



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

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

<b>ERED</b>	Environmental Residue Effects Database
<b>ESI</b>	electrospray ionization
<b>ESOH</b>	Environmental, Safety, and Occupational Health
<b>EU</b>	European Union
<b>FAIR</b>	Findability, Accessibility, Interoperability, Reusability
<b>FDA</b>	Food and Drug Administration
<b>FTIR</b>	Fourier transform infrared spectroscopy
<b>GC</b>	gas chromatography
<b>GC-MS</b>	gas chromatography-mass spectrometry
<b>GenX</b>	hexafluoropropylene oxide-dimer acid
<b>HAL</b>	health advisory levels
<b>HFPO-DA</b>	hexafluoropropylene oxide-dimer acid
<b>HPLC</b>	high-performance liquid chromatography
<b>HPLC-MS</b>	high-performance liquid chromatography-mass spectrometry
<b>HRMS</b>	high-resolution mass spectrometry
<b>ICP</b>	inductively coupled plasma
<b>ICP-MS</b>	inductively coupled plasma-mass spectrometry
<b>IRIS</b>	Integrated Risk Information System
<b>ISO</b>	International Organization for Standardization
<b>ITRC</b>	Interstate Technology and Regulatory Council
<b>IUR</b>	inhalation unit risk
<b>IURF</b>	inhalation unit risk factor
<b>LC</b>	liquid chromatography
<b>LDIR</b>	laser direct infrared microscopy
<b>LSRP</b>	licensed site remediation professional
<b>MALDI</b>	matrix-assisted laser desorption or ionization
<b>MCL</b>	maximum contaminant level
<b>MDH</b>	Minnesota Department of Health
<b>MERLA</b>	Minnesota Environmental Response and Liability Act
<b>mg/kg-day</b>	milligrams per kilogram per day
<b>MI EGLE</b>	Michigan Department of Environment, Great Lakes, and Energy
<b>MIQE</b>	minimum information of QPCR experiments
<b>mm</b>	millimeter
<b>µg/m<sup>3</sup></b>	micrograms per cubic meter
<b>µm</b>	micrometer
<b>MP</b>	microplastics
<b>MPCA</b>	Minnesota Pollution Control Agency
<b>MRL</b>	minimal risk level
<b>µs</b>	microsecond
<b>MS</b>	mass spectrometry

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

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