

**MASTER LIST OF ABBREVIATIONS, ACRONYMS, AND DEFINITIONS**

<b>Abbreviation</b>	<b>Definition</b>
AAQC	ambient air quality criteria
AAQO	ambient air quality objective
AGV	automated guided vehicle
AIA	archaeological impact assessment
AIS	Automatic Identification System
AIT	Agreement in Trade
ALC	Agricultural Land Commission
ALR	Agricultural Land Reserve
AMAR	autonomous multichannel acoustic recorder
AMS	Adaptive Management Strategy
AOA	archaeological overview assessment
AQO	air quality objective
AQSS	Air Quality Scoping Study
ASAB	Archaeology Sites Advisory Board
ASC	automated stacking crane
ATK	Aboriginal traditional knowledge
ATOR	Approved Terms of Reference
AWAC	acoustic wave and current
B&B	bed and breakfast establishments
BBCC	Boundary Bay Conservation Committee
B.C.	British Columbia
B.C. Ferries	British Columbia Ferry Services Inc.
BCCSN	B.C. Cetacean Sightings Network
BCCWS	British Columbia Coastal Waterbird Survey
BCEAA	British Columbia <i>Environmental Assessment Act</i> , S.B.C. 2002, c. 43
BCIOM	B.C. Input-Output Model
BCMEA	BC Maritime Employers Association
BCR	British Columbia Railway
BCRP	BCR Properties Ltd., a subsidiary of BCR
BMP	best management practice
BSFC	brake-specific fuel consumption
CAA	cumulative effects assessment area
CACS	computerised automation control system
CBIA	Central Burrard Inlet Area
CBSA	Canada Border Services Agency
CAAQS	Canadian Ambient Air Quality Standards

<b>Abbreviation</b>	<b>Definition</b>
CAC	criteria air contaminant
CBC	Christmas Bird Count
CCG	Canadian Coast Guard
CCIP	Container Capacity Improvement Program
CCME	Canadian Council of Ministers of the Environment
CCTV	closed-circuit television
CD	chart datum
CDC	(British Columbia) Conservation Data Centre
CDFmm	Coastal Douglas-fir moist maritime
CDI	common data interface
CDP	census-designated place
CEA	cumulative effects assessment
<i>CEAA</i>	<i>Canadian Environmental Assessment Act, SC 1992, c. 37</i>
<i>CEAA 2012</i>	<i>Canadian Environmental Assessment Act, 2012</i>
CEA Agency	Canadian Environmental Assessment Agency
CETA	Comprehensive Economic and Trade Agreement
CH <sub>4</sub>	Methane
CHE	cargo handling equipment
CHS	Canadian Hydrographic Service
CIE	Commission Internationale de L'Éclairage (International Commission of Illumination)
CITO	Construction Industry Training Organization
CMA	Crab Management Area
CN	Canadian National Railway
CNA	Cowichan Nation Alliance
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CO <sub>2</sub> e	carbon dioxide equivalent
COD	Corporation of Delta
COPC	compound of potential concern
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
CP	Canadian Pacific Railway
CPUE	catch-per-unit effort
CR	concentration ratio
CRA	commercial, recreational, and Aboriginal (fisheries)
CRF	concentration-response factor
CRMG	cantilevered rail-mounted gantry crane
CSA	Canadian Standards Association

<b>Abbreviation</b>	<b>Definition</b>
CSR	comprehensive study report
CSZ	Cascadia subduction zone
CTC	Chinook Technical Committee
CTC	Centralized Traffic Control
CTD	Depth
CWR	Center for Whale Research
CWS	Canadian Wildlife Service
CWS <sub>aq</sub>	Canada-Wide Standards
CY	container (storage) yard
CZBB	Boundary Bay Airport
DAS	disposal at sea
DDT	Dichlorodiphenyltrichloroethane
DF	deterioration factor
DFO	Fisheries and Oceans Canada
DIFID	disposal from instantaneous discharge
<DL	less than lowest level detected (2 mg/L) by routine laboratory analytical method; ~ means approximately.
DO	dissolved oxygen
DP3	Deltaport Third Berth Project
DPD	Delta Police Department
DPM	diesel particulate matter
D-POR	Daytime Points of Reception
DPU	distributed power unit
DTAG	Acoustic 3D tag
DTRRIP	Deltaport Terminal Road and Rail Improvement Project
DWT	dead-weight tonne
EA	environmental assessment
EAO	British Columbia Environmental Assessment Office
EC	Environment Canada
ECA	emission control area
EEE	Maersk Triple E class container ship
EF	emission factor
EIS	environmental impact statement
EMP	environmental management plan
EMS	environmental management system
EN	Endangered
EPA	(U.S.) Environmental Protection Agency
EPS	extracellular polymeric substances

