

List of abbreviations and explanatory notes

Tabular part of air pollution characteristics

Tables:

Summary overviews of limit values exceedences according to the Government Order No. 350/2002 Coll. as amended, and max. values at stations of the Czech Republic in 2005

bold – exceedence of air pollution limits LV+ MT (the condition of the tolerated number of exceedences TE needn't be fulfilled) assuming that the data fulfil the requirements for validity of data for calculation of the annual air pollution characteristics

dark grey background – exceedence of air pollution limits LV+MT incl. the condition of the tolerated number of exceedences TE assuming that the data fulfil the requirements for validity of data for calculation of the annual air pollution characteristics

light grey background – exceedence of air pollution limits LV incl. the condition of the tolerated number of exceedences TE assuming that the data fulfil the requirements for validity of data for calculation of the annual air pollution characteristics

Organizations

| Abbreviation | Organization |
|--------------|--|
| ČEZ | ČEZ Inc. |
| ČGS | Czech Geological Survey |
| ČHMÚ / CHMI | Czech Hydrometeorological Institute |
| FP | FRANTSCHACH PULP@PAPER, a.s. ŠTĚTÍ |
| GEÚ AV ČR | Institute of Geology of the Academy of Sciences of the Czech Republic |
| HBÚ AV ČR | Hydrobiological Institute of the Academy of Sciences of the Czech Republic |
| IFER | Institute for Forest Ecosystems Research |
| IMGW | Institute of Meteorology and Water Management, Wroclaw, Poland |
| LfUG | Landesamt für Umwelt und Geologie Dresden, FRG |
| MOlo | Olomouc City |
| MŠum | Šumperk City |
| MPI | Plzeň City |
| MÚPa | Municipal Authority in Pardubice |
| MÚTř | Municipal Authority in Třinec |
| MÚZI | Municipal Authority in Zlín |
| OÚŠu | District Authority in Šumperk |
| PIOS | State Inspectorate for Environmental Protection, Poland |
| SZÚ | National Health Institute |
| ÚH AV ČR | Institute of Hydrodynamics AS CR |
| VÚLHM | Forest Management and Gamekeeping Research Institute |
| VÚRV | Research Institute of Plant Production |
| VÚV | Water Management Research Institute T.G.M. |
| WIOS | Wojewódzki Inspektorat Ochrony Środowiska, Poland |
| ZÚ | Health Institute |
| ZÚ Kolín | Health Institute Kolín |

Measured substances and quantities – air pollution

| Abbreviation | Measured substance / quantity |
|--------------|--|
| A | anthracene |
| Ac | acenaphthene |
| ACET | acetylene |
| Acl | acenaphthylene |
| Al | aluminium |
| alpha-HCH | alpha-HCH |
| As | arsenic |
| BaA | benzo(a)anthracene |
| BaP | benzo(a)pyrene |
| BbF | benzo(b)fluoranthene |
| BbF+BkF | suma benzo(b)fluoranthene and benzo(k)fluoranthene |
| Be | beryllium |
| beta-HCH | beta-HCH |
| BghiPRL | benzo(g,h,i)perylene |
| BkF | benzo(k)fluoranthene |
| BZN | benzene |
| CCl4 | tetrachlormethane, karbon tetrachloride |
| Cd | cadmium |
| CLB | chlorbenzene |
| CH4 | methane |
| CHEX | cyclohexane |
| CM | chloromethane |
| CO | carbon monoxide |
| COR | coronen |
| CP | cyclopentane |
| Cr | chromium |
| CRY | chrysene |
| CS2 | carbon disulphide |
| Cu | copper |
| DBahA | dibenzo(a,h)anthracene |
| DCLs | sum of dichlorbenzenes |
| DCM | dichlormethane |
| delta-HCH | delta-HCH |
| DMB22 | 2,2-dimethylbutane |
| DMB23 | 2,3-dimethylbutane |
| EBZN | ethylbenzene |
| ETAN | ethane |
| ETEN | ethene |
| F11 | Freon 11 |
| F113 | Freon 113 |
| F12 | Freon 12 |
| Fe | iron |
| FEN | phenanthrene |
| Fl | fluorene |
| FLU | fluoranthene |
| gamma-HCH | gamma-HCH |
| GLRD | global radiation |
| h | relative air humidity |
| H2S | hydrogen sulfide |
| HCB | hexachlorbenzene |
| HCH | hexachlorcyclohexane |
| Hg | mercury |
| HCH | hexachlorcyclohexane |
| HNO3 | nitric acid |
| I OKT | i-octane |
| I123cdP | ideno(1,2,3,-cd)pyrene |
| IBUT | i-butane |
| IPEN | i-pentane |
| ISOP | isoprene |

