



INZRAK

Enhanced environmental protection inspection for efficient control of air quality monitoring and of all entities under obligation within system of greenhouse gas emission allowance trading, in order to achieve better quality of air in Republic of Croatia



REPUBLIKA HRVATSKA

MINISTARSTVO ZAŠTITE
OKOLIŠA I ENERGETIKE



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FINANCIARANJE I UGOVARANJE



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11. INSPECTION MONITORING

11.2 INSPECTION OF TESTING LABORATORIES

Legal basis	Air Protection Act, articles 52., 54., 55. – measurement method, licence for AQM 129., 131., 133., 137., 138., 139. - inspection 145.,146. – misdemeanor provisions
Monitored person	Legal person Laboratory for AQM

11.2 INSPECTION OF TESTING LABORATORIES

Regulations	<p>Ordinance on air quality monitoring, articles 11.to 15. – measurement method, data quality</p> <p>21., 22. - reporting, annual report</p> <p>Regulation on levels of air pollutants, articles 5., 7., 8., 13. – interpretation of annual report</p>
Monitored person	Legal person LABORATORY FOR AQM

11.2 INSPECTION OF TESTING LABORATORIES

Other documents	<ul style="list-style-type: none">- Decision on Environmental Impact Assessment- Decision on environmental acceptability of the project- Decision on the unified environmental conditions- Decision on environmental permit
Monitored person	Legal person LABORATORY FOR AQM

Monitoring procedure of regulations implementation by phases

A. Inspection preparation- steps

1. From a monitored testing laboratory request their Decision on issuing a permit for conducting air quality monitoring (permits) issued by the Ministry of Environmental Protection and Energy (Articles 54 and 55 of Environmental Protection Act), metadata from all the metering points at which they are currently performing the activity and a copy of all the most recent annual air quality monitoring reports that they have made.
2. Check whether a permit is valid for measuring all pollutants including those for which the permit is issued for one year (based on the opinion of the reference laboratories).

Monitoring procedure of regulations implementation by phases

A. Inspection preparation- steps

3. Compare a permit with the metering range of the current metering points and metering points from the most recent annual reports. (The measuring ranges must be fully covered by the permit).
4. From a monitored testing laboratory, request a list of measuring equipment to carry out air quality measurements including manufacturer, type and model, year of manufacture and the number of certificates on approved equipment testing (type approval) referred to in Article 15 of the Ordinance.
5. Verify that all instrument types have a certificate of approved equipment testing (type approval).

Monitoring procedure of regulations implementation by phases

B. Inspection implementation- steps

1.

By random selection, review several annual reports on air quality monitoring and adjust further review steps to the year for which the report was issued or include in monitoring the most recent reports from A1.

2.

Establish the identification (class / register number), the validity of the permit (the date until it is valid for each pollutant) and the pollutants for which it was issued.

3.

By using the conclusions obtained in the preparation phase in the form of findings, record the coverage of the metering range by a permit and whether the annual reports have already been issued for that metering point.

(Example: Table 1)

Monitoring procedure of regulations implementation by phases

B. Inspection implementation- steps

4.

Verify whether the monitored testing laboratory meets all the requirements of Article 55. of Environmental Protection Act by checking:

- an extract from the court register
- employee documentation
- premises
- measuring equipment
- the testing methods it uses
 - certificate of accreditation of the test laboratory according to HRN EN ISO / IEC 17025 and its annex
 - certificate of the reference laboratory if it holds one

Monitoring procedure of regulations implementation by phases

B. Inspection implementation- steps

5.

By using the conclusions obtained in the preparation phase in the form of findings, record whether all the types of instruments used by the monitored testing laboratory have a valid type approval in performing the activity.

6.

By random selection, request several calibration certificates that are used and determine their validity by checking:

- date of expiry of the certificate (Article 14 of the AQM Bill)
- measuring traceability up to standard traceable **SI** units by calibration in an accredited calibration laboratory or otherwise (Article 14 of the AQM Bill)
- If they successfully passed performance tests from Art. 14. PPKZ.

