

**D E C I S I O N**  
**No. 103 dated 31. 03. 2002**

**CONCERNING ENVIRONMENTAL MONITORING IN THE  
REPUBLIC OF ALBANIA**

Based on article 100 of the Constitution and article 52 of the Law No. 7664 dated 21. 01. 1993 "On protection of the environment" changed by law No. 8364 dated 2. 07. 1998, upon proposal from the Minister of the Environment, the Council of the Ministers,

**HAS DECIDED AS FOLLOWS:**

**CHAPTER I**

**A. General stipulations**

1. for the purposes of this decision:

- "environmental indicator" is the variable which, in a simple and concentrated way, gives information about a certain environmental phenomenon and makes it perceptible by assigning to it a numerical value for purposes of measurement and communication. Environmental phenomena relate to environmental properties and environmental constituents, discharges in the environment, environmental pollution and damage, biodiversity and scale of damage or protection, as well as measures taken for environmental protection.

- "environmental indicator of condition" is the indicator concerned with the quality and quantity of natural resources and environmental quality.

- "environmental indicator of pressure" is the indicator measuring the pressure exerted on the environment by pollution sources.

- "environmental monitoring" means the program of systematic measurement, observation and reporting of the environmental indicators.

- "report on environmental condition" means the document prepared every two years by the Ministry of the Environment which presents, comments and analyzes the environmental indicators and makes recommendations for improving environmental condition.

- "environmental data" means monthly, quarterly and annual average values of the environmental indicators of condition, impact and pressure.

**B. Environmental indicators of condition are:**

1. Relative to phenomena of climatic change:

- a) average temperature of air;
  - b) level of the sea;
  - c) amount of atmospheric precipitations;
  - d) level of underground waters;
2. relative to atmospheric precipitations:
- a) content of sulfuric dioxide, SO<sub>2</sub>;

- b) content of nitrate oxide,  $\text{NO}_x$ ;
- c) lead content, Pb;
- d) radioactivity in atmospheric precipitations.
- 3. relative to urban air:
  - a) content of solid waste suspended in the air;
  - b) ozone content,  $\text{O}_3$ , in the air;
  - c) lead content, Pb, in the air;
  - d) content of sulfuric dioxide,  $\text{SO}_2$ , in the air;
  - e) content of nitrate oxides,  $\text{NO}_x$ , in the air;
  - f) content of carbon monoxide, CO, in the air;
  - g) content of hydro carbons in the air;
  - h) level of noise;
  - i) radioactivity in the atmosphere;
  - j) electromagnetic non-ionic radiation in the atmosphere.
- 4. Relative to waters:
  - 4.1. Bodies of water (rivers, lakes):
    - a) alkalinity;
    - b) specific conductivity;
    - c) acidity;
    - d) scale of the chemical need for oxygen, NKO;
    - e) scale of biochemical need for oxygen, NBO;
    - f) content of nitrogen and nitrates;
    - g) content of phosphorous, P;
    - h) ammonium content,  $\text{NH}_3$ ;
    - i) value of pH;
    - j) value of natural radioactive stock and radioactivity of waters;
    - k) solidity of river beds;
    - l) bacterial indicators;
    - m) river debit.
  - 4.2. Relative to the sea and coast
    - a) biochemical need for oxygen in the sea waters, NBO;
    - b) chemical need for oxygen in the sea waters, NKO;
    - c) microbiological parameters in sea waters and beaches;
    - d) amount of phyto and zoo plankton;
    - e) chlorophyll content and primary productivity;
    - f) content in sea mussels of heavy metals, durable organic pollutants, and radioactivity;
    - g) water radioactivity;
    - h) communication of waters between the sea and the lagoon;
    - i) dynamics of river deltas;
    - j) morphology and topography of the sea shelf;
    - k) coast morphology.
  - 4.3. Relative to underground waters:
    - a) pH;
    - b) hardness;
    - c) alkalinity;
    - d) acidity;
    - e) nitrogen content;
    - f) saltiness;

4.4. Relative to ground, underground and sea waters in areas of substantial sources of industrial and agricultural pollution:

- a) content of heavy metals;
- b) pesticide content;
- c) content of hydro carbon compounds;

5. Relative to biodiversity:

- a) genetic diversity of agriculture and stock breeding;
- b) diversity of ecosystems and habitats;
- c) diversity of ecosystems and habitats in the forests;
- d) diversity of ecosystems and habitats in the protected zones;
- e) diversity of ecosystems and habitats in water bodies;

1.1. Relative to the land:

a) fertility;

b) salt content: Na, Cl,  $\text{SO}_4$ , - in salty lands; content of nutritious elements in orphic lands; the ratio magnesium/calcium – in magnesium lands; determination of acidity – in acidity lands;

c) natural radioactivity of the land.

