities of monitoring the water "Official Gazette of RM" no. 148/09 from 14.12.2009

Advisory Bodies

1. Decision on establishment of the National Council on waters "Official Gazette of RM" No. 149/09 from 15.12.2009

Water Management

1. Ordinance on the methodology for the content, manner and procedure revision of the Water Master Plan the RM "Official Gazette of RM" No. 148/09 from 14.12.2009
2. Ordinance for the form and content of requirement for non-bringing on decision for approval or rejection of water-economy acceptance "Official Gazette of RM" No. 129/11 from 23.09.2011

Urban Waste-waters

1. Ordinance on the Manner and procedure for use of sludge, the maximum concentrations of heavy metals in soil where sludge is used, concentrations of heavy metals in sludge, the maximum annual quantities of heavy metals that can be incorporated into the soil, "Official Gazette of RM" No. 73/11 from 31.05.2011
2. Ordinance on conditions for collection, disposal and treatment, method and conditions for the design, construction and exploitation of systems and treatment plants for urban waste water, as well as technical standards, parameters, standards and emission standards for quality pre-treatment, disposal and purification of waste water, taking into account the load and the method for purification of urban waste waters discharged into sensitive areas of discharge of urban wastewater "Official Gazette of RM" No. 73/11 from 31.05.2011.
3. Ordinance on the manner and the maximum allowable concentration values and the parameters of the purified waste water for reuse them "Official Gazette of RM" No. 73/11 from 31.05.2011.
4. Ordinance on conditions and manner of emission limit values for discharges of wastewater after their treatment, the method of their calculation, "Official Gazette of RM" No. 81/11 from 15.06.2011.
5. Ordinance on criteria's for consideration on zones most sensitive on releases on waste-waters (*) "Official Gazette of RM" No. 130/11 from 26.09.2011.

Urban Waste-waters Releases

1. Ordinance for hazardous and damage matters and substances and his emission standards which can be released in sewage system or drainage system, in surface or underground water bodies, coast soils and water habitats "Official Gazette of RM" no. 108/11 from 12.08.2011.

2. Ordinance for conditions, manner and emission limit values for discharges on waste-waters after his treatment, manner of his calculation, taking into account the special requirements for protection of safety zones, "Official Gazette of RM" No. 47/11 from 08.04.2011.

Information Reporting

1. Ordinance for manner of transfer on information's from waste-water discharges monitoring, form and content of specimen for data sending "Official Gazette of RM" No. 108/11 from 12.08.2011.

Urban Waste-waters Discharges Monitoring

1. Ordinance for the manner on transfer of information's from waste-waters discharges monitoring, form and content of specimen for data sending, "Official Gazette of RM" No. 108/11 from 12.08.2011.

Inspection Supervision

1. Ordinance on the form and content of for invitation for education, manner and procedure for realization on education, manner of guiding unique evidence for received education "Official Gazette of RM" No. 118/11 from 01.09.2011

Polluted Matters and Substances

1. List of polluted matters and substances, "Official Gazette of RM" No. 122/11 from 07.09.2011.

Water right

1. Ordinance for the form and content of requirement for non-issuing on permit, concerning non-bringing on decision for approval or rejection of water-using permit, concerning permit for sand pumping, gravel and stone from river-bed and banks on surface water bodies "Official Gazette of RM" no. 129/11 from 23.09.2011.

Waters Protection

1. Ordinance for the form and content of requirement for non-issuing on permit, concerning on non-bringing decision for rejection on requirement for discharge permit issuing "Official Gazette of RM" No. 129/11 from 23.09.2011.
2. Ordinance for the prescribing of criteria for qualification on zones most sensitive on nitrates (*) "Official Gazette of RM" No. 131/11 from 28.09.2011.

Apart from national laws, there are also some international conventions (e.g. the Convention on Environmental Impact Assessment in a Trans-boundary Context, 1991) or agreements/memorandum of understanding which complement existing national water legislation.

All sectors of water use aimed at sustaining and protecting water resources are regulated in the Law on Waters. It regulates matters related to surface water, including permanent watercourses or watercourses through which water flows occasionally, lakes, reservoirs and springs, groundwater (hereinafter: waters), the riparian lands and wetlands; management of waters, riparian lands and wetlands, including water resources distribution, water protection and conservation, as well as protection against the harmful impact of water; water management structures and services; organizational arrangements and financing of water management; as well as the manner, the conditions and the procedures under which water can be used or discharged.

The Law on Waters stipulates competencies in water management, not only with the central administration but with local authorities as well, especially with regard to the protection of water from small industry and communal wastewaters, flood protection, erosion, water supply and water discharge. Through the decentralization process, the municipalities will be key executive players in environmental protection in the future, and will provide most of the utility services. The Law on Waters comprises the Drinking Water Directives, the Bathing Water Directive, and the Fish Water Directive.