Monitoring procedure of regulations implementation by phases

B. Inspection implementation- steps

7.

Check whether continuous data transmission is ensured for pollutants whose air concentration is determined by automatic measuring instruments via the computer network in the air quality information system operated by the Agency <http://iszz.azo.hr/iskzl/>

8.

Check if air quality monitoring reports include data on:

- legal person - testing laboratory or a reference laboratory performing air quality monitoring
- metering points for sampling and measurement range
- time and method of sampling

Monitoring procedure of regulations implementation by phases

B. Inspection implementation- steps

8.

- the measurement methods and the measuring equipment used
- ensuring the quality of data according to the requirements of the harmonized standards for testing and calibration laboratories
- other quality assurance data, such as ensuring continuity, participation in comparative measurements, deviations from the prescribed methodology and the reasons for that.
- the level of air pollution and dates and times of air pollution exceeding the threshold values, target values and long-term objectives for ground-level ozone
- exceedance of notification thresholds and warning thresholds, as well as dates and times

Monitoring procedure of regulations implementation by phases

B. Inspection implementation- steps

8.

- calculated statistical air pollution parameters for pollutants according to the standards set out in Annex 8. of the Ordinance - arithmetic mean, median, relevant percentile and maximum value, data coverage- percentage of total possible number of data and number of data for relevant averaging times
- the average annual ozone precursor, polycyclic aromatic hydrocarbons and chemical composition of the PM_{2,5} particulate matter
- the level of air pollution in relation to the upper and lower threshold of estimate
- the criteria applied when assessing air pollution
- causes of exceeding the threshold value, target values and long-term goal for ground-level ozone.

Monitoring procedure of regulations implementation by phases

B. Inspection implementation- steps

9.

Verify if the test laboratory has submitted an annual report to the client (local authorities, units of regional self-government, polluter) by March 31.

Monitoring procedure of regulations implementation by phases

C. Procedure after inspection has been completed - steps

1.

If, in step B2, the invalidity of a license or the invalidity of a permit for one or more pollutants, a decision shall be issued to prohibit the performance of the AOM activity or the measurement of pollutants for which the permit is invalid (Article 138 of Environmental Protection Act) and criminal proceedings shall be initiated according to Article 146. of Environmental Protection Act.

2.

If step B3 established that there is no permit for measurement scopes for one or more pollutants, a decision shall be issued to prohibit for all measurements of pollutants not covered by a permit to measure those pollutants (Article 138 of the Environmental Protection Act) and criminal proceedings shall be initiated in accordance with Art. 146 of the Environmental Protection Act.

Monitoring procedure of regulations implementation by phases

C. Procedure after inspection has been completed - steps

3.

If Step B4 established the non-fulfillment of the conditions (Article 55 of the Environmental Protection Act) and the monitored testing laboratory has not informed the Ministry of Environment and Energy within 8 days, the inspector will issue a decision prohibiting it to perform the activity of AQM until the requirements are met (Article 138 of the Environmental Protection Act). If the monitored testing laboratory does not act on the decision, the inspector will propose to the Ministry of Environment and Energy to revoke the permit and initiate the criminal proceedings under Article 146 of the Environmental Protection Act.

Monitoring procedure of regulations implementation by phases

C. Procedure after inspection has been completed - steps

4.

If Step B5 established that some type of instrument has no valid type approval and does not fall under the provision of Paragraph 5 of Article 11 of the AQM Bill, a decision shall be issued to prohibit the measurements with that type of instrument. (Art. 138 of the Environmental Protection Act). If the monitored testing laboratory does not act on the decision, the inspector will propose to the Ministry of Environment and Energy to revoke the permit and initiate the criminal proceedings under Article 146 of the Environmental Protection Act.

Monitoring procedure of regulations implementation by phases

C. Procedure after inspection has been completed - steps

5.

