

On the basis of the first and second paragraphs of Article 23 of the Environmental Protection Act (Official Gazette of the RS, No. 39/06 – official consolidated text, 49/06 – ZMetD, 66/06 – Ord. US, 33/07 – ZPNáçrt, 57/08 – ZFO-1A and 70/08) issued by the Government of the Republic of Slovenia

REGULATION

on the state of surface waters

I. GENERAL PROVISIONS

Article 1

(content)

(1) This regulation is in accordance with Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 on establishing a framework for Community measures in the field of water policy (OJ L No. 327 of 22 December 2000, p. 1; hereinafter: Directive 2000/60/EC) and for the implementation of Decision no. 2455/2001/EC of the European Parliament and of the Council of 20 November 2001 on determining the list of priority substances in the field of water policy and on the amendment of Directive 2000/60/EC (OJ L No. 331 of 15/12/2001, p. 1) and the Commission's Decision of 30 October 2008 on the determination of values for classification by monitoring systems in the Member States, which are the result of the intercalibration process, in accordance with Directive 2000/60/EC of the European Parliament and of the Council (OJ L No. 332 of 10/12/2008, p. 20; hereinafter: Decision 2008/915/EC) stipulates:

- criteria for determining the state of surface waters,
- environmental quality standards for determining the chemical state and criteria and environmental quality standards for determining the ecological state of surface waters and

- types of surface water monitoring.

(2) For the chemical state of surface waters, this regulation specifies:

- chemical parameters for determining the chemical state of surface waters (hereinafter: chemical state parameters),

- environmental quality standards for parameters of the chemical state of surface waters,

- criteria for determining the chemical state of surface waters and classifying water bodies of surface waters into classes of chemical state.

(3) This regulation for the ecological status of surface waters provides:

- quality elements for determining the ecological state or ecological potential of surface waters (hereinafter: quality elements),

- metrics for evaluation with individual biological elements of the ecological state (hereinafter: metrics),

- parameters for the evaluation of individual chemical elements of quality that support the biological elements of the ecological state (hereinafter: special pollutants),

- parameters for the evaluation of individual general physico-chemical quality elements that support the biological elements of the ecological state (hereinafter: general physico-chemical parameters),

- parameters for evaluation with individual hydromorphological quality elements that support the biological elements of the ecological state,

- classes and descriptive definitions of classes of the ecological state of water bodies of surface waters and classes of ecological potential of artificial and heavily transformed water bodies,

- threshold values for individual classes of ecological status for evaluation with biological elements of ecological status,

- threshold values for individual classes of ecological status for specific pollutants,

- limit values for individual classes of ecological status for general physical-chemical parameters,

- evaluation criteria with individual elements of the ecological state,

- criteria for determining the ecological status of water bodies of surface waters and their classification into classes of ecological status.

(4) This regulation also specifies additional requirements for:

- water bodies of surface waters or their parts, where water is withdrawn for drinking water supply, and

- water bodies of surface waters or their parts in special protection areas (Natura 2000 areas) in accordance with the regulations governing nature conservation (hereinafter: special protection areas).

Article 2

(use)

(1) This regulation applies to water bodies of surface water, determined by the regulation governing the determination and classification of water bodies of surface water, or their parts or groups.

(2) The provisions of this regulation, which refer to the chemical state of surface waters, also apply to water bodies of the territorial sea.

(3) For artificial and heavily transformed water bodies, the indication of the ecological status is considered to be the indication of the ecological potential, except when this regulation provides otherwise.

Article 3

(expressions)

The terms used in this Regulation shall have the following meanings:

The 1st environmental quality standard is the concentration of an individual pollutant or group of pollutants in water, sediment or living organisms, which must not be exceeded in order to protect human health and the environment. For general physico-chemical parameters and specific pollutants, the limit value between the two classes good and moderate ecological status is considered the environmental quality standard;

2. good chemical status is the chemical status of a water body of surface water that meets the criteria from Article 8 of this Regulation;
3. priority substances are substances specified in Annex 1, which is an integral part of this regulation;
4. priority hazardous substances are substances defined as priority hazardous substances in Annex 1 of this regulation;
5. a metric indicates a measurable part or process of a biological system that changes with the magnitude of human influence;

Module 6 is a type of load whose impact on communities of aquatic organisms (biological elements of quality) is evaluated with selected metrics;

7. good ecological status is the ecological status of a water body of surface water that meets the conditions for classification into good ecological status from Annex 6, which is an integral part of this regulation.

