

200/1999  
DECREE  
of the Ministry of the Environment of the Slovak Republic  
of 20 July 1999  
on requirements onkeeping sources of pollution operating records  
and on extent of other data that  
operators of sources of pollution are obliged to provide  
to the air protection authority

The Ministry of the Environment of the Slovak Republic as in accordance with Article 17, paragraph (a) of Act of the Slovak National Council No. 134/1992 Zb., on state administration in air protection, as amended by Act No.148/1994 Z.z. of the National Council of the Slovak Republic, establishes as follows.

Article 1

This Decree shall apply to operators of

- a) large sources of pollution, <sup>1)</sup>
  - b) medium sources of pollution, <sup>2)</sup> and
  - c) small sources of pollution, <sup>3)</sup>
- if they are legal persons or natural persons entitled to undertaking business. <sup>4)</sup>

Article 2

(1) The extent of operating records on sources of pollution (hereinafter referred to as "operating records") follows the documents <sup>5)</sup>, and prerequisites as imposed within the permit issued by the air protection authority. <sup>6)</sup>

(2) Operating records shall contain mainly

- a) Name of source of pollution, and name of its part that the operating records apply to;
- b) Operating parameters data, data on organisation measures to ensure air protection as well as information on compliance with obligations as implied by legal provisions to air protection;
- c) Data on failures and emergency conditions of the source of pollution; <sup>7)</sup>
- d) Data on remedying failures and emergency condition of the source of pollution (Art. 3);
- e) Data needed to process a summary of selected data from operating records, and other information according to Article 4, for database of the information system of sources of pollution and their emissions as well as their impact to the atmosphere.

(3) Data on operating parameters figures according to paragraph 2 (b) above, are values of physical-chemical variables of technology, raw materials, and fuels that

- a) influence quantity and quality composition of waste gases;
- b) are limited to operation of polluting source according to documentation, and prerequisites imposed within the permit of the air protection authority,
- c) can be expressed by numeric value and respective unit or otherwise.

(4) The data on organisational measures as in accordance with the paragraph 2(b) above, are those of compliance with requirements to control and maintenance of polluting source operating in terms of the documents and prerequisites as imposed within the permit of the air protection authority.

(5) The data on operating records shall be provided to the air protection authority <sup>8)</sup> on request. <sup>9)</sup>

(6) The operating records in written or electronic form shall be kept in a manner to be protected from unauthorized intervention and modification of data therein.

(7) The operating records for each calendar year shall be filed for a five years period from the end of the respective year.

Article 3

(1) Should the emergency condition on source of pollution arise, the operator of large source of pollution and the operator of medium source of pollution shall notify the air protection authority immediately <sup>10)</sup> of data as follows:

- a) Name of polluting source and its parts, determination of site, time, and circumstances under which the emergency condition arose and, if possible, also the supposed duration of such emergency condition,
- b) Kind of polluting substance, and assumed quantity being released into the atmosphere,
- c) Available data to estimate impacts of emergency condition to human health and environment,

d) Measures taken for the event of emergency, and steps focused on relieving medium and long term effects to atmosphere by the emergency condition.

(2) The operator of large source of pollution and the operator of medium source of pollution shall work out a detailed report within 14 days from notification of emergency condition, covering issues as follows.

a) Name of the polluting source and parts thereof involved in emergency condition,

b) Updated information as according to above paragraph 1,

c) Time data of formation and duration of the emergency condition,

d) Kind and quantity of pollutants that have been released to the atmosphere compared to the quantities of pollutants released before the emergency condition arose,

e) Cause of the emergency condition,

f) Measures focused on precautions to prevent alike emergency condition arise repeated, and

g) Time information, when the emergency condition was notified.

(3) The operator of large source of pollution, and the operator of medium source of pollution shall provide the air protection authority <sup>10)</sup>, if so requested, with additional data on development and remedy of emergency condition, and information of immediate jeopardizing or declining of air quality.

#### Article 4

(1) Operators of large sources of pollution and operators of medium sources of pollution shall work out Summary of selected data from operating records and other data in accordance with Annex 1 hereto, on printed forms or in prescribed electronic form, and submit them to the District Office by 15 February of the following year.

