

Intermodal Logistics Centre at Enfield Environmental Assessment

ABBREVIATIONS AND GLOSSARY OF TERMS

■ October 2005

Abbreviations

A

ABL	Assessment Background Level
ABS	Australian Bureau of Statistics
AEP	Annual Exceedance Probability
AGV	Automated Guided Vehicles
AHD	Australian Height Datum
ANZECC	Australian and New Zealand Environment and Conservation Council
ARI	Average Recurrence Interval
ARMCANZ	Agricultural and Resource Management Council of Australia and New Zealand'
ARTC	Australian Rail Track Corporation
As	Arsenic
ASS	Acid Sulphate Soil
ATF	Australian Temporary Fencing

B

BLEVEs	Boiling Liquid Expanding Vapour Explosion
BOD	Biological Oxygen Demand
BTEX	Benzene, toluene, ethyl benzene, xylene

C

CCTV	Close Circuit Television
Cd	Cadmium
CEMP	Construction Environmental Management Plan
CMS	Communication Management System
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
CORTN	Calculation of Road Traffic Noise
Cu	Copper
CWMP	Construction Waste Management Plan

D

DA	Development Application
dBA	Decibels

DCP	Development Control Plan
DEC	NSW Department of Environment and Conservation
DEH	Commonwealth Department of Environment and Heritage
DELEC	Diesel Electric (refers to structure associated with the maintenance and repair of diesel and electric locomotives)
DIPNR	Department of Infrastructure, Planning and Natural Resources
DMP	Dust Management Plan
DO	Dissolved Oxygen
DP	Deposited Plan

E

ECRTN	Environmental Criteria for Road Traffic Noise
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statement
EMO	Emergency Management Officer
EMP	Environmental Management Plan
ENMP	Environmental Noise Management Plan
EPA	NSW Environment Protection Authority
EP&A Act	NSW Environmental Planning and Assessment Act, 1979
EP&A Reg	NSW Environmental Planning and Assessment Regulation, 2000
EPBC Act	Commonwealth Environment Protection and Biodiversity Conservation Act, 1999
EPL	Environment Protection Licence
ERIMP	Emergency Response and Incident Management Plan
ESA	Equivalent Standard Axles
ESD	Ecologically Sustainable Development

F

Fc	Faecal Coliform
FHA	Frog Habitat Area

G

GLC	Ground Level Concentrations
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H

ha	Hectares
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HAZMAT	Hazardous Materials
HIPAP	Hazardous Industry Advisory Paper
HSE	Health and Safety Executive

I

ICOMOS	International Council on Monuments and Sites
IDO	Interim Development Order
ILC	Intermodal Logistics Centre
INP	Industrial Noise Policy
ITV	Inter Terminal Vehicles

K

km ²	Square Kilometres
kL	Kilo Litres
kV	Kilo Volts
kVA	Kilo Volt Amperes
kW/m ²	Kilo Watts per Square Metre

L

L	Litres
LEP	Local Environmental Plan
LGA	Local Government Area
LALC	Local Aboriginal Land Council
LMP	Landscape Management Plan
LOS	Level of Service
LPG	Liquid Petroleum Gas

M

m	Metres
m ³	Cubic Metres
MCR	Maximum Continuous Rating
mg/ m ³	Milligrams per Cubic Metre
ML	Mega Litres
MLALC	Metropolitan Local Aboriginal Land Council

N

NEPC	National Environment Protection Council
NEPM	National Environment Protection Measures
NHMRC	National Health and Medical Research Council
NoPE	No Port Enfield
NO	Nitric Oxide
N ₂ O	Nitrous Oxide
NO _x	Oxides of Nitrogen
NO ₂	Nitrogen Dioxide
NPW Act	NSW National Parks and Wildlife Act, 1974
NSW	New South Wales

O

O/D	Origin/Destination
OCP	Organo chlorine pesticides
OEMP	Operational Environmental Management Plan
OPP	Organo phosphate pesticides

P

PAH	Poly Aromatic Hydrocarbons
PASS	Potential Acid Sulphate Soils
Pb	lead
PFM	Planning Focus Meeting
PHA	Preliminary Hazard Analysis
PM ₁₀	Particulate Matter less than 10 Microns
PMF	Probable Maximum Flood
POEO Act	NSW Planning of Environmental Operations Act 1997
ppm	Parts per Million
ppt	Parts Per Thousand
ppv	Peak Particle Velocity
PSO	Planning Scheme Ordinance