II. CONDITION OF SURFACE WATERS

Article 4

(determining the condition of surface waters)

- (1) The state of surface waters is determined based on the results of monitoring the chemical and ecological state of water bodies of surface waters.
- (2) The state of an individual water body of surface waters is determined by the chemical or ecological state of this water body of surface waters, namely by the one that is worse.
- (3) For a water body of surface waters or a part of it that extends into an area with special requirements, suitability is also established with regard to the additional requirements from Articles 15 and 16 of this regulation.

Article 5

(criteria for good surface water status)

The condition of a water body of surface water is good if:

- has a good chemical condition,
- has a very good or good ecological status and
- an artificial or heavily transformed water body has the greatest or good ecological potential.

1. Chemical state of surface waters

Article 6

(determining the chemical state)

- (1) The chemical state of the water body of surface water is determined based on the results of the chemical analysis of surface water samples, which are obtained by monitoring the state of surface water.
- (2) The parameters of the chemical state of surface waters are specified in Annex 1 of this regulation.
- (3) Environmental quality standards for chemical state parameters are specified in Annex 2, which is an integral part of this regulation. Environmental quality standards are defined as the annual average value of the chemical state parameter in water (hereinafter: LP-OSK) and as the maximum allowed concentration of the chemical state parameter in water (hereinafter: NDK-OSK).

Article 7

(calculation of chemical state)

- (1) The chemical state of the water body of surface water is determined at the individual sampling point on the basis of:
 - calculates the annual average values of the parameters of the chemical state,
 - the maximum values of the parameters of the chemical state for those parameters for which the NDK-OSK is specified in Annex 2 of this regulation, and
 - time series of values in the sediment for those parameters for which the content in the sediment is determined in accordance with Annex 1 of this regulation.
- (2) If the monitoring results contain cases of fugitives, the maximum value of the parameters of the chemical state can be calculated using a statistical method. The statistical method used is stated in the monitoring report in accordance with the regulation governing the monitoring of surface water conditions.

Article 8

(criteria for good chemical condition)

- (1) A water body of surface water has a good chemical status if:
 - the annual average value of the chemical state parameter, calculated as the arithmetic mean of the concentrations measured in different time periods of the year, at none of the sampling sites is greater than LP-OSK, which is determined for this parameter in Annex 2 of this regulation,
 - the maximum measured value of the chemical state parameter at any of the sampling sites is not greater than the NDK-OSK, which is specified for this parameter in Annex 2 of this regulation, and
 - the time series of the values of none of the parameters of the chemical state, for which the content in the sediment is determined, has no increasing trend.
- (2) When calculating the annual average value of the chemical state parameter:

- defines the result of the analysis as half the value of the limit of quantification for this parameter, when the measured concentration of the parameter is below the limit of quantification. If the annual average value calculated in this way is lower than the limit of detection, such annual average value is marked with the term "below the limit of detection" and

- for parameters that are the total sum of a given group of substances, including relevant metabolites, decomposition products and reaction products, the values of measured concentrations that do not reach the limit of detection for an individual substance shall be defined as zero.

(3) LP-OSK and NDK-OSK from Annex 2 of this regulation are expressed as the total concentration of substances in the entire water sample, except for cadmium, lead, mercury and nickel (hereinafter: metals). For metals, LP-OSK and NDK-OSK refer to dissolved concentrations, namely the dissolved phase of a water sample obtained by filtering through a filter with a pore size of 0.45 µm or by other equivalent pretreatment.

(4) When assessing the results of monitoring the chemical status according to LP-OSK and NDK-OSK for metals, the following can be taken into account:

- natural background concentrations for metals and their compounds, if they are the cause of non-compliance with LP-OSK or NDK-OSK, and
- water hardness, pH or other parameters that can affect the bioavailability of metals.

Article 9

(poor chemical condition)

A water body of surface water has a poor chemical status if it does not meet the conditions for a good chemical status from the first paragraph of the previous article.

2. Ecological state of surface waters

Article 10

(determining the ecological state)

(1) The ecological state of the water body of surface water is established on the basis of the results of chemical and physical-chemical analyzes of surface water samples, the results of analyzes of biological samples and the results of monitoring of hydromorphological quality elements, which are obtained by monitoring the state of surface water.