Abbreviation	Definition
ER	exposure ratio
EWE	modelling software suite (Ecopath with Ecosim)
FA	federal authority
FEL	front-end loader
FHA	Fraser Health Authority
FHWG	Fisheries Hydroacoustic Working Group
FPIP	Fisheries Productivity Investment Policy: A Proponent’s Guide to Offsetting
FRAP	Fraser River Action Plan
FRE	Fraser River estuary
FREP	Ministry of Forests, Forest and Range Evaluation Program
FRPA	Forest Planning and Practices Regulation
FRPD	Fraser River Pile & Dredge (GP) Inc.
FSA	Fixture Seal of Approval (IDA program)
FSC	food, social, and ceremonial
FSD	Fraser-Surrey Docks
FTA	U.S. Federal Transit Administration
FTE	full-time equivalent (job)
FVRD	Fraser Valley Regional District
GDP	gross domestic product
GHG	greenhouse gas
GPS	global positioning system
GSC	Geological Survey of Canada
GTC	Global Container Systems Canada Ltd.
GTCF	Gateway Transportation Collaboration Forum
GVRD	Greater Vancouver Regional District
GWP	global warming potential
H3D	hydrodynamic model
H <sub>s</sub>	significant wave height
HA	Health Authority
HADD	harmful alteration, disruption, or destruction
HAZMAT	hazardous materials
HC	Hydrocarbon
HCP	habitat compensation plan
HEI	Health Effects Institute
HEP	Habitat Enhancement Program
HHRA	human health risk assessment
HHW	highest high-water level
HNS	Hazardous and Noxious Substances

<b>Abbreviation</b>	<b>Definition</b>
HOV	high-occupancy vehicle
HPI	Home Price Index
HRMS	high-resolution mass spectrometry
HRSDC	Human Resources and Skills Development Canada
HSDA	Health Service Delivery Area
HSERP	Health and Safety and Emergency Response Plan
HSI	Habitat Suitability
HTG	Hul'qumi'num Treaty Group
Hz	Hertz
IARC	International Agency for Research on Cancer
IBA	Important Bird Area
IC	intermediate component
ID	Identification
IDA	International Dark-Sky Association
IDW	inverse distance weighting
IESNA	Illuminating Engineering Society of North America
ILRR	Integrated Land and Resource Registry
ILWU	International Longshore Workers Union
IMO	International Maritime Organization
IMDG	International Maritime Dangerous Goods
IPCC	Intergovernmental Panel on Climate Change
IR	Indian Reserve
IRR	internal rate of return
ISQG	interim sediment quality guidelines
ISO	International Organization for Standardization
ISPS	International Ship and Port Facility Security
ISWRMP	Integrated Solid Waste and Resource Management Plan
ITA	Industry Training Authority
ITP	intermediate transfer pit
IUCN	International Union for the Protection of Nature
IY	intermodal yard
KCB	Klohn Crippen Berger
$L_d$	daytime equivalent (noise) level
$L_{dn}$	day-night average level
$L_{eq(24)}$	24-hour equivalent noise level
$L_{max}$	maximum sound level
$L_n$	nighttime equivalent (noise) level
$LA_{max}$	maximum A-weighted sound pressure level

<b>Abbreviation</b>	<b>Definition</b>
LAA	local assessment area
LAI	Leaf Area Index
LCFN	Lake Cowichan First Nation
LED	light-emitting diode
LEED	Leadership in Energy and Environmental Design
LFN	Lyackson First Nation
LFS	Labour Force Survey
LFV	Lower Fraser Valley
LGER	Local Government-elected Roundtable
LGTLC	Local Government Technical Liaison Committee
LHA	Local Health Area
LiDAR	light detection and ranging
LLW-LT	lowest low water-large tide
LLW or LLWL	lower low-water level
LNG	liquefied natural gas
LOA	length overall
LP	Limited Partnership
LRP	limit reference point
LRSP	Liveable Region Strategic Plan
LSA	local study area
MAL	maximum acceptable level
MARPOL	International Convention for the Prevention of Pollution from Ships
MBCA	<i>Migratory Bird Convention Act</i>
MBS	Migratory Bird Sanctuary
MCA	multi-criteria decision analysis
MCC	Musqueam Capital Corporation
MCTS	Marine Communications and Traffic Service
MDL	maximum desirable level
MFLNRO	Ministry of Forests, Lands and Natural Resource Operations
MFN	Musqueam First Nation
MIB	Musqueam Indian Band (note, this is the legal name)
MNBC	Métis Nation British Columbia
MOA	Memorandum of Agreement
MOE	Ministry of Environment
MOF	Ministry of Forests
MOTI	British Columbia Ministry of Transportation and Infrastructure
MOU	memorandum of understanding
MOVES	U.S. EPA's Motor Vehicle Emission Simulator