| Abbreviation | Measured substance / quantity |
|--------------|---|
| MCPT | methyl cyclopentane |
| MH23 | 2+3 methylhexane |
| MHP23 | 2+3 methylheptane |
| Mn | manganese |
| MP23 | 2+3 methylpentane |
| MPXY | m,p-xylene |
| MXY | m-xylene |
| N | naphtalene |
| N OKT | n-octane |
| NBUT | n-butane |
| NBV | number of passing big vehicles |
| NH3 | ammonia |
| NHEP | n-heptane |
| NHEX | n-hexane |
| Ni | nickel |
| NMV | number of passing middle-sized vehicles |
| NO | nitrogen monoxide |
| NO2 | nitrogen dioxide |
| NO3 | nitrates - particles |
| NONN | nonane |
| NOx | nitrogen oxides |
| NPEN | n-pentane |
| NSV | number of passing small vehicles |
| O3 | ozone |
| OXY | o-xylene |
| p | atmospheric pressure |
| PAHs | polycyclic aromatic hydrocarbons - sum |
| PAHs TEQ | toxic equivalent of sum PAHs |
| Pb | lead |
| Pb207/206 | isotopic ratio 207Pb/206Pb |
| Pb208/206 | isotopic ratio 208Pb/206Pb |
| PCB28 | PCB28 |
| PCB52 | PCB52 |
| PCB101 | PCB101 |
| PCB118 | PCB118 |
| PCB138 | PCB138 |
| PCB153 | PCB153 |
| PCB180 | PCB180 |
| PCBs | polychlorinated biphenyls - sum |
| PeCB | pentachlorbenzene |
| PM10 | PM ₁₀ |
| PM2,5 | PM _{2,5} |
| pp-DDD | p,p'-DDD |
| pp-DDE | p,p'-DDE |
| pp-DDT | p,p'-DDT |
| PRPA | propane |
| PRPE | propene |
| PXY | p-xylene |
| PYR | pyrene |
| RAD-A | RAD-A |
| RAD-B | RAD-B |
| RAD-C | RAD-C |
| RAIN | precipitation amount |
| SBUT | sum of butene |
| Sb | antimony |
| Se | selenium |
| SO2 | sulphur dioxide |
| SO4 | sulphate particles |
| SNH4 | sum of ammonium ions |
| SNO3 | sum of nitrate ions |

| Abbreviation | Measured substance / quantity |
|--------------|--------------------------------|
| SPM | suspended particulate matter |
| SPTN | sum of pentene |
| STYR | styrene |
| T | temperature (unspecified) |
| T10m | temperature 10 m above terrain |
| T2m | temperature 2 m above terrain |
| TCE | trichlorethane |
| TCL | trichlormethane |
| TCM | trichlorethylene |
| TECE | tetrachlorethylene |
| TLN | toluene |
| TMBs | sum of trimethylbenzenes |
| V | vanadium |
| WD | wind direction |
| WDm | 30min wind direction maximum |
| WROSE | wind rose |
| WV | wind velocity |
| WVm | 30min wind velocity maximum |
| XYs | sum of xylenes |
| Zn | zinc |