(2) Quality elements for classification by ecological status are determined separately for rivers, lakes, brackish waters and coastal waters in Annex 3, which is an integral part of this regulation.

(3) The quality elements for classifying artificial and heavily transformed water bodies according to their ecological potential are the elements that are used for the type of natural surface water from the previous paragraph that is most similar to such an artificial or heavily transformed water body.

(4) The parameters and metrics for evaluation with individual quality elements and the loads to which individual quality elements are sensitive are specified in tables 1, 2 and 3 from Annex 4, which is an integral part of this regulation. The quality elements that are most sensitive to individual loads are specified in Table 4 from Annex 4 of this regulation.

Article 11

(classes of ecological status and ecological potential)

(1) Based on the results of evaluation with individual quality elements, each surface water body is classified into the following class of ecological status:

- very good,
- good,
- moderately,
- bad or
- very poor ecological condition.

(2) Based on the results of evaluation with individual quality elements, each artificial and heavily transformed water body is classified into the following class of ecological potential:

- the largest,
- good,
- moderate,
- bad or
- very poor ecological potential.

(3) Descriptive definitions of ecological status and ecological potential classes are set out in Annex 5, which is an integral part of this regulation.

Article 12

(threshold values of ecological status classes)

(1) Biological, general physico-chemical and hydromorphological elements and special pollutants must correspond to the descriptive definitions from the first to fifth point of Annex 5 of this regulation in order to be classified in an individual class of ecological status. Biological and hydromorphological elements of quality, general conditions and specific pollutants must correspond to the descriptive definitions from the sixth point of Annex 5 of this regulation in order to be classified in an individual class of ecological potential.

(2) Metrics for evaluation with individual biological elements must correspond to the limit values, which are determined for individual classes of ecological status as the ratio of ecological quality from Annex 6 of this regulation. The ratio of ecological quality is the ratio between the values of the metrics for evaluation with individual biological elements found in the water body of surface water on the basis of the monitoring referred to in Article 17 of this regulation, and the values for these metrics under reference conditions typical for the type of surface water (hereinafter: type-specific reference conditions).

(3) For each type of surface water, the ecological quality ratio scale is divided into five classes from very good to very poor ecological status. The value representing the boundary between very good and good ecological status and the value representing the boundary between good and moderate ecological status are determined in accordance with Decision 2008/915/EC.

(4) The values of special pollutants for very good and good ecological status may not exceed the limit values, which are specified for individual classes of ecological status in Annex 8, which is an integral part of this regulation. Environmental quality standards for specific pollutants are determined in accordance with the procedure from subsection 1.2.6 of Annex 4 of Directive 2000/60/EC.

(5) The values of general physico-chemical parameters for very good and good ecological status must correspond to the indicative limit values from Annex 7, which is an integral part of this regulation, and must not exceed the limit values for individual classes of ecological status according to the type description precisely determined in the methodology for the evaluation of general physico-chemical elements in accordance with the regulation governing the monitoring of surface water conditions.

(6) For a very good ecological condition, hydromorphological elements must meet the conditions in the methodology for evaluating the ecological condition with hydromorphological elements in accordance with the regulation governing the monitoring of surface water conditions.

Article 13

(evaluation with individual quality elements)

(1) Evaluation with an individual biological element of quality is carried out for an individual sampling site.

(2) The evaluation with an individual biological element of quality is carried out on the basis of the calculation of the values of the metrics from Annex 4 of this regulation using the statistical method, which is specified for each metric in the methodologies in accordance with the regulation governing the monitoring of surface water conditions.

(3) Each specific pollutant is evaluated on the basis of:

- annual average values of special pollutants from Annex 4 of this regulation, calculated as the arithmetic mean of concentrations measured at different times of the year, and

- the maximum measured values of special pollutants for which the NDK-OSK is specified in Annex 8 of this regulation.

(4) When calculating the annual average value of a special pollutant:

- defines the result of the analysis as half the value of the limit of quantification for this parameter, when the measured concentration of the parameter is below the limit of quantification. If the annual average value calculated in this way is lower than the limit of detection, such annual average value is marked with the term "below the limit of detection" and

- for parameters that are the total sum of a given group of substances, including relevant metabolites, decomposition products and reaction products, the values of measured concentrations that do not reach the limit of detection for an individual substance shall be defined as zero.