If step B6 established irregularities (none or invalid calibration and test certificates), a decision shall be issued to prohibit the measurement of these pollutants and set a deadline for fulfilling the provisions (Article 131 of the Environmental Protection Act).

If the monitored testing laboratory does not remove the irregularities within the prescribed deadline, the inspector will issue a decision ordering the removal of the irregularities and initiate the criminal proceedings under Article 146 of the Environmental Protection Act.

6.

If Steps B7 and B8 identify deficiencies and irregularities in the preparation of the report or a secured continuous data transfer is not provided to the air quality information system operated by the Agency, the inspector indicates to the testing laboratory the deficiencies and irregularities and determines the deadline for their removal, which is entered in the record. (Article 131 paragraph 2 of the Environmental Protection Act).

Procedure after inspection has been completed - steps

C. Procedure after inspection has been completed - steps

- 6.** If the testing laboratory does not send a corrected report within the set deadline or does not provide data transfer to the Agency, the inspector issues a decision and initiates a misdemeanour proceeding pursuant to Article 146 of the Environmental Protection Act.

Procedure after inspection has been completed - steps

C. Procedure after inspection has been completed - steps

7.

If subsequent monitoring established that the supervised test laboratory is not acting according to the decision, the inspector will propose to the Ministry of the Environment and Energy to revoke the license. (Article 138 of the Environmental Protection Act).

8.

For the purpose of ensuring the implementation of the measure from the decision, the inspector may seal workspaces and devices or otherwise prevent further unlawful conduct of air quality monitoring activities. (Article 140 of the Environmental Protection Act).

Inspection procedure of regulations implementation by phases

C. Procedure after inspection has been completed - steps

9.

If step B9 established that the testing laboratory did not submit the annual report for the previous year (March 31 passed), the inspector points out irregularity to the testing laboratory and sets a deadline for submitting the report, which is entered in the record. (Article 131 paragraph 2 of the Environmental Protection Act).

If the testing laboratory does not send the report within the given deadline, the inspector orders a report to be sent by decision and initiates the misdemeanor procedure pursuant to Article 146 of the Environmental Protection Act.

Inspection procedure of regulations implementation by phases

C. Procedure after inspection has been completed - steps

10.

If inspection established that the Environmental Protection Act was violated and / or a regulation passed based on it, the Ministry shall submit to the competent authority an indictment or a criminal charge for misdemeanor or criminal offense.

If inspection established a breach of this Act and / or a regulation passed on it, the inspector has the right and obligation to take other measures and perform other acts for which he is authorized pursuant to this Act and a special regulation (Article 144).

Table1. Example of licence comparison with measurement ranges

At station	Measurement range	Nisu pokriveni dozvolom	Izdano god. izvješće
ZA0105	CO, SO ₂ , C ₆ H ₆ , H ₂ S PM ₁₀ (aut)	B, PM ₁₀ (aut)	YES for 2015 and 2016
ZA0106	CO, SO ₂ , NO _x , H ₂ S, PM ₁₀ (aut)	PM ₁₀ (aut)	NO
ZA0107	CO, SO ₂ , NO _x , H ₂ S, NH ₃	PM ₁₀ (aut)	YES for 2012 to 2016

Deadlines for faults removal

For the purpose of orientation, table 2 contains real deadlines for removal of faults identified in C1 to C8.

Table 1. Realistic deadlines for removal of identified faults and irregularities

No.	Description of irregularity	Realistic removal deadline
B6	the equipment used for measurements in the year of the report is not traceable	the irregularity can not be eliminated - measurements made with such equipment are not valid
B6	the equipment currently used for measurements is not traceable	15-30 days depending on technical status of the equipment
B7	no continuous data transmission is provided into information system of quality operated by the Agency	15 days if IT equipment is appropriate

Table 1. Realistic deadlines for removal of identified faults and irregularities

No.	Description of irregularity	Realistic removal deadline
B8	annual report on AQM is not written in accordance with the regulations	1-5 days
B9	annual report on AQM is not sent in accordance with the regulations	5 days are enough to write a report unless it's a very large network



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