List of abbreviations and explanatory notes

Tabular part of air pollution characteristics

Tables:

Summary overviews of limit values exceedances according to the Government Order No. 597/2006 Coll. and max. values at stations of the Czech Republic in 2007

bold – exceedance of air pollution limits LV+ MT (the condition of the tolerated number of exceedances 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 – exceedance of air pollution limits LV+MT incl. the condition of the tolerated number of exceedances TE assuming that the data fulfil the requirements for validity of data for calculation of the annual air pollution characteristics

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

Organizations

Abbreviation	Organization
ČESRAF	Czech Refining Company a.s.,Litvinov
ČEZ	ČEZ Inc.
ČGS	Czech Geological Survey
ČHMÚ / CHMI	Czech Hydrometeorological Institute
FP	FRANTSCHACH PULP@PAPER, a.s. ŠTĚTÍ
GLÚ 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
IMGW	Institute of Meteorology and Water Management, Wroclaw, Poland
LfUG	Landesamt für Umwelt und Geologie Dresden, FRG
MOLO	City of Olomouc
MPl	City of Plzeň
MŠUM	City of Šumperk
MÚPa	Municipal Authority in Pardubice
MÚTř	Municipal Authority in Třinec
MVM	City of Valašské Meziříčí
MZl	City of Zlín
PIOS	State Inspectorate for Environmental Protection, Poland
SMBRNO	Statutory City of Brno
SŠZE Žatec	Secondary school of agriculture and ecology in Zatec
SZÚ	National Health Institute
ÚH AV ČR	Institute of Hydrodynamics AS CR
VČs	Vapenka Certovy schody, a.s
VÚLHM	Forest Management and Gamekeeping Research Institute
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
ACAL	acetic aldehyde
ACET	acethylene
ACL	acenaphthylene
AKR	acrolein
Al	aluminium
alpha-HCH	alpha-HCH
As	arsenic
BaA	benzo(a)anthracene
BaP	benzo(a)pyrene
BbF	benzo(b)fluoranthene
Be	beryllium
BeP	benzo(e)pyrene
beta-HCH	beta-HCH
BghiPRL	benzo(g,h,i)perylene
BjF	benzo(j)fluorantene
BkF	benzo(k)fluoranthene
BZA	benzaldehyde
BZN	benzene
CCl4	tetrachlormethane, karbon tetrachloride
Cd	cadmium
CLB	chlorbenzene
CHEX	cyclohexane
CM	chloromethane
CO	carbon monoxide
COR	coronen
CP	cyclopentane
Cr	chromium
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
Fe	iron
Fen	phenanthrene
Fl	fluorene
Flu	fluoranthene
FMA	formaldehyde
FR11	freon 11
FR113	freon 113
FR12	freon 12
gamma-HCH	gamma-HCH
GLL	glyoxal
GLRD	global radiation
h	relative air humidity
H2S	hydrogen sulfide
HCB	hexachlorbenzene
HCH	hexachlorcyclohexane
HEXL	hexanal
Hg	mercury
Hg0	gaseous mercury
Chry	chrysene

Abbreviation	Measured substance / quantity
I_OKT	i-octane
I123cdP	ideno(1,2,3,-cd)pyrene
IBUT	i-butane
IPEN	i-pentane
ISOP	isoprene
MAAKR	methacrolein
MCPT	methyl cyclopentane
MEK	methyl ethyl ketone
METAN	methane
MGLL	methylglyoxal
MH23	2+3 methylhexane
MHP23	2+3 methylheptane
Mn	manganese
MP23	2+3 methylpentane
MPXY	m,p-xylene
MVK	methylvinylketone
MXY	m-xylene
MYAKR	methylacrolein
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
NONN	nonane
NOx	nitrogen oxides
NPEN	n-pentane
NSV	number of passing small vehicle
O3	ozone
OXY	o-xylene
p	atmospheric pressure
PAHs	polycyclic aromatic hydrocarbons – sum
PAHs_TEQ	toxic equivalent of sum PAHs
Pb	lead
PCB28	PCB28
PCB52	PCB52
PCB101	PCB101
PCB118	PCB118
PCB138	PCB138
PCB153	PCB153
PCB180	PCB180
PCBs	polychlorinated biphenyls – sum
PeCB	pentachlorbenzene
PM1	fine particles PM_1
PM10	PM_{10}
PM2,5	$PM_{2.5}$
pp-DDD	p,p'-DDD
pp-DDE	p,p'-DDE
pp-DDT	p,p'-DDT
PPAL	propanal
PPON	propanone
PRPA	propane
PRPE	propene
PTAL	pentanal
PXY	p-xylene
Pyr	pyrene