1.2. In zones of substantial sources of industrial pollution:

a) metal content according to the particularities of the zone (mercury, nickel, chromium, etc.);

b) content of hydrocarbons.

2. Relative to irrigation waters:

- a) hardness;
- b) alkalinity;
- c) acidity;
- d) pesticide content;
- e) content of nitrogen and nitrate.

C. Environmental indicators of environmental impact are:

1. Relative to climatic changes:

- a) aptitude to change over time of all indicators in B1;
- b) phenological changes.

2. Relative to the phenomenon of acidity in environment:

- a) content of sulfate ions in the lake.

3. Relative to bodies of water:

- a) quality and quantity of solid, suspended and sediment debit of rivers;
- b) erosion caused by rivers;
- c) solidity of river beds;
- d) excesses of norms of quality indicators in B4.1.

4. Relative to the quality of sea and coast:

- a) movement of the coast line: erosion and accumulation;
- b) communication between the sea and the lagoon;
- c) dynamics of river deltas;
- d) degree of exposure of the population to the microbiological and chemical pollution on the sea and the beaches;
- e) excesses of norms of quality indicators in point B4.2.

5. Relative to underground waters:

- a) zones of high saltiness;
- b) sensitive zones to voluminous waste;

- c) degree of exposure of the population to the polluted underground waters;
- d) excesses of norms of quality indicators in point B4.3.
- 6. Relative to biodiversity:
  - a) total and annual surface of destroyed forests;
  - b) total and annual surface of incinerated forests;
  - c) total and annual surface of diseased forests;
  - d) endangered species;
  - e) threatened species;
  - f) disappeared species;
  - g) impact of anthropogenic and geological phenomena in the biological diversity.
- 7. Relative to the land and irrigation waters:
  - a) levels of erosion and accumulation of the land;
  - b) annual loss of land due to erosion by rivers and slides;
  - c) surface of degraded land;
  - d) surface of barren land;
  - e) surface and location of land polluted with heavy metal;
  - f) surface and location of land polluted with hydrocarbons;
  - g) surface and location of land polluted with chemicals and hazardous waste;
  - h) degree of exposure of the population to land pollution;
  - i) excesses of norms of quality indicators in point B 6.1 and B7.
- D. The environmental indicators of environmental pressure are:
  - 1. Relative to climatic changes:
    - a) annual discharge of CO<sub>2</sub>, NO and CH<sub>4</sub>;
    - b) distribution of discharges of CO<sub>2</sub>, NO and CH<sub>4</sub> for per sectors of the economy like energy, transport, waste management, agriculture, industry.
  - 2. Relative to urban air:
    - a) annual discharges in urban centers of SO<sub>2</sub>, NO<sub>x</sub>, CO<sub>2</sub>, CO;
    - b) distribution of discharges of SO<sub>2</sub> and NO<sub>x</sub>, according to sectors of the economy;
    - c) annual amount of heavy metal;
    - d) annual amount of radioactivity from atmospheric discharges;
    - e) annual volume of precipitations.
  - 3. Relative to solid urban waste:
    - a) annual production amount;
    - b) distribution of waste according to municipalities and regions;
    - c) content in percentage of polluting ingredients;
    - d) engineering composition.
  - 4. Relative to urban liquid waste:
    - a) annual amount of discharge and distribution according to municipalities and regions;
    - b) liquid waste properties such as pH, content of NKO, content of NBO<sub>5</sub>, alkalinity, acidity, sulfur content, ammonium content, phenol content, phosphorus content, nitrogen and heavy metal contents.
  - 5. Relative to solid, industrial waste and debris:
    - a) annual discharge of solid industrial waste in general;
    - b) annual discharge of solid industrial waste of every establishment;
    - c) content in percentage of pollutants per each solid industrial discharge;

- d) distribution of annual discharge of solid industrial waste per various sectors of the economy: energy, transports, industry;
- e) volume of debris from the construction sector and distribution per municipalities and regions;
- 6. Relative to liquid industrial waste:
  - a) annual discharges, pH;
  - b) content of NKO, content of NBO, alkalinity, acidity, sulfur, ammonium, phenol, and nitrogen content;
  - c) content of specific elements according to the nature of the industrial process: heavy metals, hydrocarbons, BTEX, durable organic pollutants.
- 7. Relative to pollution sources discharging in the air:
  - a) inventory of such polluters, annual discharges of CO<sub>2</sub>, NO<sub>x</sub>, CH<sub>4</sub>, NH<sub>3</sub>, SO<sub>2</sub>, heavy metals in general;
  - b) sectoral distribution of letter "a" as per the sectors of industry, energy, transports and services.
- 8. Annual amount of imported hazardous chemicals.
- 9. Annual amount of chemical fertilizers and chemicals used by the agricultural sector.
- 10. Relative to water bodies:
  - a) quality and quantity of solid, suspended and decanted substance carried by the rivers;
- 11. Relative to underground waters:
  - a) annual volume of exploitation in general and per basins;
  - b) annual coefficient of exploitation in general and per basin.

