



ITRC (Interstate Technology & Regulatory Council). 2023. *Contaminants of Emerging Concern Framework CEC-1*. Washington, D.C.: Interstate Technology & Regulatory Council, CEC Team. <https://cec-1.itrcweb.org/>.

Acronyms

6PPD	N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine
6PPD-q	N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine quinone
AFFF	aqueous film-forming foam
amu	atomic mass unit
AOF	adsorbable organic fluorine
ATSDR	United States Agency for Toxic Substances and Disease Registry
BAF	bioaccumulation factor
BCF	bioconcentration factor
BIL	Bipartisan Infrastructure Law
BP4NTA	Benchmarking and Publication for Non-Targeted Analysis
CalEPA	California Environmental Protection Agency
CCL	Contaminant Candidate List
CDC	United States Centers for Disease Control and Prevention
cDNA	complementary DNA
CEC	contaminant(s) of emerging concern
CIC	combustion ion chromatography
CMRM	Chemical and Material Risk Management
CSF	cancer slope factor
Da	Dalton
DLS	dynamic light scattering
DNA	deoxyribonucleic acid
DOD	United States Department of Defense
DOE	United States Department of Energy
DQRAchem	Detailed Quantitative Risk Assessment for Chemicals
EC	emerging chemical
ECHA	European Chemicals Agency
EDA	effect-directed analysis
EI	electron impact
EMD	Environmental Molecular Diagnostics
ENM	engineered nanomaterials
ENP	engineered nanoparticles
EOF	extractable organic fluorine

ERED	Environmental Residue Effects Database
ESI	electrospray ionization
ESOH	Environmental, Safety, and Occupational Health
EU	European Union
FAIR	Findability, Accessibility, Interoperability, Reusability
FDA	Food and Drug Administration
FTIR	Fourier transform infrared spectroscopy
GC	gas chromatography
GC-MS	gas chromatography-mass spectrometry
GenX	hexafluoropropylene oxide-dimer acid
HAL	health advisory levels
HFPO-DA	hexafluoropropylene oxide-dimer acid
HPLC	high-performance liquid chromatography
HPLC-MS	high-performance liquid chromatography-mass spectrometry
HRMS	high-resolution mass spectrometry
ICP	inductively coupled plasma
ICP-MS	inductively coupled plasma-mass spectrometry
IRIS	Integrated Risk Information System
ISO	International Organization for Standardization
ITRC	Interstate Technology and Regulatory Council
IUR	inhalation unit risk
IURF	inhalation unit risk factor
LC	liquid chromatography
LDIR	laser direct infrared microscopy
LSRP	licensed site remediation professional
MALDI	matrix-assisted laser desorption or ionization
MCL	maximum contaminant level
MDH	Minnesota Department of Health
MERLA	Minnesota Environmental Response and Liability Act
mg/kg-day	milligrams per kilogram per day
MI EGLE	Michigan Department of Environment, Great Lakes, and Energy
MIQE	minimum information of QPCR experiments
mm	millimeter
µg/m³	micrograms per cubic meter
µm	micrometer
MP	microplastics
MPCA	Minnesota Pollution Control Agency
MRL	minimal risk level
µs	microsecond
MS	mass spectrometry

MS/MS	tandem mass spectrometry
m/z	mass-to-charge ratio
ng/L	nanogram per liter
NGS	next-generation sequencing
NIST	National Institutes of Standards and Technology
nm	nanometer
NMR	nuclear magnetic resonance
NOAA	National Oceanic and Atmospheric Administration
NORMAN	network of reference laboratories, research centers and related organizations for monitoring of emerging environmental substances
NPRI	National Pollutant Release Inventory
NTA	nontarget analysis
NTP	National Toxicology Program
OECD	Organisation for Economic Co-operation and Development
OEHHA	California Office of Environmental Health Hazard Assessment
OPP	United States Environmental Protection Agency Office of Pesticide Programs
OSF	oral slope factor
OW	Office of Water, United States Environmental Protection Agency
PACT	Public Activities Coordination Tool
PAPM	Precaution Adoption Process Model
PBT	persistent, bioaccumulative, and toxic
PCR	polymerase chain reaction
PE	polyethylene
PFAA	perfluoroalkyl acids
PFAS	per- and polyfluoroalkyl substances
PFBS	perfluorobutanesulfonic acid
PFHpA	perfluoroheptanoic acid
PFHxS	perfluorohexanesulfonic acid
PFNA	perfluorononanoic acid
PFOA	perfluorooctanoic acid
PFOS	perfluorooctane sulfonic acid
PFP	pentafluorophenyl
PFPE	perfluoropolyether
PIGE	particle-induced gamma ray emission
PNEC	predicted no effect concentration
POPs	persistent organic pollutants
POTWs	publicly owned treatment works
PP	polypropylene
PPCPs	pharmaceuticals and personal care products
PPRTV	Provisional Peer-Reviewed Toxicity Values

PQRA	Preliminary Quantitative Risk Assessment
PS	polystyrene
PWS	public water systems
QA	quality assurance
QC	quality control
qPCR	quantitative polymerase chain reaction
QSAR	quantitative structure activity relationships
REACH	registration, evaluation, authorization and restriction of chemicals
RfC	reference concentration
RfD	reference dose
RNA	ribonucleic acid
RT	retention time
RT-qPCR	reverse transcription-quantitative polymerase chain reaction
SDWA	Safe Drinking Water Act
SIM	selective ion monitoring
SP ICP-MS	single particle inductively coupled plasma-mass spectrometry
SPE	solid-phase extraction
SWRCB	State Water Resources Control Board
TIC	tentatively identified compound
TOF	time of flight
TOP	total oxidizable precursor
TRRP	Texas Risk Reduction Program
TRV	toxicity reference value or toxicological reference value
TSCA	Toxic Substances Control Act
TWPL	tread wear particle leachate
UCMR	Unregulated Contaminant Monitoring Rule
UCMR 3	third Unregulated Contaminant Monitoring Rule
UCMR 5	fifth Unregulated Contaminant Monitoring Rule
UHPLC-HRMS	ultra-high-performance liquid chromatography-high resolution mass spectrometry
URMS	urban runoff mortality syndrome
U.S.	United States
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
VOCs	volatile organic compounds
WWTP	wastewater treatment plant