(2) Operators of large sources of pollution shall work out a file of engineering-operational parameters, and engineering-organisational measures to ensure air protection, including measures to moderate development and remedy results of emergency situations <sup>11)</sup> (hereinafter referred to as "File"), as in accordance with the Annex 2.

#### Article 5

(1) Operators of those sources of pollution, that were put in operation by 31 December 1999, shall bring their operating records in compliance with this Decree from 1 January 2000.

(2) Operators of sources of pollution shall submit the data according to Article 4, paragraph 1 for the first time by 15 February 2001.

(3) Operators of large sources of pollution shall bring the files, as under Article 4, paragraph 2 above, in compliance with this Decree by 31 December 2000 at the latest.

(4) Operators of new large sources of pollution to be put in operation after this Decree enters in force, shall work out the File in accordance with the Annex 2, along with putting the polluting source in operation, however, within one year period at the latest from the date the polluting source was put in operation.

#### Article 6

This Decree shall enter into force on 1 September 1999.

László Miklós, man. sign.

<sup>1)</sup> Article 3, paragraph 2(a) of, Act No. 309/1991 Zb., on protection from air polluting substances (Air protection act) as amended by Act No. 218/1992 Zb. and the Act of the National Council of the Slovak Republic No. 148/1994 Z.z.

<sup>2)</sup> Article 3, paragraph 2(b), Act No. 309/1991 Zb.

<sup>3)</sup> Article 3, paragraph 2(c), Act No. 309/1991 Zb.

<sup>4)</sup> Article 2, Commercial Code.

<sup>5)</sup> Article 2, paragraph 3, Regulation of the Government of the Slovak Republic No. 92/1996 Z.z., to effectuate Act No. 309/1991 Zb. on protection from air polluting substances (Air protection act) as amended by later provisions.

<sup>6)</sup> Article 11, paragraph 1, Act No. 309/1991 Zb., on protection from air polluting substances (Air protection act) as amended by Act of the National Council of the Slovak Republic No. 148/1994 Z.z.

<sup>7)</sup> Article 2, paragraph 1(d), Decree of the Ministry of the Environment of the Slovak Republic, No. 41/1997 Z.z. on assessing quantities of emitted polluting substances and adhering to set up pollution limits.

<sup>8)</sup> Article 1, Act of the Slovak National Council No. 134/1992 Zb. on state administration in air protection.

<sup>9)</sup> Article 7, paragraph 1(e), Act No. 309/1991 Zb.

<sup>10)</sup> Articles 3 and 5, Act of the Slovak National Council No. 134/1992 Zb. on state administration in air protection as amended by the Act of the National Council of the Slovak Republic No. 222/1996 Z.z. on organization of local government and on amendments to certain acts, and the Act No. 393/1998 Z.z.

<sup>11)</sup> Article 7, paragraph 2, Act no. 309/1991 Zb.

\*\*\*\*\* Annex 1 to the Decree No. 200/1999 Z.z. \*\*\*\*\*  
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Summary of selected data from operating records, and other information to be submitted by operators of large sources of pollution and medium sources of pollution

#### A. BASIC ANNUAL DATA

##### 1. Operator of polluting source - annual data on summarised emissions, and pollution charges

Name of polluting source operator.

Operator address (Street, Place, ZIP-Code, Telephone No., Facsimile No., E-mail).

Identification number of polluting Operator.

Code of Operators main activity in accordance with the Register of the Statistical Office of the Slovak Republic.

Bank account No. of the charge payer (Operator).

Sortcode of the payer's bank as in accordance with the Register of the National Bank of Slovakia.

Variable symbol of due charge payment, as assigned to the Operator by Official of District Office.

Total annual quantity of individual basic polluting substances released (PM, SO<sub>2</sub>, NO<sub>x</sub> expressed as NO<sub>2</sub>, CO, gaseous organic substances expressed as total carbon "C").

Total annual quantity of other polluting substances, as according to pollution charge classes.

Number of large source of pollution and medium sources of pollution of the Operator across District of concern.

Year of release of polluting substances to the atmosphere.

Total charge rounded down to whole SKK 100.

Code of the Region as according to acting District Office.

Code of the District as according to acting District Office.