## **CHAPTER II**

### **NATIONAL PROGRAM OF ENVIRONMENTAL MONITORING**

- 1. The National Program of Environmental Monitoring determines the main indicators of condition, impact and pressure in the air, internal waters, land, costal areas, sea, woods and biological diversity.
- 2. The national monitoring program defines, relative to each of the environmental indicators measured or estimated, the manner of determination, measurement method, sample extraction, frequency of measurement, unit of measurement, manner of data processing and data presentation.
- 3. Pursuant to the national program of environmental monitoring, the Ministry of Environment in conjunction with the Institute of Statistics must design a system of indicators and statistical forms which are obligatorily submitted to the Ministry of Environment by all implementing institutions and physical and legal persons, national and foreign, as prescribed by Law no. 7687, dated 16. 03. 1993 "On statistics".
- 4. Pursuant to the national program of environmental monitoring, the implementing institutions must design special monitoring projects in accordance with their functional duties and the available material and laboratory basis.
- 5. Physical and legal entities, national or foreign, the activity of which requires an environmental license, must implement monitoring programs of environmental pressure indicators for individual sources, both mobile and immobile, and must document respective data in accordance with models endorsed by the Ministry of

Environment.

6. Methodologies for measuring and estimating any of the environmental indicators must be in accordance with technical standards in the Republic of Albania. In the event such methodological standards are missing, the Ministry of the Environment will be called to endorse the use of particular methodologies.

### CHAPTER III

#### IMPLEMENTATION OF THE NATIONAL PROGRAM OF ENVIRONMENTAL MONITORING

##### **A. Duties of the central bodies, institutions and physical and legal entities**

1. The Ministry of Environment designs the National Program of Environmental Monitoring and coordinates action to implement the program. Based on the national program, the Academy of Sciences, ministries involved in this decision and institutes under their dependence are obligated to design special programs of environmental monitoring.

2. The Health Ministry, through the Public Health Institute and the directorates of primary health services at region level must monitor the indicators in accordance with points B3-a, b, c, d, e, f, g, h; B4-h; B4.2-c, C4-d, C5-c, C7-h, D4-b, D3-c, d.

3. The Ministry of Tourism and Territorial Regulation and local governments are charged to monitor indicators in points D3-a, b; D4-a and D5-d.

4. The Academy of Sciences, is charged: through

a) The Institute of Hydrometeorology to monitor indicators in points: B1-a, b, c, d; B2-a, b, c; B3-a, d, f; B4.1-a, b, c, d, e, f, g, h, i, j, k, j; B4.2-a, b, h, i, j, k; B4.4-a, b, c; C1-a, b; C2; C3-a, b, c, d; C4-a, b, c, e; D10;

b) The Institute of Nuclear Physics to monitor indicators in points: B2-d; B3-g, i; B4.1-j; B4.2-f, e; B6.1-c; B3-c.

c) The Institute of Biological Research to monitor indicators in points B5; B4.2-e, g and C6-d, e, f, g.

d) The Center for Hydraulic Research, in conjunction with relevant institutions, to prepare reports on environmental indicators in points B4.1-k; B4.2-h, i, j, k; C3-a, b, c; C4-a, b, c; D10.

e) The Center for Geographic Studies to map monitoring data according to the system of geographical data.

5. The Faculty of Natural Sciences, University of Tirana is charged with the monitoring of indicators in points B4.4-a, b, c; B4.2-f.

6. The General Directorate of Forests and Pastures, the Institute of Forest Research, the Botanical Garden and the Museum of the Faculty of Natural Sciences are charged with the monitoring of indicators B5 and C6-a, b, c, d, e, f, and g.

7. The Ministry of Agriculture and Food, through the Lands Institute, is charged with the monitoring of indicators in B6, B7, C7, D9, as well as D1, D2, D5, D6, D7, D10 for all persons, physical and legal, publicly owned, forming part of its system. Through the Institute for Veterinary Research, it cooperates with the Faculty of Natural Sciences for monitoring indicators in point B4.2-f.

