

Acronyms

α-syn PFF	alpha-synuclein preformed fibrils
μg/g	micrograms per gram
μg/kg	micrograms per kilogram
μL	microliter
μg/L	micrograms per liter
μg/m³	micrograms per cubic meter
μg/mL	micrograms per milliliter
μm	micrometer
μM	micromolar
4-ADPA	4-aminodiphenylamine; CAS: 101-54-2
4-HDPA	4-hydroxydiphenylamine; CAS: 122-37-2
6PPD	N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine; CAS: 793-24-8
6PPD-q	6PPD-quinone; CAS: 2754428-18-5
AA	alternatives assessment
ACN	acetonitrile; CAS: 75-05-8
ADME	absorption, distribution, metabolism, and excretion
ALP	alkaline phosphatase
ATP	adenosine triphosphate
ALT	alanine aminotransferase
ARAR	applicable or relevant and appropriate requirements
ASE	accelerated solvent extractor
AST	aspartate aminotransferase
BAF	bioaccumulation factor
BCFs	bioconcentration factors
BEH	bridged ethyl-siloxane/silica hybrid
B-IBI	Benthic Index of Biotic Integrity
BMC	Brake Manufacturers Council
BMP	best management practice
cc	cubic centimeter
CEC	contaminants of emerging concern
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
cm	centimeter
CMTT	cryo-milled tire tread
CP-MIMS	condensed phase membrane introduction mass spectrometry
CSF	cerebral spinal fluid
CWA	Clean Water Act
DAPD	diaryl-p-phenylene diamine; CAS: 68953-84-4

DCM	dichloromethane; CAS: 75-09-2
dMRM	dynamic multiple reaction monitoring mode
DNA	deoxyribonucleic acid
DPPD	N,N'-diphenyl-1,4-phenylenediamine; CAS: 74-31-7
DQOs	data quality objectives
DTSC	(California) Department of Toxic Substances Control
DWTP	drinking water treatment plant
EC₁₀	10% effect concentration
EC₅₀	50% effect concentration
ECHA	European Chemicals Agency
EDTA	ethylenediaminetetraacetic acid; CAS: 60-00-4
EFH	essential fish habitat
EIS	extracted internal standard
Eco-SSLs	ecological soil screening levels
ESA	Endangered Species Act
ESI	electrospray ionization
FAF5	Freight Analysis Framework version 5
GAPS	Global Atmospheric Passive Sampling
GAPS-Megacities	Global Atmospheric Passive Sampling Network
GC	gas chromatography
GC/MS	gas chromatography / mass spectrometry
GC-QTOF-HRMS	gas chromatography–quadrupole time-of-flight–high-resolution mass spectrometry
GFF	glass fiber filter
GIS	geographic information system
g/L	grams per liter
HDPE	high-density polyethylene
Herrera	Herrera Environmental Consulting
HESI	heated electrospray ionization mode
HLB	hydrophilic-lipophilic-balanced
HPBSM	high-performance bioretention soil mixes
HPLC	high-performance liquid chromatography
HRGC/HRMS	high-resolution gas chromatography / high-resolution mass spectrometry
HRMS	high-resolution mass spectrometry
HSAID	hot-surface induced desolvation
HSS T3	high-strength silica, trifunctionally bonded
HUC	hydraulic unit code
ICP/MS	inductively coupled plasma / mass spectrometry
ID	inner diameter
IDL	instrument detection limit

ILC₅₀	internal median lethal concentration 50%
IPPD	phenyl-p-phenylenediamine; CAS: 101-72-4
IQL	instrument quantification limit
ISTD	internal standards
ITRC	Interstate Technology and Regulatory Council
KCEL	King County Environmental Laboratory
LC	liquid chromatography
LC₁₀	lethal concentration 10%
LC₅₀	lethal concentration 50%
LC-HRMS	liquid chromatography / high-resolution mass spectrometry
LC-MS	liquid chromatography / mass spectrometry
LC-MS/MS	liquid chromatography / tandem mass spectrometry
LC-QTOF-HRMS	liquid chromatography / quadrupole time-of-flight / high-resolution mass spectrometry
LD₅₀	median lethal dose
LOAEL	lowest observed adverse effect level
LOEC	lowest observed effect concentration
LOEL	lowest observed effect level
LOD	limit of detection
LOQ	limit of quantitation
LTCP	long-term control plan
LVSPE	large-volume solid-phase extraction
m	meters
m³	cubic meter
MCLs	maximum contaminant levels
MDL	method detection limit
MEMA	Motor & Equipment Manufacturers Association
MeOH	methanol; CAS: 67-56-1
mg	milligram
mg/kg	milligrams per kilogram
mg/kg-bw	milligrams per kilogram of body weight
mg/L	milligrams per liter
mg/m³	milligrams per cubic meter
mL	milliliter
ML	minimum level of quantification
mm	millimeter
mM	millimolar
mmol	millimol
mmol/L	millimole per liter
mol/L	mole per liter