##### 2. Source of pollution - annual data on summary emissions, pollution charges, energy production and consumption

Name and place of source of pollution (Number of cadastral area).

Reference number of polluting source in the district, as assigned by the District Office.

Total annual production, internal consumption, and external supply of electric and heating energy (only power resources that produce energy to external supply indicate this).

Total annual quantity of individual basic polluting substances, and other polluting substances released by the source of pollution, categorized according to charge categories 1-4.

Total annual quantity of individual basic polluting substances, and other polluting substances released by the source of pollution, categorized according to charge categories 1-4, and assigned to class A, under compliance with assigned emission limit (Charge mode D).

Total annual quantity of individual basic polluting substances, and other polluting substances released by the source of pollution, categorized according to charge categories 1-4, and assigned to class B (Charge mode B).

Total annual quantity of individual basic polluting substances, and other polluting substances released by the source of pollution, categorized according to charge categories 1-4 under non data of compliance with the prescribed emission limits (Charge mode N).

Total annual quantity of individual basic polluting substances, and other polluting substances released by the source of pollution, categorized according to charge categories 1-4, under violation of emission limits (Charge mode P).

Total annual quantity of individual basic polluting substances, and other polluting substances released by the source of pollution, categorized according to charge categories 1-4, exceeding the emission quota allowed (Charge mode Q).

Annual emission quota for individual basic polluting substances and annual emission quota for other polluting substances categorized according to charge categories 1-4.

Annual charge for total quantity of individual basic polluting substances, and other polluting substances released by the source of pollution, categorized according to charge categories 1-4, in SKK.

Names of individual polluting substances, for which no emission limits are set up, and hence no charge imposed.

Total annual quantity of individual polluting substances released, there are no emission limits set up for, and hence no charge paid.

Annual charge total paid for all released polluting substances, rounded down to whole SKK  
100.

3. Parts of the polluting source combusting fuels - devices, annual emission data, and input data to computing the charges

Number of device according to Data file, Part 8.

Character of operating condition of the technology.<sup>1)</sup>

Type of grid.

Number of operating hours during charge period.

Individual types of fuels combusted according to Data file, Part 5, and annual consumption of them (in Tones or thousands m<sup>3</sup>).

Heat produced (GJ/hr.).

Reference oxygen.<sup>2)</sup>

Average specific oxygen concentration in waste gas during charge mode period - operating condition; ascertaining method by continuous or snap sample measurement.

Total volume amount of flue gases during charge mode period - operating condition; ascertaining method by continuous measurement, or computation.

Stack/exhaust number, according to Data file, Part 7.

Code of polluting substance as according to Register.

Charge mode (D, P, B, N, and Q).<sup>3)</sup>

Method to determining quantity amounts of polluting substance in question.<sup>4)</sup>

Amount of polluting substance released during the period of charge mode - operating condition.

Average mass flow rate of polluting substances during the period of charge mode - operating condition, ascertaining by either continuous or snap sample measurement.

General emission factor or coefficient of general emission correlation as according to the Journal of Ministry.

Individual emission factor or emission correlation factor as ascertained by snap sample measurement.

Other emission factor or emission correlation factor based on qualified analysis.

Measuring unit of emission factor.

Average mass concentration of polluting substance during the period of charge mode - operating condition; ascertaining by either continuous or snap sample measurement.

Equation used to compute amount of polluting substance.

Equation used to compute volume of flue gases when not measured continuously.

Total efficiency of separating equipment.

Parameter of reference variable, and its unit of measure.

Average emission degree of polluting substance during the period of charge mode - operating condition; ascertaining by either continuous or snap sample measurement.

Identification data of so authorised person <sup>5)</sup> who performed measurements.

Date of snap sample measurement.

Year in which the snap sampling measurement must be repeated.

4. Technological parts of polluting source (including area and fugitive emissions) - annual data on emissions, and conditions of charge amount computation.

Number of part of source of pollution, according to Data file, Part 9.

Character of operating condition of the technology.<sup>1)</sup>

Kind, amounts, parameters of particular reference variables (product, batch, raw material, heat input, m<sup>2</sup> of area, etc.), and units of measure thereof.