Abbreviation	Measured substance / quantity
RAD-A	RAD-A
RAD-B	RAD-B
RAD-C	RAD-C
RAIN	precipitation amount
SBTOL	sum of butanol
SBUT	sum of butene
SNH4	sum of ammonium ions
SNO3	sum of nitrate ions
SO2	sulphur dioxide
SO4	sulphate particles
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
WV	wind velocity
WVm	30min wind velocity maximum
XYs	sum of xylenes
Zn	zinc

Measured substances and quantities – chemical composition of atmospheric precipitation

Abbreviation	Measured substance / quantity
A	anthracene
Ac	acenaphtene
Acl	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
Cr	chromium
Cu	copper
CRY	chrysene
DahA	dibenzo(a,h)anthracene
delta_HCH	delta-HCH
F	fluoride anions
Fe	iron
FEN	phenanthrene
Fl	fluorene
FLU	fluoranthene
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

Abbreviation	Measured substance / quantity
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
AMA	atomic absorption spectrophotometry AMA for mercury determination
APRESS	atmospheric pressure measurement
CAP	capacitance sensor
CLM	coulometry
ELMAG	electromagnetic method
FIA-BERTH	Berthelot method - spectrophotometry
GC-FID	gas chromatography - flame-ionization detection
GC-MS	gas chromatography - mass spectroscopy (for PAH)
GC-MS/PUF	gas chromatography - mass spectroscopy / gaseous phase only (PUF)
GC-MS/QUA	gas chromatography - mass spectroscopy aerosol (only QUARTZ)
GC-PID	gas chromatography - photo-ionization detection
GC-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-MS	inductively coupled plasma - mass spectrometry
IRABS	IR correl. absorption spectrometry
OPEL	optoelectronic method
PD	passive sampler
PT100	resistance method
RAD	dosimeter
RADIO	radiometry - beta ray absorption
RAIN	standard rain gauge
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 atmospheric precipitation

Abbreviation	Method
EC metr	EC meter
FAAS	flame atomic absorption spectrometry
FIA	flow analysis and spectrometric detection
FIA-BERTH	spectrophotometry flow injection analysis FIA with indophenol, Berthelot reaction
GF-AAS	graphite furnace atomic absorption spectrometry
GCH-MS	gas chromatography-mass spectroscopy
CHLM	chemiluminescence
GRAN	Gran titration
HPLC	high performance liquid chromatography
IC	ion chromatography
ICP-OES	inductively coupled plasma- optical emission spectroscopy
KOLAM	ammonium molybdate colorimetric method
KOLT	thiocyanate colorimetric method
KOLV	pyrocatechol violet colorimetric method
NDIR	non-dispersive infrared absorption
PDSM-CHLM	oxidative digestion with peroxodisulfate
pH metr	electrometry – pH meter
SFA	spectrophotometry
TITRACE	titration
TOC/TN	TOC/TN analyser
VA	voltamperometry
VOL	volumetric method

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
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 / 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

Measurement intervals – chemical composition of atmospheric precipitation

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 exceedance of IH_d
č.p.%	relative frequency of exceedance of IH_d
DAT.	date of occurrence of MAX.
dv	length of the longest continuous failure
KMPL	code of measuring programme in the given locality
LV	limit value
MAX.	hourly, 8-hour or daily maximum for the year
MAX8h	maximum daily 8-hour running average for the year
mc	monthly measurement frequency
MP	measuring programme
MT	margin of tolerance
N	number of measurements in the year
PA	alert threshold
PD	passive sampler
PI	information threshold
pLV	number of LV exceedances
pMT, pLV+MT	number of LV+MT exceedances
ppLV	average number of exceedances
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 exceedances
TK, HM	heavy metals
VoL	number of LV exceedances
VoM	number of LV+MT exceedances
X	annual arithmetic average
X1q, X2q, X3q, X4q	quarterly arithmetic average
XG	annual geometric average
Xm	monthly arithmetic average