

PROPOSED ADELAIDE DESALINATION PLANT



EIS - Glossary

Glossary

AARD	Aboriginal Affairs and Reconciliation Division of the South Australian Department of Premier and Cabinet
ABS	Australian Bureau of Statistics
ACHM	Australian Cultural Heritage Management
ADP	Adelaide Desalination Project
ANZECC	Australian and New Zealand Environment and Conservation Council
APA Group	Comprising Australian Pipeline Trust and APT Investment Trust
AQIS	Australian Quarantine and Inspection Service
Aqueous	A solution in which the solvent is water. Usually used as 'aqueous solution'
AWQC	Australian Water Quality Centre
Australian Standards	Published documents setting out specifications and procedures designed to ensure products, services and systems are safe, reliable and consistently perform the way they were intended to.
Backstairs Passage	Stretch of water lying between Cape Jervis and Kangaroo Island in South Australia
Bathymetry	The measurement of the depth of the ocean floor from the water surface; the oceanic equivalent of topography
BDBSA	Biological Database South Australia
Benthic Biota (Benthos)	Organisms living in or on the seabed
Biodiversity	The variety of different species, the genetic variability of each species, and the variety of different ecosystems that they form
Biofouling	The overgrowth of algae, marine invertebrates, and other organisms on nets, intake pipes, and structures in the water
Biomass	The weight of living matter, usually given as weight per unit area
Cake	Pre-treatment waste.
CEMMP	Construction Environmental Management and Monitoring Plan
Coastal Cliff Zone	The area extending vertically from the top of the cliff to the edge of the horizontal intertidal reef

Concept Design	As detailed in the Concept Design for the Adelaide Desalination Project report prepared by Connell Wagner
Conductivity	A measure of the ability of water to conduct electrical current. It is directly related to the total dissolved substances in the water
Contract	The contract for the DBOM of the Desalination Plant
Contractor	The successful proponent selected by SA Water to design, build, operate and maintain the Desalination Plant
CPB	South Australian Coast Protection Board
CPRS	Carbon Pollution Reduction Scheme
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DAC	South Australian Development Assessment Commission
DBOM	Design, Build, Operate and Maintain
Declared Plants	Exotic plant species which are considered to cause widespread economic and environmental damage. Exotic plant species are Declared under the <i>Natural Resources and Management Act of 2004</i>
DECS	South Australian Department of Education and Children's Services
Deep Benthic Zone	Marine area found at depths 18 m and greater. The habitat is characterised by areas of unconsolidated sand, shell grit and coarse sediment that is sparsely inhabited
DEH	South Australian Department for Environment and Heritage
Desalination	The process of removing salts and other minerals from seawater so that it can be used for drinking water
DETI	South Australia Department for Energy, Transport and Infrastructure
DEWHA	Commonwealth Department of the Environment, Water, Heritage and the Arts
DFC	South Australian Department for Families and Communities
Diatoms	A class of unicellular algae more formally known as Bacillariophyceae that live in cold waters of relatively low salinity
Diffuser	An outlet designed to break up the flow of brine into small streams and 'jet' these streams into a large volume of surrounding seawater with sufficient velocity to mix and disperse the brine rapidly and effectively

Dinoflagellate	A single-celled organism found in fresh and marine waters
Discharge	The saline concentrate that will be emitted from the outfall pipe into Gulf St Vincent
Dissolved Oxygen (DO)	The amount of oxygen freely available in water and necessary for aquatic life and the oxidation of organic materials
Dodge tide	A period of minimal tidal movement
DPC	South Australian Department of Premier and Cabinet
DTA	Direct Toxicity Assessments
DTED	South Australian Department of Trade and Economic Development
DTEI	South Australian Department for Transport, Energy and Infrastructure
DWG	Desalination Working Group
DWLBC	South Australian Department of Water, Land and Biodiversity Conservation
Ecotoxicology	A study of the harmful effects of chemical compounds on species, population and the natural environment
EIS	Environmental Impact Statement
EMMP	Environmental Management and Monitoring Plan
Entrainment	The drawing of fish and other aquatic organisms into an intake system
Entrapment	When fish and other organisms get caught on screens or physical barriers of intake pipes
Environmental Weed	Exotic plant species which are invading areas of native vegetation, preventing natural regeneration of native plants
EPA	Environment Protection Authority
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act of 1999</i>
EPA Bunding and Spill Management Guidelines	This guideline applies to facilities that use or store liquids above ground, and provides information on bunds or spill containment systems to minimise the risk of environmental harm from liquids spills or leaks.
Equinox	Either of two instants during the year when the sun is directly over the Earth's equator. In the Southern Hemisphere the vernal (Spring) equinox occurs around September 21 st and the autumnal (Autumn) equinox occurs around March 21 st , although the specific dates vary from year to year
Exotic plant species	Introduced species not native or endemic to the area in question
Ferruginised	Material that resembles iron rust in colour