(5) If the monitoring results contain cases of fugitives, the maximum value of specific pollutants can be calculated using a statistical method. The statistical method used is stated in the monitoring report in accordance with the regulation governing the monitoring of surface water conditions.

(6) An individual general physico-chemical parameter is evaluated on the basis of a calculation using a statistical method, such as the calculation of percentiles, of the values of general physico-chemical parameters, for which the limit values of the ecological status classes are specified in Annex 7 of this regulation. The statistical method used is stated in the monitoring report in accordance with the regulation governing the monitoring of surface water conditions.

(7) The evaluation of individual hydromorphological elements that support biological elements is carried out on the basis of the calculation of the values of metrics from Annex 4 of this regulation in accordance with the methodology for individual metrics in accordance with the regulation governing the monitoring of surface water conditions.

(8) When several metrics or parameters are determined for the evaluation of an individual biological or hydromorphological quality element, the evaluation is carried out on the basis of the methodology for this quality element in accordance with the regulation governing the monitoring of surface water conditions.

(9) When evaluating the results of the monitoring of the ecological situation in relation to the annual average values of specific pollutants for metals, the following may be taken into account:

- natural background concentrations for metals and their compounds, if they are the cause of non-compliance with LP-OSK or NDK-OSK, and

- water hardness, pH or other parameters that can affect the bioavailability of metals.

Article 14

(classification into ecological status classes)

(1) The water body of surface water is classified into ecological status classes from the first paragraph of Article 11 of this regulation based on the results of evaluations with individual quality elements, namely according to the worst value of the results of evaluation with biological quality elements, general physico-chemical elements and special pollutants.

(2) When, in accordance with the previous paragraph, the water body of surface water is classified in the class of very good ecological status, the classification is additionally checked with regard to the adequacy of the hydromorphological elements of the ecological status in accordance with the sixth paragraph of Article 12 of this regulation.

(3) When one quality element is sensitive to several types of loads, the water body shall be ranked according to the worst value of the evaluation results with this quality element in relation to different loads.

(4) When several different quality elements are sensitive to one type of load, the water body is classified according to the value of the evaluation results with that quality element which, in accordance with the fourth paragraph of Article 10 of this Regulation, is the most sensitive to this load.

(5) The method of classifying water bodies of surface waters into classes of ecological status according to biological elements of quality is shown schematically in Annex 9, which is an integral part of this regulation.

3. Additional requirements for operational monitoring of surface water bodies in areas with special requirements

Article 15

(surface water taken for drinking water supply)

(1) The operational monitoring program shall include water bodies or their parts where surface water is withdrawn for drinking water supply and on average they provide more than 100 m³ of water per day.

(2) The water body or part of the water body of surface water from the previous paragraph meets the additional requirements for surface water taken for drinking water supply, if:

- has a good chemical status in accordance with Article 8 of this regulation,
- the monitoring results for any of the substances that are discharged into surface water in significant quantities and could affect the state of this water body and are monitored in accordance with the regulation governing drinking water for the purpose of determining the health suitability of drinking water, do not show any deterioration in to the results of the previous year,
- the monitoring results for the substances from the previous paragraph show that the water will meet the requirements of the regulation governing drinking water after the treatment process used.

(3) Compliance with the additional requirements from the previous paragraph is established on the basis of:

- monitoring of the chemical state and
- monitoring of the parameters from the second indent of the previous paragraph at sampling points determined on water bodies of surface water or their parts, where surface water is withdrawn for drinking water supply.

Article 16

(surface waters in special protection areas)

(1) Water bodies of surface waters or their parts located in special protection areas shall be included in the operational monitoring program when, based on the analysis of the impacts of human activities on the state of surface waters or the results of supervisory monitoring, it is estimated that they will not achieve their environmental goals and requirements regarding surface water in accordance with the regulation governing special protection areas (Natura 2000 areas).

(2) The water body or part of the water body of surface water from the previous paragraph meets the requirements for surface water in special protection areas, if:

- has a good chemical and ecological status and
- meets the requirements regarding the quality of surface water in accordance with the regulation governing special protection areas (Natura 2000 areas).

(3) Adequacy from the previous paragraph is established on the basis of operational monitoring of the chemical state and ecological state of surface waters.