R

REP	Regional Environmental Plan
RMG	Rail Mounted Gantries

RTA	NSW Roads and Traffic Authority
RTG	Rubber Tyred Gantries

S

SAFETI	Software for Assessment of Fire, Explosion and Toxic Impact
SEPP	State Environmental Planning Policy
SIS	Species Impact Statement
SO ₂	Sulphur Dioxide
SPC	Sydney Ports Corporation
SWMP	Soil and Water Management Plan

T

t	Tonnes
TEU	Twenty-Foot Equivalent Unit
TN	Total Nitrogen
TP	Total Phosphorous
TPH	Total Petroleum Hydrocarbons
TSC Act	Threatened Species Conservation Act, 1997
TSP	Total Suspended Particles
TSS	Total Suspended Solids

U

URS	URS Australia Pty Ltd
USEPA	United States Environmental Protection Agency

V

VBS	Vehicle Booking System
VENM	Virgin Excavated Natural Material
VHCs	Volatile Halogenated Compounds
VMP	Vegetation Management Plan

W

WM Act	NSW Water Management Act 2000\
WMP	Waste Management Plan

Glossary of Terms

Aboriginal archaeological site (Aboriginal Site)	A place where physical remains or modification of the natural environment indicate past and ‘traditional’ activities by Aboriginal people. Site types include artefact scatters, isolated artefacts, burials, shell middens, scarred trees, quarries and contact sites.
Acid Sulphate Soil (ASS)	Soils containing pyrite which produces sulphuric acid when exposed to oxygen.
Ambient	Surrounding environment.
Ambient noise	The all-encompassing noise associated within a given environment. It is the composite of sounds from many sources, both near and far.
Anthropogenic	Of human origin; Being centred primarily on humans and human affairs.
Aquifer	Rock formation containing water in recoverable quantities.
Assessment Background Level (ABL)	The Assessment Background Level is the single figure background noise level representing each assessment period (day, evening, night) for each day. It is determined by calculating the 10 th percentile (lowest 10 th percent) background level (L_{A90}) for each period.
Average Recurrence Interval (ARI)	The Average Recurrence Interval (measured in years) is a term used to describe flood size. It is a means of describing how likely a flood is to occur in a given number of years. For example, a 100 year ARI flood is a flood that occurs or is exceeded on average once every 100 years.
Background noise	The underlying level of noise present in the ambient noise, excluding the noise source under investigation, when extraneous noise is removed. This is described using the L_{A90} descriptor.
Biodiversity	First coined in 1988 as a contraction of biological diversity
Biota	All the animal and plant life in a given area.
BLEVE (Boiling Liquid Expanding Vapour Explosion)	A BLEVE is the explosive release of expanding vapour and boiling liquid following the catastrophic failure of a pressure vessel holding a pressure liquefied gas such as propane or LPG.
Bunds	An earthwork or wall to contain and control spillages, normally associated with tank farms, fuelling and chemical storage facilities

Commission of Inquiry (COI)	A Commission of Inquiry is a public process that enables the community to make written submissions to and presentations before independent Commissioners.
Construction Environmental Management Plan (CEMP)	An element of an Environmental Management Plan that addresses the control, training and monitoring measures to be implemented during the construction phase of a project in order to avoid, minimise or ameliorate potentially adverse impacts identified during environmental assessments.
Conservation	The management of natural resources in a way that will benefit both present and future generations.
Culvert	A totally enclosed drain under a road or railway.
Cumulative effect	Refers to the accumulation of effects over time.
dBA	The most common measurement of environmental noise – measured using a simple sound level meter having an A-weighting filter to simulate the subjective response of the human ear.
Deferred Matter	Land Use zones for an area have not been updated zoning is deferred back to that present in the previous land use plans.
Designated Development	Development that is declared to be Designated Development by an environmental planning instrument or the Schedule 2 of the Environmental Planning and Assessment Regulation 2000.
Ecologically Sustainable Development	Using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained and the total quality of life, now and in the future can be increased. Incorporates four key principles: the precautionary principle; inter-generational equity; conservation of biological diversity and ecological integrity; improved valuation and pricing of environmental resources.
Ecosystem	An interdependent system of interacting plants, animals and other Organisms together with the non-living (physical and chemical) components of their surroundings.
Emergency Response	The reaction by emergency services such as Fire, Police, Ambulance, Industrial Response Teams, etc., to an emergency.
Endangered Species	Those plant and animal species listed under Part 1 of Schedule 1 of the NSW Threatened Species Conservation Act 1995 or listed as <i>endangered</i> under Subdivision A of Division 1 of Part 13 of the