Reference oxygen. <sup>2)</sup>

Average volume oxygen concentration in waste gas during period of charge payment mode or operating condition; ascertaining by either continuous or snap sample measurement.  
Specific volume of waste gas as ascertained by snap sample measurement as used to computing waste gases amounts.  
Total amount of waste gas during period of charge mode - operating condition; ascertaining by either continuous or snap sample measurement or computation.  
Equation used to compute volume of waste gas when not measured continuously.  
Number of operating hours during charge period.  
Code of polluting substance according to Register.  
Charge mode (D, P, B, N, and Q).<sup>3)</sup>  
Amount of polluting substance released during the period of charge mode (operating condition).  
Method to determine quantity of polluting substance in question.<sup>4)</sup>  
Identification data of so authorised person <sup>5)</sup> who performed measurement .  
Date of snap sample measurement.  
Year in which snap sample measurement must be repeated.  
Average mass flow of polluting substance during the period of charge mode - operating condition; ascertaining by either continuous or snap sample measurement.  
General emission factor for concrete technology in question as according to Journal of Ministry (Data file, Part 9).  
Individual emission factor or emission correlation factor as ascertained by snap sample measurement (clear correlation).  
Other emission factor or coefficient based on qualified analysis.  
Cumulative coefficient of general emission correlation for a concrete technology in question as according to Journal of Ministry (Data file, Part 9).  
Average mass concentration during the period of charge payment mode - operating condition; ascertaining by either continuous or snap sample measurement.  
Equation used to compute amount of polluting substance.  
Resultant efficiency of separating equipment.  
Average emission degree of polluting substance during the period of charge mode - operating condition; ascertaining by either continuous or snap sample measurement.

## 5. Fuels and other combusted materials - annual data on average quality and parameters

Fuel or combusted material for computation mode as according to Data file, Parts 3 and 4.  
Internal reference number of fuel in frame of one fuel type if computing emissions of different compositions of the same type.  
Consumption of fuel or combusted material, and unit of measure thereof.  
Heating value of fuel or waste (GJ/Tone, GJ/thousands m<sup>3</sup>).  
Water content in %, in solid fuels and waste.  
Ash content in %, in dry matter of solid fuels or waste.  
Sulphur content in %, in fuel oils, dry matter of solid fuels, and waste.  
Chlorine content in materials and waste.  
Fluorine content in materials and waste.  
Mercury content in materials or waste.  
Total content of other heavy metals in materials or waste.  
Content of persistent organic matters in waste.  
Other matters contained.  
Data of the file A shall be submitted every year using printed forms or electronic media.  
Content of printed forms with detailed comments and instruction for filling in shall be published in the Journal of the Ministry of the Environment of the Slovak Republic.

## B. BASIC SNAP SAMPLE DATA

### 6. Essential data on construction and parameters of source of pollution

Identification number of the operator of polluting source.  
 Reference number of polluting source in the District as assigned by the District Office.  
 Name of source according to documentation.  
 Site of source (address, number of cadastral area).  
 Construction of pollution source.  
 Itemising of pollution sources in terms of statistics.  
 Category in terms of "establishment of source" <sup>6)</sup> (new source or existing source).  
 Category "size" of source. <sup>2)</sup>  
 Source category number - three digit code <sup>7)</sup> distinguishing between existing or new sources.  
 Summary rated thermal output according to documentation, in MW<sub>t</sub>.  
 Summary rated electric output according to documentation, in MW<sub>e</sub>.  
 Unit of capacity of technological source of pollution.  
 Output or capacity relating to main product (e.g. manufactured article, processed material) of the technological source of pollution.  
 Number of devices for combusting fuels according to Data file, Part 3.  
 Number of technological units according to Data file, Part 4.  
 Number of spot places emitting pollution substances especially such as stacks, exhausts, and other technological outlets.  
 Number of "area" places emitting polluting substances.  
 Fugitive emissions occurred.  
 Number of facilities and parts thereof, to which special emission limits apply. <sup>8)</sup>  
 Number of installed monitoring systems.  
 Number of places where snap sample measurements were performed. <sup>4)</sup>  
 Relation between emission factor and technology.  
 Shift-work, if any (1, 2, 3 shift operation).  
 Working time fund as according to documentation.  
 Year of putting into operation (Operation permit).  
 Category according to IPCC.  
 Category according to CORINAIR.

