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Acronyms and Abbreviations

AET	apparent effects threshold
APHA	American Public Health Association
ARAR	applicable or relevant and appropriate requirement
ASTM	American Society for Testing and Materials
ATBAL	acute toxicities for benthic aquatic life
ATSDR	Agency for Toxic Substances and Disease Registry
AVS	acid-volatile sulfide
BAF	bioaccumulation factor
BBL	Blasland, Bouck & Lee
BCF	biota concentration factor
BERA	baseline ecological risk assessment
BTEX	benzene, toluene, ethylbenzene, and xylenes
CDI	chronic daily intake
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
cfs	cubic feet per second
CLP	Contract Laboratory Program
cm	centimeter
COC	contaminant of concern
COPC	contaminant of potential concern
CPOI	chemical parameter of interest
Cs	cesium
CSF	carcinogenic slope factor
CSO	combined sewer overflow
CT	central tendency
CTBAL	chronic toxicities for benthic aquatic life
CV	coefficient of variation
cy	cubic yard
DNAPL	dense non-aqueous phase liquid
DO	dissolved oxygen
DOC	dissolved organic carbon
dpm/g	decays per minute per gram
dw	dry weight
Eh	oxidation-reduction potential
EPC	exposure point concentration
ERAGS	Ecological Risk Assessment Guidance for Superfund
ER-L	effects range-low
ER-M	effects range-median
ft	feet/foot
FS	feasibility study
FWPCA	Federal Water Pollution Control Administration

g	grams
g/mo	grams per month
GB	Geddes Brook
GE	General Electric Corporation
GM	General Motors Corporation
GMS	Groundwater Modeling System
GPS	global positioning system
HB	Harbor Brook
HCB	hexachlorobenzene
HEAST	Health Effects Assessment Summary Tables
HHB	human health bioaccumulation
HHRA	human health risk assessment
HI	hazard index
Honeywell	Honeywell International Inc.
HPAH	high molecular weight polycyclic aromatic hydrocarbon
HPCB	high molecular weight polychlorinated biphenyl
HpCDD	heptachlorodibenzodioxin
HQ	hazard quotient
HxCDD	hexachlorodibenzodioxin
HxCDF	hexachlorodibenzofuran
I-90	Interstate 90
I-690	Interstate 690
I-81	Interstate 81
IDW	Inverse Distance Weighted
IRIS	Integrated Risk Information System
IRM	interim remedial measure
kg	kilogram
kg/yr	kilogram per year
km	kilometer
LCP	Linden Chemicals and Plastics
LDC	Lakefront Development Corporation
LEL	lowest effect level
LOAEL	lowest observed adverse effects level
LPAH	low molecular weight polycyclic aromatic hydrocarbon
LPCB	low molecular weight polychlorinated biphenyl
m	meter
Metro	Metropolitan Syracuse Sewage Treatment Plant
mgd	million gallons per day
MGP	manufactured gas plant
MPA	mass per unit area
MPAH	medium molecular weight polycyclic aromatic hydrocarbon
MRL	maximum regulatory limit
MVUE	minimum variance unbiased estimator
NCDC	National Climatic Data Center
NCEA	National Center or Environmental Assessment

NCP	National Oil and Hazardous Substances Pollution Contingency Plan
nd	no date
Ni-Cd	nickel-cadmium
NMC	Ninemile Creek
NYNHP	New York Natural Heritage Program
NOAA	National Oceanic and Atmospheric Administration
NOAEL	no observed adverse effects level
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRC	National Research Council
NTP	National Toxicology Program
NTU	nephelometric turbidity unit
NW	northwest
NWI	National Wetlands Inventory
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSOL	New York State Department of Law
OCDD	octachlorodibenzodioxin
OCDDS	Onondaga County Department of Drainage and Sanitation
OCDWEP	Onondaga County Department of Water Environment Protection
OCPD	Onondaga County Parks Department
OLMC	Onondaga Lake Management Conference
OLS	Onondaga Lake System
ORAs	Other Relevant Areas
ORNL	Oak Ridge National Laboratory
ORP	oxidation-reduction potential
OU	Operable Unit
PAH	polycyclic aromatic hydrocarbon
PCA	principal components analysis
PCB	polychlorinated biphenyl
PCDD	polychlorinated dibenzo- <i>p</i> -dioxin
PCDF	polychlorinated dibenzofuran
PEC	probable effect concentration
PeCDD	pentachlorodibenzodioxin
PeCDF	pentachlorodibenzofuran
PEL	probable effect level
PMA	percent model affinity
PRP	potentially responsible party
PSA	preliminary site assessment
psf	per square foot
PTE	1-phenyl-1-[4-methylphenyl]-ethane, or PhenylTolyEthane
PTI	PTI Environmental Services
P-W Labs	Parratt-Wolff Laboratories, Inc.
PXE	1-phenyl-1-[2,4-dimethylphenyl]-ethane, or PhenylXylylEthane
QAPP	quality assurance project plan

