Microgram; one, one hundred thousandth of a gram  $(1 \text{ g x } 10^{-6})$ μg

 $\mu g/m^3$ Micrograms per cubic metre

°C Degree's celcius, a unit of temperature **AAPA** Aboriginal Area Protection Authority

**ABWMAC** Australian Ballast Water Management Advisory Committee

AC Alternating current

Acceptable public health risk

The risk associated with exposure to genotoxic carcinogens has been calculated and compared to a notional 'acceptable' public health carcinogenic risk level of 1 in a million

 $(1x10^{-6})$ 

Risk assessment of an acute exposure is regarded as one which is less than 14 days Acute exposure

Acute health based guidelines

Legislative guideline applied to events (usually emissions) that result in a single brief

exposure to a potentially harmful substance

Acute HI Acute hazard indices

Additive risk The cumulative risk primarily to lifeforms associated with a number of (sub acute) exposures

to a substance or technology over a period of time

**AEP** Annual Exceedence Probability

**AGAL** Australian Government Analytical Laboratories

**AGO** Australian Greenhouse Office

Substance with a pH of between 7.1 and 14 on a logarithmic scale ranging from 1-14, Alkaline

substances less than pH 6.9 are 'acidic'

**AMIRA** Australian Mineral Industries Research Association

Anthropogenic Human

Australia and New Zealand Conservation Council **ANZECC** 

API American Petroleum Institute

**AQIS** Australian Quarantine and Inspection Service

**ARCHIE** Automated Resource for Chemical Hazard Incident Evaluation

Arsenic As

As (III) Arsenic oxidation state 3 As (V) Arsenic oxidation state 5

atm Atmosphere

**ATSIC** Aboriginal and Torres Strait Islander Commission

**AUSLIG** Geoscience Australia – Commonwealth Government Geographic and Cartographic

Information Service (formerly Australian Survey Land and Information Group), Department

of Industry, Tourism and Resources

Chemical process by which alumina is extracted from bauxite Bayer process

**BCA** Building Code of Australia

Benthic Organism Organism whose primary lifecycle is spent at the bottom of a water body.

Benzene Aromatic hydrocarbon found in coal tar and oils; it is a carcinogen

A specific geographic zone with a repeating or similar patterning of biotic (flora, fauna) and Bigeographic Zone

abiotic (soils, terrain, geography, climate, rainfall) factors.

Biogeography The geographical study of the distribution of organisms.





Biological Amount of energy (material) produced by a community/ecosystem in a specific period.

productivity

BPIP Building Profile Input Program; Input component of the CALPUF program that takes in

account the effect of buildings on the downwash and dispersion of emission plumes near

ground level

BTEX Analytical test for the aromatic hydrocarbon compounds: benzene, toluene, ethyl benzene

and xylene

BW Ballast water

C'wlth/Comm Commonwealth (Government)

Cd Cadmium

CALMET Computer based predictive meteorological model that includes a wind field generator

CALPUF Air quality computer dispersion model

Carcinogen Substance that causes cancer; often it does not cause cancer directly but it can invoke a series

of reactions, the products of which cause aberrant cell behaviour.

CASA Civil Aviation Safety Authority

Caustic soda Sodium hydroxide

CHAZOP Control, Hazard and Operability Plan

Chronic exposure | Chronic exposure is regarded as being equal to or greater than 365 days

Chronic HI Chronic hazard indices

CO<sub>2</sub> Carbon dioxide

CO<sub>2</sub>e Equivalent carbon dioxide

COP3 Third Conference of the Parties to the UNFCCC (See UNFCCC)

Cr (III) Chromium oxidation state 3
Cr (VI) Chromium oxidation state 6

CSIRO Commonwealth Scientific and Industrial Research Organisation

dB(A) Decibel, A – weighted (corrected for human hearing) sound pressure level.

DBIRD Department of Business, Industry and Regional Development (NT Government)

Declared weed Plant listed under class A, B or C of the Weeds Management Act

DEET Diethyl toluamide

DEET Department of Employment Education and Training (Commonwealth Department of)

DEH Department of Environment and Heritage; *formerly* Environment Australia (C'wlth

Government)

Dhimurru Land Management Aboriginal Corporation

Dioxin A non-genotoxic carcinogen sometimes formed by the incineration of chlorinated organic

compounds

DIPE Department of Infrastructure, Planning, and the Environment

Dissolved phase hydrocarbon

Hydrocarbon that has dissolved into groundwater

DNA Deoxyribonuleic acid; the principal building block of genetic inheritance for all biological

organisms.