Measured substances and quantities – chemical composition of precipitation and atmospheric deposition

| Abbreviation | Measured substance / quantity |
|--------------|-------------------------------|
| A | anthracene |
| Ac | acenaphtene |
| AcI | acenaphtylene |
| Al | aluminium |
| Alk. | alkalinity |
| alpha_HCH | alpha-HCH |
| As | arsenic |
| BaA | benzo(a)anthracene |
| BaP | benzo(a)pyrene |
| BbF | benzo(b)fluoranthene |
| beta_HCH | beta-HCH |
| BkF | benzo(k)fluoranthene |
| BghiPRL | benzo(g,h,i)perylene |
| Ca | calcium cations |
| Cd | cadmium |
| cond | conductivity |
| Cl | chloride anions |
| Co | cobalt |
| Cox | oxidizable carbon |
| Cr | chromium |
| Cu | copper |
| CRY | chrysene |
| DBahA | dibenzo(a,h)anthracene |
| delta_HCH | delta-HCH |
| F | fluoride anions |
| Fe | iron |
| FEN | phenanthrene |
| Fl | fluorene |
| FLU | fluoranthene |

| Abbreviation | Measured substance / quantity |
|-------------------|--|
| gamma_HCH | gamma-HCH |
| Hg | mercury |
| HCB | hexachlorbenzene |
| I123cdP | ideno(1,2,3-cd)pyrene |
| K | potassium cations |
| Mg | magnesium cations |
| Mn | manganese |
| N | naphtalene |
| Na | sodium cations |
| NH ₄ | ammonium cations |
| Ni | nickel |
| NO ₃ | nitrate anions |
| NO ₂ | nitrite anions |
| N-ox | nitrogen in form of nitrite and nitrate anions |
| N-sum | nitrogen sum |
| o-PO ₄ | orthophosphate anions |
| Pb | lead |
| PCB101 | PCB101 |
| PCB118 | PCB118 |
| PCB153 | PCB153 |
| PCB180 | PCB180 |
| PCB28 | PCB28 |
| PCB52 | PCB52 |
| pH | pH |
| P-sum | phosphorus sum |
| PO ₄ | phosphate anions |
| pp_DDD | p,p'-DDD |
| pp_DDE | p,p'-DDE |
| pp_DDT | p,p'-DDT |
| PYR | pyrene |
| úhrn | precipitation amount |
| SO ₄ | sulphate anions |
| V | vanadium |
| Zn | zinc |

Measuring methods – air pollution

| Abbreviation | Method |
|--------------|--|
| AAS | atomic absorption spectrometry |
| AFS | low-temperature gas atomic fluorescence spectrometry |
| APRESS | atmospheric pressure measurement |
| BERTH | Berthelot method - spectrophotometry |
| CAP | capacitance sensor |
| CLM | coulometry |
| ELMAG | electromagnetic method |
| FUCEL | el. fuel cell |
| GCH-FID | gas chromatography - flame-ionization detection |
| GCH-MS | gas chromatography - mass spectroscopy (for PAH) |
| GCH-PID | gas chromatography - photo-ionization detection |
| GCH-VOC | gas chromatography - volatile org. compounds |
| GRV | gravimetry |
| GUAJA | guajacol (modif. Jakobs-Hochheiser) method - spectrophotometry |
| HAIR | hair hygrometer |
| HPLC | high performance liquid chromatography |
| CHLM | chemiluminescence |
| IC | ion chromatography |
| ICP-AES | inductively coupled plasma - atomic emission spectrometry |
| ICP-MS | inductively coupled plasma - mass spectrometry |
| IRABS | IR correl. absorption spectrometry |
| OPEL | optoelectronic method |
| PD | passive sampler |
| PT100 | resistance method |
| PUF-GCH | PUF - gas chromatography |
| QUARTZ+PUF | QUARTZ+PUF-GCH |
| QUARTZ-GCH | QUARTZ - gas chromatography |
| RAD | dosimeter |
| RADIO | radiometry - beta ray absorption |
| RAIN | standard rain gauge |
| SKIN | animal skin |
| TDM | temperature difference method |
| TEOM | tapered element oscillating microbalance (TEOM) |
| TLAM | triethanolamine spectrophotometry |
| U-SONIC | ultrasonic anemometer |
| UVABS | UV-absorption |
| UVFL | UV-fluorescence |
| WGAE | spectrophotometry with TCM and fuchsin (West-Gaeke) |
| XRF | X-ray fluorescence |