7. Places of release and leakage of polluting substances - essential data on stacks, exhausts, and defined areas where from polluting substances are emitted

Reference number of polluting source within cadastral area, as assigned by the District Office.  
 Register number of site where polluting substance is released from.  
 Name of site, and type of emitting device (such as stack, exhaust, area, fugitive emission).  
 Area of "emission area" according to documentation.  
 Height of outlet above level of 0,0, in meters.  
 Outlet diameter of stack, exhaust, orifice.  
 Geographical width and length (X, and Y coordinates of emission place, or those of its centre if concerning spread, and fugitive emissions).  
 Altitude (of stack base, or pavement).

8. Energetic parts of air polluting sources - basic data on devices (boiler, turbine, piston combustion engine, process relating heating, equipment to combust fuels with direct contact between flue gasses and heat transfer fluid)

Identification number of device - identical devices.  
 Name of device - part of polluting source, which determined emission factor applies to.  
 Year of putting device into service.  
 Working time fund as according to documentation.  
 Types of boilers, turbines, and engines according to fuel, type of grid, or output - setting up general emission factors.  
 Character of device.  
 Number of equal devices.  
 Type of combustion (single fuel system or multi-fuel system).  
 Identification of the place where polluting substances are released from.

Manufacturer of device.  
Rated thermal output as according to particular fuels.  
Efficiency as to particular fuels, according to documentation.  
Specific consumption of particular fuels to produce electric power, as according to documentation.  
Specific consumption of particular fuels to produce heat, as according to documentation.  
Specific volume of flue gases from turbine for gaseous and liquid fuels (at 15 %-vol. O<sub>2</sub>).  
Determined emission limits. <sup>2)</sup>

9. Technological parts of source of pollution - basic data on technological lines, including combustion with direct contact between flue gases and heat transfer fluid, accumulators, stores, and activities.

Number of technological part, according to Data file, Part 4, and number of identical parts.  
Character of process - continuous, batchwise, discontinuous.  
Emission character - stable, unstable, intermittent.  
Emission correlation - parametric, non parametric according to correlation of emission factor with the engineering operational conditions.  
Site where from polluting substances are released, according to Data file, Part 7.  
Name of main production equipment.  
Name of technological part, as according to documentation; type and identification thereof, as in accordance with a separate provision. <sup>9)</sup>  
Manufacturer of technological part.  
Year of putting technological part into service.  
Number of operating hours.  
Reference to the Table concerning general emission factor, or number of the item for which the general emission correlation applies, as referred to in the Journal of Ministry (year of Journal of Ministry, Number, number of table or item).  
Name of performance unit such as capacity, activity, product, storage capacity for accumulators, and annual pumping turnover, landfill capacity, area.  
Specific unit for output, capacity, process performance.  
Rated output in specific units.  
Structure of the part of polluting source - name of technological operations, for which partial emission factors are ascertained, or separate calculations be made if general emission factors are not published (issued).  
Reference to emission factors as according to Register of general emission factors for technologies in accordance with technological activities incorporated by the respective part of polluting source in question (names thereof need not indicating).  
Determined emission limits. <sup>2)</sup>

10. Data on separators - basic data concerning power engineering and technological parts of polluting sources

Device and part of polluting source - number of device connected to or part of the source of pollution according to Data file, Parts 3 and 4; and type thereof.  
Name, production type (principle of how separator works), and number of separator.  
Type of separator connection (parallel or serial).  
Reference number.  
Year of putting separator into service.  
Separated polluting substance or group of polluting substances.  
Manufacturer of separator.  
Efficiency, as according to documentation.  
Emission rate.  
Output concentration, as according to documentation, in mg/m<sup>3</sup><sub>n</sub>.  
Data of the file B are to be submitted once at first submission, and then, whenever change occurs, using printed forms or electronic media.  
Contents of above forms with comments in detail and instructions to filling in thereof will be published in the Journal of the Ministry of the Environment of the Slovak Republic.