MQL	method quantification limit
MRL	method reporting limit
MRM	multiple reaction monitoring mode
MS	mass spectrometry
MS2	tandem mass spectrometry
MS4	municipal separate storm sewer systems
MSA	Magnuson-Stevens Fishery Conservation and Management Act
MS/ddMS2	MS/ddMS2=mass spectrometry / data dependent tandem mass spectrometry
NAS	(USGS) Nonindigenous Aquatic Species
ND	nondetect
ng/g	nanograms per gram
ng/kg-bw/day	nanograms per kilogram of body weight per day
ng/L	nanograms per liter
ng/mg dw	nanogram per milligram dry weight
ng/mL	nanograms per milliliter
nM	nanometer
NOAA	National Oceanic and Atmospheric Administration
NOAEL	no observed adverse effect level
NOEC	no observed effect level concentration
NOEL	no observed effect level
NPDES	National Pollutant Discharge Elimination System
NREL	National Renewable Energy Laboratory
NWIFC	Northwest Indian Fisheries Commission
OECD	Organisation for Economic Co-Operation and Development
OW	(USEPA) Office of Water
PAH	polynuclear aromatic hydrocarbon
PAS	passive air sampler
PD	Parkinson's disease
PDMS	polydimethylsiloxane
PE	polyethylene
PET	polyethylene terephthalate
PFF	preformed fibrils
PPD	para-phenylenediamine; CAS: 106-50-3
pg	picogram
pg/m³	picograms per cubic meter
PM_{0.1}	ultrafine particulate matter, 0.1 micrometers or less in diameter
PM_{2.5}	fine particulate matter 2.5 micrometers or less in diameter
PM₁₀	coarse particulate matter, between 2.5 micrometers and 10 micrometers in diameter
POCIS	Polar Organic Chemical Integrative Sampler

POM	polyoxymethylene
PPDs	para-phenylenediamines, class of
PPD-q	para-phenylenediamines-quinone
PPE	personal protective equipment
ppm	parts per million
PRM	parallel reaction monitoring
PTFE	polytetrafluoroethylene
PUF	polyurethane foam
pyro-GC/MS	pyrolysis-gas chromatography / mass spectrometry
QTOF	quadrupole time-of-flight
QTOF/MS	quadrupole time-of-flight / mass spectrometry
QuEChERS	A solid-phase extraction method: Quick, Easy, Cheap, Effective, Rugged, and Safe
RAC	rubberized asphalt concrete
RARα	retinoic acid receptor α
RCRA	Resource Conservation and Recovery Act
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RI/FS	remedial investigation / feasibility study
RMA	rubber-modified asphalt
RNA	ribonucleic acid
RXRα	retinoid X receptor α
SCM	stormwater control measure
SD	standard deviation
SDWA	Safe Drinking Water Act
SIP	state implementation plan
SOP	standard operating procedure
SPE	solid-phase extraction
SRM	selected reaction monitoring
SSTD	surrogate standard
SWIFD	Statewide Integrated Fish Distribution
TAPE	Technology Assessment Protocol-Ecology
TCI	Tokyo Chemical Industry
TD	thermal desorption
TK	toxicokinetics
TMDL	Total Maximum Daily Load
TNC	The Nature Conservancy
TRC	Toronto Research Chemical
TRWP	tire- and road-wear particles
TSCA	Toxic Substances Control Act
TWA	time-weighted average
TWC	tire-wear contaminants

TWP	tire-wear particles
UHPLC	ultra-high-performance liquid chromatography
UPLC	ultra-performance liquid chromatography
UPLC-QTOF-MS/MS	ultra-performance liquid chromatography-quadrupole time-of-flight-tandem mass spectrometry
UPLC-TOF-MS	ultra-performance liquid chromatography-time-of-flight-mass spectrometry
URMS	urban runoff mortality syndrome
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
USTMA	U.S. Tire Manufacturers Association
VELMA	Visualizing Ecosystem Land Management Assessments
v/v	volume per volume
WA Ecology	Washington State Department of Ecology
WDFW	Washington (State) Department of Fish and Wildlife
WDOC	Washington State Department of Commerce
WET	whole effluent toxicity
WaTech Solutions	Washington (State) Technology Solutions
WQS	water quality standards
WSDOT	Washington State Department of Transportation
WSU	Washington State University
WWTP	wastewater treatment plants