QA/QC	quality assurance/quality control
RAGS	Risk Assessment Guidance for Superfund
RAO	remedial action objective
RBC	risk-based concentration
RDRA	remedial design/remedial action
RfD	reference dose
RI	remedial investigation
RME	reasonable maximum exposure
ROD	record of decision
RSCO	recommended soil cleanup objective
RUSS	Remote Underwater Sampling Station
SAP	sampling and analysis plan
SARA	Superfund Amendments and Reauthorization Act of 1986
SCS	Soil Conservation Service
SEC	sediment effect concentration
SEL	severe effect level
SEM	simultaneously extracted metals
SLRIDT	St. Louis River/Interlake/Duluth/Tar site
SOC	stressor of concern
SOP	standard operating procedure
SPDES	State Pollutant Discharge Elimination System
SQV	sediment quality value
SUNY	State University of New York
SUNY ESF	SUNY College of Environmental Science and Forestry
SVOC	semivolatile organic compound
SYW	Syracuse West [USGS quadrant sheet]
TAL	Target Analyte List
TAGM	Technical and Administrative Guidance Memorandum
TAMS	TAMS Consultants, Inc.
TBC	to-be-considered
TCDD	tetrachlorodibenzo- <i>p</i> -dioxin
TCDF	tetrachlorodibenzofuran
TCL	Target Compound List
TCLP	Toxicity Characteristic Leachate Procedure
TDS	total dissolved solid
TEC	toxicity equivalent concentration
TEL	threshold effect level
TEF	toxicity equivalence factor
TEQ	toxicity equivalent
TIC	total inorganic carbon
TOC	total organic carbon
TRV	toxicity reference value
TSS	total suspended solids
UCL	upper confidence limit
UFI	Upstate Freshwater Institute

USACE	US Army Corps of Engineers
USCS	Unified Soil Classification System
USEPA	US Environmental Protection Agency
USFDA	US Food and Drug Administration
USFWS	US Fish and Wildlife Service
USGS	US Geological Survey
UST	underground storage tanks
VOC	volatile organic compound
WB	wildlife bioaccumulation
WHO	World Health Organization
ww	wet weight
yd	yard
YOY	young-of-year
yr	year

Glossary

Advection. The movement of a quality, such as chemical content, due to the flow of the fluid possessing that property.

Anoxic. The condition of oxygen deficiency or absence of oxygen.

Aquatic macrophyte. Macroscopic (visible to the naked eye) forms of vegetation in the waters of the lake.

Benthic Community. The community of organisms dwelling at the bottom of a pond, river, lake, or ocean.

Charophytes. A group of green algae (class Charophyceae) found primarily in freshwater that are large, structurally complex algae. They range in size from a few millimeters to over a meter in length, and consist of a complex set of branching filaments.

Class 2 or 3 Site. A priority classification assigned to a site on the NYSDEC Registry of Inactive Hazardous Waste Sites. A Class 2 site presents significant threat to the public or environment – action required. A Class 3 site does not present a significant threat to the public health or the environment – action may be deferred. Onondaga Lake is a Class 2 site.

Epilimnion. The upper, warm, circulating water in a thermally stratified lake in summer.

Fen. A swampy, low-lying area of freshwater peat formed along and between sluggish river channels.

Hypolimnion. The lower, cooler, non-circulating water in a thermally stratified lake in summer.

Limnology. The study of the biology, physics, and chemistry of lakes and rivers.

Littoral. Designating or occurring in the marginal shallow-water zone of a lake.

Marl. A mixture of clay with lime (calcium carbonate).

Oxic. Containing oxygen.

PISCES. Passive in-situ concentration-extraction sampler. Sampling occurs by molecular diffusion of organic contaminants from the water through a membrane into an organic solvent. The results are given as total amount of contaminant recovered, but can be correlated to concentrations in water.

Plankton. Minute organisms that drift with the currents in seas and lakes. Plankton includes many microscopic animals (zooplankton) and plants (phytoplankton).

Probable Effect Concentrations (PECs). Sediment quality values established as the concentrations of individual chemicals above which adverse effects in sediments are expected to frequently occur.

Profundal. Designating or occurring in the deepwater zone of an inland lake.

Sediment Effect Concentrations (SECs). Concentrations of individual contaminants in sediments below which toxicity is rarely observed and above which toxicity is frequently observed.

Seiche. Seiches are tide-like rises and drops in lake water levels caused by prolonged strong winds that push water toward one side of the lake, causing the water level to rise on the downwind side of the lake and to drop on the upwind side.

Thermocline. A steep temperature gradient that exists in the middle zone (the metalimnion) of a lake and gives rise to thermally induced vertical stratification of the water. The metalimnion lies between the relatively warm epilimnion above and the cold hypolimnion below.