- 1) Article 2, Decree of the Ministry of the Environment of the Slovak Republic No. 41/1997 Z.z. on ascertaining amounts of air polluting substances discharged (released), and compliance with pollution limits prescribed.
- 2) Regulation of the Government of the Slovak Republic No. 92/1996 Z.z., providing execution of Act No. 309/1991 Zb., on protection from air polluting substances (Air protection act) as amended by of later provisions.
- 3) Act No. 401/1998 Z.z. on air pollution charges.
- 4) Decree of the Ministry of the Environment of the Slovak Republic No. 41/1997 Z.z.
- 5) Decree of the Ministry of the Environment of the Slovak Republic No. 299/1995 Z.z. on preconditions to awarding authorisation for measuring emissions and imissions, and on principles of doing latter business.
- 6) Article 2, paragraph 1 of Regulation of the Government of the Slovak Republic No. 92/1996 Z.z.
- 7) Annex 2 to the Regulation of the Government of the Slovak Republic No. 92/1996 Z.z.
- 8) Annex 4 to the Regulation of the Government of the Slovak Republic No. 92/1996 Z.z.
- 9) Annex 4 to the Regulation of the Government of the Slovak Republic No. 92/1996 Z.z.

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Data of the File of engineering-operational parameters, and engineering-organisational measures to ensure air protection, including measures to moderate development, and remedy results of emergency situations.

#### 1. Basic data on Operator of polluting source

Identification data on Operator of polluting source (business name, seat, ID No.)

Identification data on internal organisation unit operating the source of pollution (if the source of pollution is articulated).

Identification (reference, registration) number of the File of engineering-operational parameters, and engineering-organisational parameters as binding internal document.

Full name of the document covering the File of engineering-operational parameters, and engineering-organisational parameters containing official name of polluting source and identification number thereof if, according to documentation, this exists. Name(s), surname(s), and title(s) of the person (persons) who worked out the file of engineering-operational parameters and engineering-organisational parameters.

Name, surname, and title of the person acting as the statutory agent (e.g. CEO.) of polluting source operator.

Signature of statutory agent and stamp.

Date and place the file of engineering-operational, and engineering organisational parameters were issued and duly signed by statutory agent.

Number of pages, and number of annexes to the file of engineering-operational, and engineering organisational parameters.

Number of copies of the file of engineering-operational, and engineering organisational parameters, and current number of the copy.

#### 2. Description of the source of pollution

Identification data on source of pollution, technological unit, and equipment, particularly name, reference number (another ID number), place, house register number, cadastral area.

Classification of source of pollution - three digits code, and name as according to separate provision. <sup>1)</sup>

Defining source (summary of any equipment and activities within functional and spatial unit), itemising source of pollution; names and identification codes of its parts, and reference numbers or object numbers thereof.

Purpose of technology and kinds of products.

Rated output of technology (equipment), performance levels.

Kind of operation (shift labour, seasonal work, if any, and annual working time fund).

Year of putting polluting source into operation.

Concise explanation of technology principle, especially functional principles of main producing assembly group of the equipment, and/or parts of polluting source; primary and secondary physicochemical reactions.

List, and concise name of decisive equipment, especially focused on those parts of the source of pollution that influence the formation, reduction (separation) of released polluting substances.

List and parameters of emergency equipment that serves to prevent emergency condition or moderate development thereof, e.g. emergency shut down system, emergency separation system, system to formation gas water curtains, emergency system to overflowing reactor system with water or another inert substance, system of stand-by power generator sets, system to actuating emergency separating system to "neutralizing" polluting leakage.

Principal development diagram or technological layout.

Concise material or energy balance relating to rated output.

List of raw materials and fuels.

List of any polluting substances released to the atmosphere as components of waste gases at steady state operation, <sup>2)</sup> categorised according to places of release thereof to the atmosphere.

List of other polluting substances which do or may arise under transitive conditions and other condition as according to separate provision,<sup>3)</sup> if referred to analyses of raw material composition, physico-mechanical, and physicochemical primary and secondary processes - reactions.

Characteristic parameters of waste gases, particularly specific flow rate under standard conditions, volume rate of main components and mass rate of polluting substance categorised according to places of discharge waste gases into atmosphere at rated output, <sup>4)</sup> at another steady state operation where in supposedly the highest emission figures occur<sup>4)</sup> provided that there are available measurement results pursuing a separate provision<sup>5)</sup>, and emission limits of polluting substances in question.