EA Environment Australia





EC Electrical conductivity; measured as mS/cm

EFA Ecosystem functional analysis
EHS Environment, Health and Safety
EIS Environmental Impact Statement
EMP Environmental Management Plan

EPIRB Emergency Position Indicating Radio Beacon

E<sub>v</sub> Vertical illuminances

Ferruginous Relating to material containing elemental iron

FIFO Fly-in, fly-out

FMCT Fault Mode Control Table

Free phase Hydrocarbons floating on top of groundwater; viz not dissolved

hydrocarbon

Furan A non-genotoxic carcinogen blonging to a group of organic compounds that also occur

naturally in plant materials

g/L Grams per litre
g/s Grams per second

GAM Gove Accommodation Management

Genotoxic An agent that causes mutations in genetic material (DNA) that results in abnormal function

carcinogens resulting in development of cancer

Genotoxicity A substance that has a toxic effect on the genetic material of an organism

GOVE PLAN Port of Gove emergency response plan

Grab sample Random surface water sample taken by filling the sample container over a short period

GSC Gas suspension calciner
GSD Gas suspension dryer
GSP Gross State Product

GWh Giga Watts per hour; 10<sup>9</sup> W per hour

H<sub>2</sub>S Hydrogen sulphide

H<sub>2</sub>SO<sub>4</sub> Sulfuric acid

ha Hectare equivalent to 10,000m<sup>2</sup>
HAZOP Hazard and Operability Plan

H Cl Hydrogen chloride
HF Hydrogen fluoride
HI Hazard indices
hPa Hectapascals

HTD High temperature digestion
Hydrate Aluminium hydroxide

IATA International Air Transport Association
ICAO International Civil Aviation Organisation

Invertebrate Organism without a spine composed of bone or cartilage





IPA Indigenous protection area declared by the Aboriginal people to hold cultural significance

Irritancy The threshold above which a substance causes irritations to skin and organs

thresholds

IUCN International Union for the Conservation of Nature

J Joule; unit of energy
kg Kilogram; unit of mass
kg/ha Kilogram per hectare
kL Kilo Litres; 10<sup>3</sup> L

km Kilometre

km/h Kilometres per hour

kPa Kilopascal, 10<sup>3</sup> pascals; unit of pressure kW Kilowatt, 10<sup>3</sup> watts; a unit of energy

kW/m² Kilowatt per square metre
L/p/d Litres per person per day

L/s Litres per second

 $L_{A10}$  The A – weighted sound pressure (noise) level exceeded 10 % of the time

L<sub>A10(18 hour)</sub> he A – weighted sound pressure (noise) level exceeded 10 % of the time over an 18 hour

period

L<sub>A90</sub> The A – weighted sound pressure (noise) level exceeded 90 % of the time

 $L_{Aeq}$  The equivalent continuous sound pressure (noise) level  $L_{Amax}$  The maximum A – weighted sound pressure (noise) level

Land unit A recognisable, repeating terrain type in the biophysical landscape that has been identified

with reference to existing geological, topographical and land system information, soil

sampling and field investigations

Laterite Earth, granular or concretionary mass, chiefly composed of iron and aluminium sesquioxides,

occurring as a layer or scattered nodules in tropical soils.

LNG Liquified natural gas

LOAEC Low Observed Effect Adverse Concentration

LOAEL Low Observed Effect Adverse Level

LTD Low temperature digestion

lux Measurement unit of light intensity
m Metre; measurement of distance

M Million

m/d Metres per day

Mm³Million cubic metresm/sMetres per second

m<sup>3</sup> Cubic metres; measurement of volume

m<sup>3</sup>/h Cubic metres per hour

MBAS A surfactant – substance that causes a liquid to spread more easily on a solid surface by

reducing surface tension (viz. a detergent)





MBHD Melville Bay Height Datum
Mdt/y Million dry tonnes per year
MEB Medical Entomology Branch

mg/L Milligrams per litre

Microns/ One, one hundred thousandth of a metre  $(10^{-6} \text{ m})$ ; unit of length

micrometres (µm)