<b>Abbreviation</b>	<b>Definition</b>
MPOI	maximum point of impingement
MRDT	municipal and regional district tax
MSDS	Material Safety Data Sheet
MSP	Medical Service Plan
MTL	maximum tolerable level
Mt	million tonnes
MU	management unit
MV	Metro Vancouver
MVHC	Metro Vancouver Housing Corporation
MWLAP	Ministry of Water, Land and Air Protection
NAAQO	National Ambient Air Quality Objectives
NAICS	North American Industry Classification System
NBCC	National Building Code of Canada
NFPR	North Fraser Perimeter Road
NGO	non-governmental organisation
N <sub>2</sub> O	nitrous oxide
NHC	Northwest Hydraulic Consultants Ltd.
NHS	National Household Survey
NMFS	U.S. National marine Fisheries Service
NO	nitrogen oxide
NO <sub>2</sub>	nitrogen dioxide
NO <sub>x</sub>	nitrogen oxide
NOAA	National Oceanic and Atmospheric Administration
NPV	net present value
NRC	Natural Resources Canada
NRKW	northern resident killer whale
NS	No Status
NTU	nephelometric turbidity unit
NW	northwest
NWA	National Wildlife Area (federal)
NWPP	Navigable Waters Protection Program
NWPTA	New West Partnership Trade Agreement
NWUE	number of whales per unit effort
O <sub>3</sub>	Ozone
OCP	official community plan
OIC	Order in Council
OM	OrcaMaster
OSC	Ocean Shipping Consultants

Abbreviation	Definition
P	phosphorus
PA	Planning Area
PAH	polycyclic aromatic hydrocarbon
PCOD	population consequence of disturbance
PDO	Pacific decadal oscillation
PEL	probable effects level
PEOPLE	Population Extrapolation for Organizational Planning with Less Error
PCB	polychlorinated biphenal
PCLC	Port Community Liaison Committee
PC - TAG	Productive Capacity Technical Advisory Group
PFMA	Pacific Fisheries Management Area
PGA	peak ground acceleration
PM	particulate matter
PM <sub>10</sub>	inhalable particulate matter; particulate matter of 10 microns or less in diameter
PM <sub>2.5</sub>	respirable particulate matter; particulate matter of 2.5 microns or less in diameter
PMV	Port Metro Vancouver
POP	persistent organic pollutant
POR	point of reception
Port (the)	The Port of Vancouver
PPM	parts per million
<i>PPTA</i>	<i>Ports Property Tax Act</i>
PSC	Pacific Salmon Commission
PSD	power spectral density
PSEP	Puget Sound Estuary Program
PY	person-year
PSU	practical salinity units
QRA	quantitative risk assessment
RA	responsible authority
RAA	regional assessment area
RAAD	remote access to archaeological data
RAC	Rail Association of Canada
RBRC	Roberts Bank Rail Corridor
RBT2	Roberts Bank Terminal 2 Project
RCA	rockfish conservation areas
RCMP	Royal Canadian Mounted Police
RD	regional district
RGS	regional growth strategy



Abbreviation	Definition
RL	rating level
RMG	rail-mounted gantry crane
RMS	root mean square
ROV	remote-operated vehicle
RPM	radiation portal monitor
RQ	risk quotient
RSE	relative sighting effectiveness
RTG	rubber-tired gantry crane
RV	recreational vehicle
RWDI	RWDI West Inc.
S	South
SA	study area
SAIC	Science Applications International Corporation
SAR	DFO's Species at Risk Program
SARA	<i>Species at Risk Act</i>
SC	Special Concern
SCUBA	self-contained underwater breathing apparatus
SD	standard deviation
SDUE	sighting density per unit effort
SE	southeast
SE	sighting effectiveness
SEDA	SO <sub>x</sub> Emission Control Area
SEL	sound exposure level
SENES	Arcadis Senes Canada Inc.
SEWG	Socio-economic/Community Working Group
SFOM	shorebird foraging opportunity modelling
SFPR	South Fraser Perimeter Road
SLR	sea level rise
SME	small and medium-sized enterprise
SO <sub>2</sub>	sulphur dioxide
SOI	Statement of Intent
SO <sub>x</sub>	sulphur oxide
SPM	suspended particulate matter
SPL	sound pressure level
SRKW	southern resident killer whale
SWL	sound power level
TAC	total allowable catch
TAF	transient load adjustment factor