Diffusion; basic parameters and concise name of taking-off polluting substances from defined places, particularly such as stacks or exhaust vents, and non-defined (fugitive) leakage of waste gases to the atmosphere, especially transfer lines, handling drainage, leaks; open air surfaces of reservoirs, landfills, generally of areas where from polluting substances escape directly to atmosphere; indirect leakage - by means of working environment or another combined leakage of polluting substances; total building height of stacks, if any, and diameters thereof; at landfills, reservoirs and alike, size of leakage area.

Transitive phases of technology with specifying inevitable timing required, <sup>6)</sup> and other activities relating to operation, recovery or repairs on machinery equipment, <sup>3)</sup> during of which, if regarding features of respective technological process or activity, is it practicable adhere to set up emission limits.

3. Engineering-operational parameters to provide protection of atmosphere while operating sources of pollution.

As the engineering-operational parameters to provide air protection, values of physicochemical variables and other alike technological parameters of raw materials, fuels, technology, and decisive machinery equipment shall be indicated; e.g. in cases of power engineering , and separating equipment we recommend indicating particular, if regarding air protection, significant engineering-operational parameters, covered by chapters 4, 5, and 6, OTN ŽP 2 003 2, or those in terms of the STN 07 0710, STN 38 6405 which

- a) influence quantitative and qualitative composition of waste gases from concrete technology, its part and equipment during operation thereof,
- b) determine operating condition of technology allowed in effective documentation - determine standards of technological mode in scope of which the source is operated in compliance with the documentation,
- c) are expressed by numeric figures and appropriate units or otherwise, e.g. by composition of substances, temperature, pressure, pressure losses, pH-value, dosing, flow rates, flow loads, percentages of opening pipe armatures, kinds of separating refills, and fabric;
- d) have to be followed up, controlled and recorded; e.g. incoming inspection, in process inspection, final inspection, continuous measurements by recording instruments and other measurements with periodical frequency of records.

The engineering-operational parameters shall be indicated, categorised as follows.

- a) Limit values of engineering-operational parameters, minimal and maximal ones, as according to concrete preconditions that determine modes of steady state operation, <sup>2)</sup> where the source of pollution operates in compliance with the effective documentation;
- b) Limit values of engineering-operational parameters at which as dangerous conditions jeopardizing the air quality arise as, in manner and time stipulated in the documentation (through normal control of technology), still can be brought in compliance with the effective documentation without necessity to take extraordinary measures in order to prevent emergency condition (Defining engineering-operational parameters of failure state conditions); <sup>7)</sup>
- c) Limit values of engineering-operational parameters exceeding of which is the emergency condition of the source of pollution. <sup>8)</sup>

When dealing with sources of pollution with extended technology and large amounts of parameters, it is practicable in the files of engineering-operational parameters and engineering-organisational measures to refer as appropriate to applicable parts, pages, items of Operating instruction if there are the above information about parameters in required extent as in accordance with this Annex.

4. Engineering-organisational measures to providing protection of atmosphere while operating sources of pollution.

As the engineering-organisational measures to providing air protection, requirements shall be indicated to management and maintenance of technology that provide operating the source in compliance with the effective documentation, e.g. obligations of attendant personnel and their supervisors, maintenance, management and control of technology by means of continuously measured and recorded engineering-operational parameters; as well as such preconditions, imposed to polluting source operation by the consent of air protection authority, which being not implied by generally binding air protection provisions.

The engineering-organisational measures shall be indicated, categorised as follows.

- a) Management and control of technology by attendant personnel, and supervisors thereof,
- b) Time intervals and conditions for maintenance, repairs, and renewal of fluids.

Particularly, engineering-organisational measures shall be indicated as applicable if dangerous conditions occur, especially those of the manner and the most admissible period of time during of which the dangerous (defective) engineering-operational parameters may be brought into compliance with effective documentation.

