

Units, Symbols and Abbreviations

Units

The technical units of measurement in this report are based on the International System of Units (SI) wherever possible. These technical units may be broadly grouped as prefixes and units.

A prefix applies to the unit of measurement that immediately follows it—for example, milligram is abbreviated as mg.

Superscripts ² and ³ following a linear unit indicate area and volume respectively—for example, m² (square metres) and m³ (cubic metres).

Different units are combined by a full stop (.) to differentiate units of the same exponential sign, and a solidus (/) to indicate 'per'. For example, a kilometre per hour is abbreviated as km/h, while megalitres per day per square kilometre are ML/d.km².

Prefixes

M	mega	1,000,000	M	milli	0.001
k	kilo	1,000		micro	0.000001
n	nano	0.000000001			

Units

a	year (annum)	L	litre
°C	degrees Celsius	m	metre
d	day	Pa	Pascal
dB	decibel	pH	degree of alkalinity/acidity
dBA	decibel, network A frequency weighting	s	second
g	gram	t	tonne
h	hour	V	volt
ha	hectare	VA	volt-amp
Hz	hertz		

Chemical Symbols and Formulae

As	Arsenic	Mn	Manganese
Bi	Bismuth	Ni	Nickel
CH ₄	Methane	NO ₂	Nitrogen dioxide
CO ₂	Carbon dioxide	Sb	Antimony
CO ₂ -e	Carbon dioxide equivalent	SO ₂	Sulphur dioxide
Cu	Copper	Zn	Zinc
H ₂ O	Water		

Abbreviations

Abbreviation	Description
>	greater than
<	less than
24/7	Twenty four hour, seven day a week (as in operating hours)
95% UCL	95% upper confidence limit of the mean
A-A	Anti-Aircraft
AADT	Annual Average Daily Traffic
AAPA	Aboriginal Areas Protection Authority
AAQ NEPM	National Environment Protection (ambient air quality) Measure
AASL	Anti-Aircraft Search Light
ABS	Australian Bureau of Statistics
AFANT	Amateur Fishing Association of the Northern Territory
AHD	Australian Height Datum
ALRA	<i>Aboriginal Land Rights (Northern Territory) Act 1976</i>
ANZECC	Australia and New Zealand Environment Conservation Council
ARMCANZ	Agriculture and Resource Management Council of Australia and New Zealand
API	Aerial photo interpretation
AQIS	Australian Quarantine and Inspection Service
AQMP	Air Quality Management Plan
ARMCANZ	Agriculture and Resource Management Council of Australia and New Zealand
ASS	Acid sulphate soils
AS/NZS	Australian Standard / New Zealand Standard
BCF	Burrell Creek formation
BP	before present
BTEX	Benzene, toluene, ethylbenzene, xylenes
CBD	Central business district
CD	Chart Datum
CEMP	Construction environmental management plan
CH ₄	Methane
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CO ₂	carbon dioxide
CO _{2-e}	carbon dioxide equivalent
CRIMP	Centre for Research Into Marine Pests
CSD	Cutter suction dredge
Cwlth	Commonwealth of Australia
CWMP	Construction Waste Management Plan
DBE	Department of Business and Employment
DCI	Department of Construction and Infrastructure
DCM	Department of the Chief Minister (NT)
DCP	Dynamic cone penetrometer

Abbreviation	Description
DEEWR	Department of Education, Employment and Workplace Relations
Defence	Department of Defence
DEIS	Draft Environmental Impact Statement
DEWHA (now DSEWPC)	Department of Environment, Water, Heritage and the Arts
DHAC	Darwin Harbour Advisory Committee
DHF	Department of Health and Families
DIA	Darwin International Airport
DLP	Northern Territory Department of Lands and Planning
DMP	Dredge Management Plan
DO	Dissolved oxygen
DPA Act	<i>Darwin Port Authority Act 1983</i> (NT)
DPC	Darwin Port Corporation
DPI	Department of Planning and Infrastructure
DSEWPC	Department of Sustainability, Environment, Water, Population and Communities (Cwlth)
EA Act	<i>Environmental Assessment Act 1982</i> and the <i>Environmental Assessment Amendment Act 1994</i> (NT)
EAW	East Arm Wharf
EC	Electrical conductivity
ECRTN	Environmental Criteria for Road Traffic Noise (NSW)
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statement
Elton Consulting	Elton Consulting Group Pty Ltd
EMP	Environmental Management Plans
EMS	Environment Management System
EOI	Expression of Interest
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cwlth)
ESCOSA	Essential Services Commission of South Australia
FMP	Fire Management Plan
FTE	Full Time Equivalent
FOB	Free on board
GA	General Aviation
GDA	Geocentric Datum of Australia
GHG	Greenhouse gases
GPS	Global positioning system
GWI	Genesee and Wyoming Incorporated
H ₂ O	Water
HAA	Heavy Anti Aircraft
HAC	Heritage Advisory Council
HAT	Highest Astronomical Tide
HCA	<i>Heritage Conservation Act 1991</i>
ICNG	Construction Noise Guideline (NSW)