<b>Abbreviation</b>	<b>Definition</b>
TAG	technical advisory group
TBD	to be determined
TBWG	Technical/Biophysical Working Group
TC	Transport Canada
TD	Toronto Dominion
TDR	technical data report
TDG	transportation of dangerous goods
TEU	twenty-foot equivalent unit
TFN	Tsawwassen First Nation
TFNFA	Tsawwassen First Nation Final Agreement
TFNHA	Tsawwassen First Nation Harvest Agreement
TH	Threatened
TLMRU	Traditional Land and Marine Resource Use
TOC	total organic carbon
TOCs	trace organic contaminants
TOR	terms of reference
TOS	terminal operating system
TR	technical report
TransCDA	Transportation Career Development Association of B.C.
TSA	technical study area
TSI	TSI Terminal Systems Inc.
TSP	total suspended particulates
TSS	total suspended solids
TWN	Tsleil-Waututh Nation
U.S.A.	United States of America
USFS	U.S. Forest Service
UTM	Universal Transverse Mercator
VACS	vehicle access and control system
VACIS	vehicle and cargo inspection system
VAFFC	Vancouver Airport Fuel Facility Corporation
VC	valued component
VdB	vibration decibel
VEC	valued ecosystem component
VEF	vibro-replacement expressed fines
VHF	Very High Frequency
VKT	vehicle kilometres travelled
VLII	Visual Landscape Inventory
VMT	vehicle miles travelled

Abbreviation	Definition
VOC	volatile organic compound
VPA	Vancouver Port Authority
VQC	visual quality classes
VRM	Visual Resource Management
VTSS	vessel traffic operating support system
VTS	vehicle traffic system
WCMRC	Western Canada Marine Response Corporation
WCVI	west coast of Vancouver Island
WDUE	whale density per unit effort
WEF	wetland ecological functions assessment
WG	working group
WHMIS	Workplace Hazardous Materials Information System
WHO	World Health Organization
WHRA	Wildlife Health Risk Assessment
WHSRN	Western Hemisphere Shorebird Reserve Network
WMA	Wildlife Management Area (provincial)
WMU	Wildlife Management Unit
WRAP	Western Region Air Partnership
YVR	Vancouver International Airport
ZOA	zone of audibility

## SYMBOLS AND UNITS OF MEASUREMENT

Unit of Measurement	Definition
<sup>137</sup> Cs	Cesium-137
<sup>210</sup> Pb	Lead-210
D <sub>50</sub>	sediment grain size distribution
dB	Decibel
dBA	A-weighted decibel
dBC	C-weighted decibel
VdB	maximum particle velocities using decibels relative to one nanometer per second
DWT	deadweight tonne/tonnage
ft.	foot, feet
g	Gram
g/bhp-h	grams per brake horsepower hour
g/hp-h	grams per horsepower hour
g/s	grams per second

Unit of Measurement	Definition
H	Hour
Ha	Hectare
Hp	horsepower
kg	Kilogram
Kg/tonne	kilograms per tonne
Km	kilometre
km <sup>2</sup>	square kilometres
km/h	kilometres per hour
kPa	Kilo Pascal
kt	Knot
kV	Kilovolt
lb.	pound(s)
L	Litre
Lux	luminance levels
L <sub>pk</sub>	true peak noise
M	million
M	metre
mm/y	millimetres per year
m <sup>3</sup>	cubic metre
m/s	metre per second
mag/arcsec <sup>2</sup>	magnitude per square arcsecond
mg/kg	milligrams per kilogram
mm	millimetre
MMT	million metric tonnes
MVA	megavolt ampere
N	north
NE	northeast
Nm	nautical miles
NW	northwest
t	tonne
t/km <sup>2</sup>	tonnes per square kilometre
t/y	tonnes per year
μPa	micro Pascal
μg/m <sup>3</sup>	micrograms per cubic metre
°	degree
° C	degrees Celsius
%	percent