III. SURFACE WATER STATE MONITORING

Article 17

(types, content and method of monitoring the state of surface waters)

(1) The state ensures the monitoring of the state of surface waters in order to determine the chemical and ecological state of surface waters and their adequacy in relation to the additional requirements from Articles 15 and 16 of this regulation.

(2) Monitoring of the state of surface waters is supervisory and operational monitoring, which includes monitoring of the chemical and ecological state.

(3) Monitoring the state of surface waters also includes investigative monitoring and operational monitoring in areas with special requirements from Articles 15 and 16 of this regulation.

(4) The method of conducting monitoring in accordance with this regulation, the content of the surface water monitoring program, the method and format of reporting on the results of surface water monitoring, and the method and format of displaying the chemical and ecological status of surface water are regulated in more detail by the regulation governing the monitoring of surface water .

IV. EXCESSIVE LOADING OF WATER BODIES OF SURFACE WATERS

Article 18

(overloaded water body)

(1) A body of water or a group of water bodies of surface water is excessively loaded if:

- has a poor chemical condition,
- is classified as moderate, poor or very poor ecological status or
- does not meet the additional requirements from Article 15 or 16 of this regulation.

(2) For the water body or group of water bodies from the previous paragraph, measures must be started in accordance with the regulations governing the protection of the environment and water.

(3) Regardless of the previous paragraph, the measures do not have to be implemented if:

- the exceedance of environmental quality standards originates from a source in another country and due to such cross-border pollution it is not possible to implement effective measures to achieve environmental quality standards,
- available coordination mechanisms have been used in the relevant international river basin or river basin and
- exceptions were made in the definition of environmental goals in accordance with the regulation governing the detailed content and method of preparation of the water management plan.

V. REPORTING TO THE EUROPEAN COMMISSION

Article 19

(report)

(1) The Ministry responsible for environmental protection (hereinafter referred to as the Ministry) sends a report on the state of surface waters to the European Commission as an integral part of the water management plan in accordance with the regulation governing the detailed content and method of preparation of the water management plan.

(2) In the cases from the second paragraph of the previous article, the ministry must include in the report from the previous paragraph the available information and a summary of measures related to cross-border pollution.

VI. TRANSITIONAL AND FINAL PROVISIONS

Article 20

(transitional provision)

(1) The provisions of the second indent of the first paragraph of Article 7 of this regulation and the second indent of the first paragraph of Article 8 of this regulation shall be applied in the evaluation of the monitoring results for the year 2010.

(2) Until December 31, 2010, the value of 10 µg/L shall be used for the parameter lead and its compounds for inland surface waters and for sea and brackish waters instead of LP-OSK from Annex 2 of this regulation.

(3) Until December 31, 2010, the value of 25 mg/L shall be used for the general physico-chemical parameter of the ecological state of nitrate for rivers instead of the limit values for good ecological state from point 1 of annex 7 of this regulation.

Article 21

(expiration)

As of the date of entry into force of this Regulation, the following shall cease to apply:

- Regulation on the chemical state of surface waters (Official Gazette of the Republic of Slovenia, no. 11/02 and 41/04 – ZVO-1),
- Regulation on the quality of surface water taken for drinking water supply (Official Gazette of the Republic of Slovenia, no. 125/00, 4/01 - apr., 52/02 and 41/04 - ZVO-1), and
- Decree on the first classification of surface waters that are withdrawn for drinking water supply (Official Gazette of the RS, No. 56/02).

Article 22

(start of force)

This regulation enters into force on the fifteenth day after its publication in the Official Gazette of the Republic of Slovenia.

No. 00719-3/2009/4

Ljubljana, on February 12, 2009

EVA 2008-2511-0173

Government of the Republic of Slovenia

Borut Pahor Ir
President

[Annex 1: Parameters of the chemical state of surface waters](#)

[Annex 2: Environmental quality standards for chemical state parameters \(osk\)](#)

[Annex 3: Quality elements of the ecological state](#)

[Annex 4: Parameters and metrics of ecological status](#)

[Annex 5: Descriptive definitions of ecological status classes](#)

[Annex 6: Limit values of classes of ecological status](#)

[Annex 7: Limit values of ecological status classes for general physico-chemical parameters](#)

[Annex 8: Limit values of ecological status classes for special pollutants](#)

[Annex 9: Schematic representation of the classification of water bodies into classes of ecological status](#)