	Commonwealth Environment Protection and Biodiversity Conservation Act 1999.
Environment	The physical, biological, cultural, economic and social characteristics of an area, region or site.
Environmental Impact Statement (EIS)	The orderly and systematic evaluation of a proposal, including alternatives and objectives, and its effects on the environment, including the mitigation and management of these effects.
Environmental Management	That part of the overall management system which includes organisational Structure, planning activities, responsibilities, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining environmental policy (Refer to related term Environmental Management System).
Environmental Management Plan (EMP)	<p>The control, training and monitoring measures to be implemented during</p> <p>the design, construction and operation phases of a project in order to avoid, minimise or ameliorate potentially adverse impacts identified during environmental (being socio-economic, cultural, physical, biological) assessments.</p>
Fauna	Animals
Flora	Plants
Freight	The transport of commercial goods.
Frog Habitat Area (FHA)	Area where frog habitat including foraging areas have been provided.
Gantry crane	Track-mounted crane used in the loading and unloading of bulk cargo, containers and heavy lifts.
Geotechnical	Relating to the form, arrangement and structure of the geology.
Greenhouse gas	A gas which has an effect on the radioactive absorptivity of the earth's atmosphere and the atmosphere's temperature (e.g. Carbon dioxide).
Greenhouse Effect	Predicted global climatic change (e.g. global warming) associated with build up of certain gases (such as water vapour, carbon dioxide, methane, chlorofluorocarbons, ozone, nitrous oxide, etc.) within the atmospheric environment of the earth. These are known as Greenhouse Gases.

Green Waste	Organic matter comprising vegetation and trees which requires disposal.
Groundwater	Subsurface water contained within the saturated zone.
Heritage (cultural heritage)	A term which encompasses Aboriginal and European sites and material remains (cultural resources).
Hotspot	Area of contamination where levels of organic or inorganic contaminants are elevated above guideline or background levels.
Hydrocarbons	A class or compounds containing only carbon and hydrogen in various structures. Both naturally occurring and from human sources
Hydrology	Surface water and groundwater and their interaction with earth materials.
Hydrogeology	The study of subsurface water in its geological context
Integrated development.	Development that requires development consent and one or more of the approvals listed within Section 91 of the Environmental Planning & Assessment Act 1979.
Intermodal Facility/Intermodal Logistics Centre	Area where commercial goods are unloaded or loaded to allow transfer between road and rail. May contain other facilities including warehousing or administration buildings.
Isotank	Container for transporting liquids on the road.
Isothermal	Same temperature. That is, no temperature inversion present.
L _{A1}	The L _{A1} level is the noise level which is exceeded for 1% of the sample period. During the sample period, the noise level is below the L _{A1} level for 99% of the time.
L _{A10}	The L _{A10} level is the noise level which is exceeded for 10% of the sample period. During the sample period, the noise level is below the L _{A10} level for 90% of the time. The L _{A10} is a common noise descriptor for environmental noise and road traffic noise.
L _{A50}	The L _{A50} level is the noise level which is exceeded for 50% of the sample period. During the sample period, the noise level is below the L _{A50} level for 50% of the time.
L _{Aeq}	The equivalent continuous sound level (L _{aeq}) is the energy average of the varying noise over the sample period and is equivalent to the level of a constant noise which contains the same energy as the varying noise

environment. This measure is also a common measure of environmental noise and road traffic noise.