Mj/m<sup>2</sup> Megajoules per metre squared

ML Mega (million) Litres

ML/d Mega (million) Litres per day
ML/y Mega (million) Litres per year

mm Millimetre; one thousandth of a metre (10<sup>-3</sup>m); unit of length

MOL Milk of lime

mS/cm Millisiemens per centimetre; measure of electrical conductivity within soil or water,

indicative of salinity

Mt Million tonnes

Mt/y Million tonnes per year
MW Mega (Million) watts

NCRG Nhulunbuy Community Reference Group
NEPC National Environmental Protection Council
NEPM National Environmental Protection Measure

Neurotoxin A substance that affects the nerve pathways of an organism

NGS National Greenhouse Strategy

Ni Nickel

NIMPCG National Introduced Marine Pests Coordinating Group

NLC Northern Land Council NO<sub>2</sub> Nitrogen dioxide

NOAEC No Observed Effect Adverse Concentration

NOAEL No Observed Effect Adverse Level

NOEL No Observed Effect Level

NOI Notice of Intent
NO<sub>x</sub> Oxides of nitrogen

NPI National Pollutant Inventory

NT Northern Territory

NTETA Northern Territory Education and Training Authority

O<sub>2</sub> Oxygen

OEH Office of Environment and Heritage (NT Government)

OEL Occupational Exposure Limit (OEL) for expressed as an 8 hr TWA

OHS Occupational Health and Safety

PAH Polyaromatic hydrocarbons; a group of compounds which are carcinogenic





Pre-assembly modules PAM

**PCB** Polychlorinated biphenyls; a group of closely related chlorinated hydrocarbon compounds

A measure of the acidity (<7) or alkalinity (>7) of a (water) sample pН

Peta joules per year; unit of heat capacity (1 x 10<sup>15</sup> J) PJ/y

 $PM_{10}$ Small dust particles with a diameter of less than 10 microns (µm)

Polyarthritic Disease that manifests as a result of exposure to Barmah Forest Virus and Ross River Virus, disease

Japanese Encephalitis, Murray Valley Encephalitis and Kunjin; common symptoms include

joint soreness and inflammation, muscle aches, headaches and lethargy,

Parts per million ppm

Pounds per square inch psi

**RCRG** Regional Community Reference Group

**RDA** Residue disposal area

Reproductive

toxin

A substance that affects the ability to conceive or produce normally functioning progeny

Second S

**SEL** Strong Evaporated Liquor

**SLA** Statistical local area **SLC** Solid/Liquid Calciner **SML** Special Minerals Lease **SNL** Supernatant liquor  $SO_2$ Sulfur dioxide

SPL Special Purpose Lease

**SPMT** Self-propelled modular transporter **Spolic** Human made soils; 'fill' or 'spoil'

Anthroposols

Tonnes; metric unit of mass (weight) equivalent to 1,000 kg (1 x 10<sup>3</sup> kg)

t/d Tonnes per day t/h Tonnes per hour

t/ha/v Tonnes per hectare per year t/m³ Tonnes per cubic metre

t/y Tonnes per year

**TBT** Tributyltin; toxic compound used for marine industry application as a ships' hull antifouling

paint

TDS Total dissolve solids

Threatened species

Species identified by NT or C'wlth legislation as being of conservation significance

TMI Tolerable monthly intake

TOC Total organic carbon

Toxicological The specific effect that a substance has on biota (see carcinogen, genotoxicity, reproductive

effect toxin, neurotoxin)

Toxicology The study of the effect of a substance on biota





## Glossary of Terms & Acronyms

TPH Total Petroleum Hydrocarbons; analytical test for all aromatic hydrocarbons present in a

sample

UHF Ultra High Frequency

UNFCCC United Nations Framework Convention on Climate Change

URT Upper Respiratory Tract

Vadose zone Soil zone above the groundwater table

Vertebrate Organism with a bony or cartilaginous spine.

W Watt; unit of energy
W/m² Watts per square metre
WDL Waste Discharge Licence
WHO World Health Organisation

Worst case Worst possible outcome of an event such as risk to life from a technology or cataclismic

(scenario) event (eg. explosion) or technology malfunction

y Year

YBE Yirrkala Business Enterprises Pty Limited

YNOTS The YBE and Nabalco Operator Training School; joint venture between Alcan Gove

(formerly Nabalco), YBE and the Commonwealth Government