Since many rivers and lakes have a trans-boundary character, the necessity for trans-boundary water basin management according to WFD is regulated in article 7 -11 and 70, 71 of the Law on Waters in addition to the Rulebook on River Basins, No148/09.

Concessions are necessary for:

- generation of electricity in hydropower plants;
- bottling of water from underground bodies for commercial purposes;
- breeding of fish and water birds;
- lake traffic; and
- provision of tourist, sports and other recreational services, including construction of permanent structures and facilities.

The Law on Waters provides three types of water management in planning and development documents:

- The National Strategy for Waters;
- Water Master Plan;
- River Basin Management Plans.

Under the Law on Waters, MoEPP, in cooperation with public utilities, local and regional authorities, has identified the state of existing sewerage networks and wastewater treatment plants, as well as the need for provision of sewerage networks to collect wastewater and to build wastewater treatment plants. The relevant activities have been planned for the period between 2007 and 2015 for agglomerations exceeding 2,000 inhabitants, and in the period between 2014 and 2025 for smaller agglomerations below 2,000 inhabitants.

Construction of sewerage networks has been envisaged for the period between 2008 and 2015, as well as by 2025 for smaller agglomerations (<2,000 inhabitants). The development of detailed designs for the new wastewater treatment plants will be provided through projects with technical assistance, including their construction in accordance with the adopted programme. Construction has been planned to proceed by 2025 until full compliance with Directive on Urban Wastewater Treatment is reached.

To this end, MoEPP will need to identify the resources required to cover the costs for the design, construction and maintenance of sewerage systems and wastewater treatment plants by users and to introduce a fee collection system based on the polluter-pays-principle.

The National Water Strategy prepared in 2011, and although preparation of the Water Master Plan has begun, much work remains to be done. The 1975 WMP was not replaced by a new water master plan so far, but is in planning according to Articles 63-65 of the Law on Waters. The National Water Council has been established, and will be responsible inter-alia for the adoption of the National Water Strategy.

In the absence of other policy documents, the 2006 Second National Environmental Action Plan had identified some policy and technical priorities:

- Action to finalize the legislation; establishment of the new organizational set-up for water resources management;
- Protection of water quality and maintenance of the water balances of the three natural lakes - Ohrid, Prespa and Dojran - in cooperation with neighboring countries;
- Protection of surface water and groundwater from the pollution of urban and industrial wastewaters;
- Protection of the water quality of the reservoirs, especially those whose water is used for drinking water supply, recreation, sport and tourism;
- Improvement of the rural drinking water supply and access to healthy drinking water; investment in urban water supply systems upgrading;
- Improvement of urban public sewage systems through physical rehabilitation of the systems, upgrading, extension and modernization;
- Extension and construction of rural sewage systems and construction of isolated wastewater treatment plants;
- Improvement of the state of irrigation systems through amelioration of flood protection and erosion protection systems;
- Improvement of the water regime via the construction of new multipurpose hydropower systems;

- Introduction of water-saving measures in water consumption (pricing policy, introduction of irrigation application methods for water saving, use of other sources for supplying of industries, etc);
- Improvement of the State monitoring network for waters and creation of conditions for broadening and filling the database; establishment and operation of the local network for water monitoring by the local self-government units;
- Protection of surface and underground water from diffuse sources of pollution.

Institutional Framework and Responsibilities

Since January 2011, the Ministry of Environment and Physical Planning (MoEPP) has been the main central government authority in the water sector, especially in water management. The Water Department was recently established in the MoEPP Administration of Environment to take over the water competences.

At present, water management is situated within the Administration for Environment in the sector of waters, which comprises three units: Water Management Planning Unit; Inter-sectorial Cooperation Unit; and Lake Ohrid Protection Unit.

Six units are envisaged, one for each river basin and additional three units, one for planning and development of waters, one for water rights and one for concession and inter-sectorial cooperation.

In addition to the Administration of Environment, there are two more units in the State Inspectorate of Environment (for Inspection Supervision and Inspectors' Coordination).

At present, responsibilities for water-related issues are still shared amongst several ministries (MAFWE, Ministry of Transport and Communication - MTC, Ministry of Economy - ME, Ministry of Health - MoH) and also Municipalities. The Law on Water provides a basis for a consolidation in this sector, by stipulating transferal of competence to MoEPP.

The main challenge for MoEPP in the coming period will be to establish an effective institutional set-up for water management. Within the Water Department, the organizational units responsible for river basin management need to be properly established.

Currently, the Water Department is organized based on the competences that the MoEPP has at present.

According to the Plan for Institutional Development of the Capacity for Environmental Management on the Central and Local Level for the period 2009-2014, the Water Department needs to be restructured in accordance to the competencies set out in the Law on Waters, and the number of employees should be significantly increased in the next five years.