Abbreviation	Description
IGANRIP	Interim Guideline for the Assessment of Noise from Rail Infrastructure Projects (NSW)
INP	Industrial Noise Policy (NSW)
IUCN	International Union for Conservation of Nature
IRR	Internal rates of return
ISQG	Interim Sediment Quality Guideline
L _{A10}	The noise level exceeded for 10% of the measurement period
L _{A90}	The noise level exceeded for 90% of the measurement period
L _{Aeq}	Equivalent noise level – the constant sound pressure level equivalent in sound energy to the varying sounds over the measurement period
L _{Amax}	The maximum A-weighted sound pressure level occurring in a specified time period.
LAT	Lowest Astronomical Tide
LCH	Landing Craft, Heavy
LDC	Land Development Corporation (NT)
LHD	Landing Helicopter Dock
LIR	Land Information Register
L-MH	Low-Mixed High
LMS	Lugger Maintenance Section
LNG	Liquefied natural gas
LOA	Length Over All
LOR	Limit of reporting
LPA	Landing Platform, Amphibious
LSH	Landing Ship, Heavy
MAGNT	Museums and Art Galleries of the Northern Territory
MNES	Matters of National Environmental Significance
MSB	Marine Supply Base
MVF	Monsoon Vine Forest (vegetation community)
N ₂ O	nitrous oxide
NATA	National Association of Testing Authorities
NEPC	National Environment Protection Council
NEPM	National Environmental Protection Measure
NLC	Northern Land Council
NOHSC	National Occupational Health & Safety Commission
NOI	<i>Notice of Intent</i> (AECOM, 2009a)
NRETAS	Department of Natural Resources, Environment and the Arts (NT)
NT	Northern Territory of Australia
NTG	Northern Territory Government
NTU	Nephelometric turbidity unit
OH&S	Occupational Health and Safety
OW/W	Open Woodland to Woodland (vegetation community)
PASS	Potential acid sulphate soils
PM	Particulate Matter

Abbreviation	Description
PM ₁₀	Particulate matter with an average aerodynamic diameter of 10 µm and less
PPT	Parts Per Thousand
PQL	Practical quantification limits
PWC	Power and Water Corporation
PWCNT	Parks and Wildlife Commission of the NT
PTS	Permanent Threshold Shift
QA/QC	quality assurance / quality control
RAAF	Royal Australian Air Force
RAN	Royal Australian Navy
Redox	Reduction-oxidation potential
REINT	Real Estate Institute of Northern Territory
RFT	Request for Tender
RISQUE	Risk Identification and Strategy Using Quantitative Evaluation
RL	Real Level
RLO	Road Loadout
RMS	root-mean-squared
Roads Act	<i>Control of Roads Act</i>
ROV	Remote Operated Vehicles
RPT	Regular Public Transport
SA	South Australia / South Australian
SD	Statistical Division
SKM	Sinclair Knight Merz
SOP	Standard operational procedure
SRD	Services Reconnaissance Department
SSD	Statistical sub-division
TBTs	Tributyltin compounds
TcF	Trillion cubic Feet
TDS	Total dissolved solids
TEOM	Tapered element oscillating mass balance
the Guidelines	Guidelines for Preparation of a Draft Environmental Impact Statement for the Expansion works at East Arm, Northern Territory (Department of Planning and Infrastructure, December 2009)
the Masterplan	<i>East Arm Wharf Facilities Masterplan 2030</i> (GHD, 2009)
the Minister	Northern Territory Minister of Natural Resources, the Environment and Heritage
the Port	Port of Darwin
the Strategy	Darwin Harbour Strategy
TOs	Traditional Owners
TPH	total petroleum hydrocarbons
TPWC Act	Territory Parks and Wildlife Conservation Act
TSD	Trailer Suction Dredge
TSS	total suspended solids
TTS	Temporary Threshold Shift

Abbreviation	Description
TWP	Territory Wildlife Park
UCL	Upper confidence limit
UXO	Unexploded ordnance
VET	Vocational Education and Training
WHO	World Health Organisation
VDV	Vibration Dose Value
VIA	Visual Impact Assessment
WMB	Water Monitoring Branch
WMP	Waste Management Plan
WWII	World War II