Measuring methods – chemical composition of precipitation

| Abbreviation | Method |
|---------------------|---|
| cond | conductometry |
| FAAS | flame atomic absorption spectrometry |
| FIA | flow injection analysis |
| GF AAS | graphite furnace atomic absorption spectrometry |
| GRAV | by weight |
| HPLC | high performance liquid chromatography |
| IC | ion chromatography |
| ICP-OES | inductively coupled plasma- optical emission spectroscopy |
| ISE | ion selective electrode |
| KOLT | thiocyanate colorimetric method |
| KOLV | pyrocatechol violet colorimetric method |
| pH metr | electrometry – pH meter |
| PTELDA | conductometry (platinum electrode) |
| SFA | spectrophotometry |
| VOL | precipitation amount volumetric analysis |
| TITR | volumetry (acidimetry, alkalimetry, potenciometry, complexometry) |

Measurement intervals – air pollution

| Abbreviation | Description |
|---------------------|---|
| 10min / 10min | measured 10-min. concentration |
| 10min/ 4d | 10-minute sample once in 4 days |
| 14d / 14d | measured 14-day concentration |
| 14d / 1M | measured 14-day concentration once in a month |
| 1d / 1d | measured average daily concentration |
| 1d / 2d | 24-h sample once in 2 days |
| 1d / 3d | 24-h sample once in 3 days |
| 1d / 4d | 24-h sample once in 4 days |
| 1d / 5d | 24-h sample once in 5 days |
| 1d / 6d | 24-h sample once in 6 days |
| 1d / 7d | 24-h sample once in 7 days |
| 1h / 1h | 1h / 1h |
| 30 min / 30min | measured half-hour concentration |
| 7d / 1M | measured weekly concentration once in a month |
| 7d / 7d | measured 7-day concentration |

Measurement intervals – chemical composition of precipitation and atmospheric deposition

| Abbreviation | Description |
|---------------------|--------------------|
| irregular | irregular samples |
| 1M | monthly samples |
| 7d | weekly samples |
| 1d | daily samples |

Other abbreviations

| Abbreviation | Description |
|-----------------------|---|
| 4MV, 19MV, 25MV, 36MV | 4 th , 19 th , 25 th , 36 th highest value in a calendar year for the given time interval |
| 50%kv | 50 th percentile |
| 90%kv | 90 th percentile |
| 95%kv | 95 th percentile |
| 98%kv | 98 th percentile |
| 99.9%kv | 99.9 th percentile |
| AIM | automated air pollution monitoring |
| AMS | automated monitoring station |
| C1q, C2q, C3q, C4q | number of values from which the arithmetic average is calculated for the given quarter |
| cond | measured sample conductivity |
| č.p. | absolute frequency of exceedence of IH _d |
| č.p.% | relative frequency of exceedence of IH _d |
| DAT. | date of occurrence of MAX. |
| dv | length of the longest continuous failure |
| EKO zóna/zone | Protected areas with regard to the limit values for the protection of ecosystems and vegetation: Territories in which the Governmental Regulation requires meeting the limit values for the protection of ecosystems and vegetation: a) national parks (NP) and protected landscape areas (CHKO) b) territories with the altitude ≥ 800 meters c) other selected forested areas published in the Bulletin of the Ministry of the Environment |
| KMPL | code of measuring programme in the given locality |
| LV | limit value |
| MAX. | hourly, 8-hour or daily maximum for the year |
| MAX8h | daily maximum for the year for ozone in the time period 9:00–17:00 UTC |
| mc | monthly measurement frequency |
| MP | measuring programme |
| MT | margin of tolerance |
| N | number of measurements in the year |
| pLV | number of LV exceedences |
| pMT, pLV+MT | number of LV+MT exceedences |
| ppLV | average number of exceedences |
| úhrn/rain | precipitation amount measured by the standard method directly at the sampling site or at a station that can be meteorologically considered to be representative for the given site |
| S | standard deviation |
| SG | standard geometric deviation |
| SRS | information, alert and control system |
| TE | tolerated number of exceedences |
| VoL | number of LV exceedences |
| VoM | number of LV+MT exceedences |
| X | annual arithmetic average |
| X1q, X2q, X3q, X4q | quarterly arithmetic average |
| XG | annual geometric average |
| Xm | monthly arithmetic average |