8. The Ministry of Industry and Energy monitors: through:

- The Albanian Geological Service, points B1-d; C3-a, b, c; B4.2-j, k; B4.3-a, b, c, d, e, f; B3-i. B4.1-k. B4.4-a, b, c; C4 - a, b, c; C5; C6-e; D11;

-The Network of Institutes, under its line of dependence, every physical and legal entity forming part of its systems, with regard to indicators in D1, D2, D5, D6, D7 and D8.

9. The Ministry of Defense is charged with the monitoring of indicators in points D1, D2, D5, D6, D7, D8, for all physical and legal persons forming part of its system.

10. Physical and legal persons monitor environmental indicators in points D1, D2, D5, D6, D7, and D8 at individual level.

11. The Ministry of Transports and Telecommunications, through the General Directorate of Road Transport Services is responsible for the level of environmental indicators of air pressure contained in point D2 Chapter I.

12. The Ministry of Environment is responsible for recording and processing environmental indicators contained in points D1, D2, D5, D6, and D7, based on the collected data.

13. The Ministry of Environment is responsible for checking the quality of analysis of environmental indicators, as well as for the standardization of the methodology of such analysis.

## **B. Data exchange**

1. The institutions charged with the implementation of the national program of environmental monitoring are obligated to submit the data defined in their contract with the Ministry of the Environment at least quarterly, not later than the 15th day of the first month of the next quarter. They are obligated to submit the data any time the Ministry of Environment demands submission through official channels for emergency reasons.

2. Physical and legal persons under the obligation of acquiring an environmental license are obligated to submit monitoring data to the regional environmental agencies at least 4 times a year. They are also obligated to make such data available to environmental inspectors while on inspection missions with their establishments. The Academy of Sciences and the Institute for Public Health are exempt from the obligation to send their monitoring data to the regional environmental agencies.

3. Ministries involved in the national program of environmental monitoring as prescribed by this decision and the Academy of Sciences are obligated to submit to the Environmental Ministry: the annual reports on condition of the environment; respective environmental policies; information on environmental projects under implementation; and data on environmental components in various projects being carried out by institutions within their jurisdiction.

4. The Ministry of Environment keeps the inventory of polluting sources, their characteristics and sectoral distribution. The inventory of sources of pollution and their sectoral distribution is subject to regulation by a special normative act.

5. The Ministry of the Environment is obligated to report to the Council of Ministers and specializing international organizations on the environmental indicators and applied contemporary methodologies.

6. The Ministry of the Environment prepares and publishes, based on collected data from the monitoring subjects, the biannual report on the condition of the environment which is submitted to the Council of Ministers. It also complies with all governmental and international requirements related to reporting on the condition of the environment.

7. The Ministry of the Environment exchanges mutual information with the

Institute of Statistics at the beginning of each calendar year, in accordance with the stipulations of a special normative act.

8. The Ministry of Environment exchanges data with the councils for territorial regulation and with the Technical Secretariat on Waters as regards monitoring indicators of water reserves.

9. The Ministry of Environment recognizes and honors the intellectual rights of the monitoring institutions over the data they produce and submit to the Environmental Ministry under the national program of environmental monitoring.

10. The Ministry of Environment obtains the data in the context of the national program on environmental monitoring through the technical reports compiled by the responsible institutions as stipulated in this decision.

11. Environmental data are entered every three months in the relevant registers of the Environment Ministry and in its electronic database. The registers and the electronic database are accessible to the public, both national and foreign.

12. The implementing institutions of the national program of environmental monitoring must create the electronic database of environmental indicators in accordance with the requirements of this decision. These databases must be accessible to the wide public.

### **C. Miscellaneous and closing stipulations**

1. Operational expenses related to collection and processing of data on environmental indicators of the condition and impact, and expenses related to the control of accuracy of such indicators are borne by the state budget entrusted to the Ministry of Environment.

2. Monitoring expenses related to pressure indicators in the case of public owned establishments are covered by the respective Ministries.

3. Funds for environmental monitoring must represent a separate line in the budget of the Ministry of Environment and other ministries described in point C2, of the Academy of Sciences and the implementing institutions of the national monitoring program.

4. In the context of administration of its funds, the Ministry of the Environment concludes contract agreements with the responsible monitoring institutions and at its discretion with other subjects as may be necessitated by designed projects.

5. Physical and legal entities required to acquire an environmental license, are obligated to cover expenses related to environmental monitoring from their own budgets.

6. The Ministry of the Environment, line ministries, central institutions and the Academy of Sciences are hereby charged to pass relevant instructions and regulations to make this decision applicable.

7. Decision No. 541 dated 25. 09. 1995 of the Council of Ministers "On duties of the Ministries, legal and physical persons for monitoring the environment" is hereby repealed.

This decision enters into force following its publication in the Official Journal.

**PRIME MINISTER**  
**Pandeli Majko**