Under the provisions of the Law on Waters, MoEPP is responsible for developing national policies and guidelines for overall water management, including river basin management and the permit issuing system. MoEPP also supervises the monitoring of water quality and the implementation of water-related laws. In cooperation with MTC, MoEPP is responsible for overseeing development plans for water supply systems and sewerage network infrastructure, implemented with financial allocations of the State budget. MAFWE is responsible for irrigation, drainage, flood protection and river bed training and erosion control in the boundaries of areas being managed by water economies. In addition, MAFWE is responsible for qualitative and quantitative water monitoring and for the maintenance of dams which are used as sources for irrigation schemes. As for irrigation and drainage, the present Water Economies that are being established under MAFWE auspices are responsible for management of the main facilities and infrastructure on the sub-regional level. On the other hand, the water users' association is responsible for managing the irrigation distribution network. MoH shares responsibility with MoEPP with regard to the issuing of water quality standards, and is responsible for monitoring of water supply sources along with public users.

The Hydro-biological Institute (HBI) on Lake Ohrid is subordinated to the Ministry of Education and Science (MES) and is not quite integrated into the new structure. The Hydro-biological Institute (HBI) performs monitoring over the three main natural lakes in Republic of Macedonia. They do limno-

chemical and limno-biological basic monitoring with a limited size of sites and parameters (again since 2003, intense monitoring 1998-2003 during the Lake Ohrid Conservation Project financed by the World Bank). It is not clear who will do the limno-biological investigations on rivers according to WFD. Some work was done by Ss. Cyril and Methodius University in Skopje, Faculty of Natural Sciences and Mathematics/Institut of Biology. Limno-chemical and hydrological monitoring is insufficient given the number of sites and the equipment needs (e.g. lack of automatic running stations for flood prediction) and is carried out by the Hydro-meteorological Institute (HMI), which again belongs to a different ministry.

Conclusions and Recommendations

In the EC Progress Report for Republic of Macedonia for 2011, Chapter Environment, Water, there is written: *Little progress can be reported in the area of water quality. Administrative reorganization of this sector is underway. The process of transposition of the acquis in this field is not very advanced. Some implementing legislation was adopted to further align with the Urban Waste Water directive and the Water Framework Directive. Administrative capacity is still insufficient at all levels. The lack of sufficient coordination between the competent authorities in the water sector is hampering the implementation of the legislation. There is very little progress in addressing the gaps in the water monitoring system. Planning and preparation of infrastructure investments are lagging behind and the funding is far too low in relation to the needs. No progress was made in applying the polluter-pays principle. This creates problems for the sustainability of investments in this sector. Preparations are lagging behind in this area.*

Capacity deficiencies in key institutions; lack of political will to tackle and resolve serious issues; fragmented management of water between sectors and institutions with little regard for conflicts between social, economic and environmental objectives and hence no accountability; and finally, overall poor implementation and enforcement capacity on national and local levels, all of the previous lead to poor water governance at present.

Through the reorganization of MoEPP, the 2008 Law on Waters and the Second NEAP accompanied by strategy papers, recommendations and support reports from international institutions, the country achieved an appropriate framework for sustainable water management. The environmental issue for water bodies is now embedded into legislation. The country has to start implementation, which can be achieved mainly through adequate investment. The main objective is how to integrate water management based on the principles of sustainable development for river basins in transboundary international cooperation.

Although MoEPP has been strengthened in the water management sector there is still overlapping in responsibilities and competencies between different ministries and a lack of institutional coordination and sometime inefficient performance. MAFWE is still responsible for functions of irrigation and protection of waters from pollution from agricultural resources (nitrate pollution). Hydrometeorological Institute (HMI) is responsible for quantitative and qualitative water monitoring, while agriculture is one of the biggest water user at the same time. In the past, this side tended to emphasize water supply and water use rather than water protection or ecological issues.

Capacities of the MoEPP and SEI are limited. Responses to demands for information from outside clients are often put together at the last minute, causing considerable strain for already busy EU Integration Units. However, when resources are limited, the progress monitoring becomes essential. A system for periodically reviewing progress in approximation can help the MoEPP and SEI to:

- Use resources more efficiently. Regular review of programmes for transposing and implementation will facilitate early identification of potential problems and help the MoEPP to allocate limited human and financial resources to priority issues;
- Build more stakeholder support;
- Perform analysis of the administrative capacities for enforcement of environmental law (staff, structure, trained experts in specific areas/especially water, equipment, documentation, coordination and competences) including exploration of regional approach;
- Draft guidelines for performing inspections and sampling per environmental sector;
- Development and approval of tailor-made short-term and long-term training plans;
- Develop a training module on training and re-training on environmental inspections;

- Develop a mechanism for improved coordination between central and local level inspectorates;
- Develop proposal and measures for further strengthening of enforcement of environmental legislation, with regards to the judiciary system;
- Development of a management information and reporting system for inspections.
- Established an Agency on Water, nomination of a minimum 3 Water-Economy Inspectors.

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