## 5. Defining events of severe and immediate endangering or deterioration of air quality

Severe and immediate endangering or deterioration of air quality by the source of pollution shall be defined so as to assessed according to methodology <sup>9)</sup> whether in the case of emergency condition or due to extraordinary events beyond liability of the operator, e.g. natural disaster, fire, explosion, may escape to the atmosphere such amounts of polluting substances that would endanger the health of individuals who stay in the zone of health danger, and the public should be informed of such endangering. <sup>10)</sup>

Should the source of pollution cause a severe and immediate endangering, it is necessary in the files of engineering-operational parameters and engineering-organisational measures, for such cases, to indicate as follows.

- a) All potential extraordinary leakages of polluting substance into atmosphere such as failure of separating system, destruction of accumulators, piping, and other transfer systems, producing equipment; emergency events at operating transportation means; events of fire, explosion, implosion, natural disaster;
- b) The highest possible mass of polluting substance leaked out, in kg;
- c) Physicochemical properties of released polluting substances, dangerous properties thereof;
- d) Supposed duration of polluting leakage, in minutes;
- e) Distance from place of polluting leakage, in meters, where natural person may occur who is the public;
- f) Ways of direct or indirect warning of leaking pollutants in surroundings of the source;
- g) Zone of danger to health, and zone of fatal danger.

## 6. Measures to moderate development and remedy consequences of emergency condition

As the measures to moderate development of emergency situations and to remedy consequences thereof, procedures and activities shall be indicated that removing as follows.

- a) Emergency condition of technology<sup>8)</sup> caused by failing to remedy dangerous (defective) condition (by overriding due time to remedying it),
- b) Crashes of polluting source that severely and immediately endanger or deteriorate quality of atmosphere. <sup>11)</sup>

In the event of potential severe and immediate endangering or deterioration of air quality caused by the source of pollution, following measures and activities are to be specified.

- a) Shut-down or restriction of operation of polluting source, its part or other activity which causes endangering or deterioration of air quality;
- b) Notifying both the Air protection authority and the District hygienist;
- c) Signalling and informing the public in terms of Population Protection Plan as worked out by the Regional Office and the District Office, in accordance with a separate provision. <sup>12)</sup>

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<sup>1)</sup> Annex 2, Regulation of the Government of the Slovak Republic No. 92/1996 Z.z., providing execution of Act No. 309/1991 Zb., on protection from air polluting substances (Air protection act) as amended by later provisions.

<sup>2)</sup> Article 2, paragraph 1(a), Decree of the Ministry of the Environment of the Slovak Republic No. 41/1997 Z.z. on assessing air polluting emissions and compliance with contamination limits assigned .

- <sup>3)</sup> Article 2, paragraph 1(b), Decree of the Ministry of the Environment of the Slovak Republic No. 41/1997 Z.z.
- <sup>4)</sup> Article 9, paragraph 2, Decree of the Ministry of the Environment of the Slovak Republic No. 41/1997 Z.z.
- <sup>5)</sup> Decree of the Ministry of the Environment of the Slovak Republic No. 41/1997 Z.z.
- <sup>6)</sup> Article 9, paragraph 4, Regulation of the Government of the Slovak Republic No. 92/1996 Z.z.
- <sup>7)</sup> Article 2, paragraph 1 letter c), Decree of the Ministry of the Environment of the Slovak Republic No. 41/1997 Z.z.
- <sup>8)</sup> Article 2, paragraph 1(d), Decree of the Ministry of the Environment of the Slovak Republic, No. 41/1997 Z.z.
- <sup>9)</sup> Annexes 2 and 3, Decree of the Ministry of Interior of the Slovak Republic No. 300/1996 Z.z. on ensuring protection to population at production, transportation, storage, and handling dangerous, harmful substances.
- <sup>10)</sup> Article 7, paragraph 1(h), of Act No. 309/1991 Zb. on protection from air polluting substances (Air protection act) as amended by the National Council of the Slovak Republic Act No. 148/1994 Z.z. Article 13, paragraph 1(b), Act of the Slovak National Council, No. 42/1994 Z.z. on civil protection of population.
- <sup>11)</sup> Article 2, paragraph 1(e), Decree of the Ministry of the Environment , No. 41/1997 Z.z.
- <sup>12)</sup> Act of the National Council of the Slovak Republic, No. 42/1994 Z.z. Decree of Ministry of Interior of the Slovak Republic No. 300/1996 Z.z.