L _{eq}	The equivalent continuous sound level in dB(A); that is, the constant sound level which has the same acoustic energy as the original fluctuating noise for the same period of time.
L _{Amax}	The maximum noise level over the sampling period (usually 15 minutes).
Lux	The International System unit of illumination, equal to one lumen per square metre.
Mean	The sum of n values divided by n
Median	The middle value in a set of values
Middens	Evidence of Aboriginal occupation of an area.
Monitoring	The checking of impacts of a proposal or an existing activity in order to improve or evaluate environmental management practices. To check the efficiency and effectiveness of the environmental impact assessment process. To determine if the requirements of environmental legislation and associated regulations are being met.
Native vegetation	A broad term for vegetation comprised of plant species which occur naturally in Australia (but which are not necessarily indigenous)
Organochlorines	A group of organic chemicals used in pesticides. Most organochlorine pesticides have low water-solubility, but high chemical and biological stability. They are fat soluble and tend to accumulate in the fat tissue of organisms.
Operation Environmental Management Plan	An element of an Environmental Management Plan that addresses the control, training and monitoring measures to be implemented during the operation phase of a project in order to avoid, minimise or ameliorate potentially adverse impacts identified during environmental assessments.
Ozone	A form of oxygen having three atoms to the molecule. Ozone is a powerful oxidising agent.
Particulate	Small particles, usually in suspension.

Petroleum hydrocarbons (total petroleum hydrocarbons (TPH))	A class of organic compounds arising from unburnt fuel sources or fuel spillage.
Phytotoxic	Elements which inhibit plant growth.
Polycyclic Aromatic Hydrocarbons (PAH)	A class of organic chemicals, PAHs are formed by incomplete combustion or organic material, diagenesis (during or throughout generation) and biosynthesis. PAHs are naturally occurring, however, a significant proportion are the result of combustion by humans.
Potential Acid Sulphate Soil	Soil material which is waterlogged and contains oxidisable sulphur compounds, usually iron sulphide (pyrite) that has a field pH of 4 or more (1:5 soil:water).
Remediation	Removal of identified contamination to minimise human and environmental risks.
Register of National Estate (RNE)	A list of the National Estate developed under the provisions of the Commonwealth's Australian Heritage Commission Act 1975.
Risk	Likelihood of a specific undesirable event occurring within a specified period or in specified circumstances. Listed as a frequency or probability.
Risk assessment	A process used to determine whether people and the environment are at risk (e.g. health and safety) from exposure to hazardous substances used or produced (mainly in an industrial or work place) so that appropriate control measures or management practices can be introduced to prevent or minimise the risk.
Security fence	A fence designed to prevent unlawful intrusion to a prohibited
sediment/detention pond	Artificial earthen depression to retain water runoff for a period of time so as to control high intensity runoff.
State Significant Development	Development that constitutes State Significant Development under Section 76A(7) of the Environmental Planning and Assessment Act 1979. This usually occurs when development is declared to be State Significant Development under an environmental planning instrument or has been declared in the Gazette by the Minister for Planning to be so.
Stevedore	A person employed in the loading or unloading of ships.

Sustainable use	Use of organism, ecosystem or their renewable resource at a rate within its capacity for renewal
Terminal operator (s)	Stevedoring company or companies who would operate the container handling operations at the new terminal.
Terrestrial	Of or pertaining to the land as distinct from the water.
Thermal efficiency	The proportion of energy converted from the fuel to electricity in the generation process and is an indication of CO ₂ emissions.
Threatened species	Animals or plants listed as endangered or vulnerable under the NSW Threatened Species Conservation Act 1995 or the Commonwealth Environment Protection and Biodiversity Conservation Act 1999.
Total organic carbon (TOC)	The amount of carbon in the organic form contained in a sample, measured as a percentage.
Total suspended solids (TSS)	Total load of particulates in water, measured in mg/L.
Twenty-foot Equivalent Unit (TEU)	An internationally recognised measurement for containers. A standard twenty-foot container equals 1 TEU. A forty-foot container equals 2 TEUs.
Viewpoint	Location from which the subject site is visible.
Visibility	Measure of extent to which particular components of a development may be visible from surrounding areas.
Volatiles	Any chemical compound which will evaporate quickly due to its low boiling point.
Vulnerable species	Those plant and animal species listed under Part 1 of Schedule 2 of the NSW Threatened Species Conservation Act 1995 or listed as <i>vulnerable</i> under Subdivision A of Division 1 of Part 13 of the Commonwealth Environment Protection and Biodiversity Conservation Act 1999.
Wheel lathe	Equipment used to re-surface the steel wheels of railway rolling stock without requiring their removal from the Vehicle