FPO	Full Pipeline Option
FTO	Full Tunnel Option
GL	Gigalitres
Green power	Renewable energy sourced from the sun, the wind, water and waste
GRP	Glass fibre reinforced plastic or polymer
GSP	South Australian Gross State Product
GSV (Gulf)	Gulf St Vincent
Guidelines	Guidelines for the preparation of an Environment Impact Statement issued by DAC
HDPE	High-Density Polyethylene
Hematite	The most common iron ore, it is a natural iron oxide that is reddish or brown in colour
Holocene	The period of time since the last glaciation, about 10,000 years ago
HTO	Hybrid Tunnel Option
HVWTP	Happy Valley Waste Water Treatment Plant
Hydrodynamic modelling	Allows water movements, speeds and directions to be simulated on a computer to give a representation of how the estuary processes work and predicts how future processes (as a result of sea level rise or changes to flood defences) might behave
IAIA	International Association of Impact Assessment
IBRA	Interim Biogeographical Regionalisation of Australia
Iconic marine species	Marine species that are well known in South Australia, such as the Leafy Seadragon
Independent Verifier	Is a person or an organisation, owing no obligations to any of the parties to a contract other than to perform the role of independent verifier who is required to confirm by investigation as necessary, the validity of claims by the parties
Infauna	Living in the sediment or sand under the seafloor
Intertidal Reef Zone	The area between the high and low water mark of a spring tide. It is defined as the rocky platform, approximately 100m in width running along the section of coastline adjacent to the Port Stanvac oil refinery
Investigator Strait	Stretch of water between Kangaroo Island and the lower southern stretch of the Yorke Peninsula
KHB	Kaurna Heritage Board Inc.
KMPG	A financial and professional services firm
Laterised	The process by which rock is converted into laterite

Macroalgae	A classification of algae that are defined according to the size of the plant where the body of the plant is large enough to be observable to the eye. Macroalgae is also known commonly as seaweed
Macrobenthic	Large benthos (eg crabs and starfish)
Major development	As defined by the <i>Development Act 1993</i> (SA)
Marine Environment	The saltwater environment
MCA	Multi-Criteria Analysis undertaken to determine the proposed site for the Desalination Plant
Meiofauna	Small benthic invertebrates that live in both marine and fresh water environments, loosely defines a group of organisms by their size, larger than microfauna but smaller than macrofauna
Microbiological	Relating to microorganisms and their life processes
Mid Benthic Zone	The marine area between the depths of 12 and 18 metres that is broadly defined by large areas of bare sand
MRET	National Mandatory Renewable Energy Target
Nationally Listed Species	Species considered Extinct, Endangered, Vulnerable, Migratory or Marine in accordance with the <i>EPBC Act 1999</i>
NES	Matters of National Environmental Significance in accordance with the <i>EPBC Act 1999</i>
NPW Act 1972	<i>National Parks and Wildlife Act of 1972</i>
NSW DEC	New South Wales Department of Environment and Conservation
OEMMP	Operational Environmental Management and Monitoring Plan
Osmoregulation	Control of the water and electrolyte balance within an organism
Pelagic Biota	Organisms living in open water
Pigged	The physical removal of fouling material from a pipe by forcing a 'pig' or block through the pipe
Planktonic Biota	(or plankton) are free-floating or weakly swimming organisms, including microscopic plants and animals, less than 1 millimetre in size, living in open water
Port Stanvac	Located 30 km south of the Adelaide CBD on the eastern side of Gulf St Vincent in South Australia. The Port Stanvac site is partly occupied by a 'mothballed' oil refinery
Ppt	Parts per thousand
PIRSA	Primary Industries and Resources South Australia
Primary Production	The amount of carbon and other nutrients assimilated by plants

Proterozoic	A geological era from 2,400 million years to 570 million years
PSDP	Perth Seawater Desalination Plant
Quaternary sediments	Sediments deposited during the geological time period of the Quaternary which occurred about 1.8 million years ago
Quartzite	A rock made entirely of the mineral quartz
Regionally Listed Plant Species	species that are considered Extinct, Endangered, Threatened, Vulnerable, Uncertain, Rare or Uncommon within the Southern Lofty Botanic region
RNE	Register of National Estate
RO	Reverse Osmosis
RTA	Roads and Traffic Authority
Saline Concentrate	A liquid by-product of the desalination process that has a higher concentration of suspended and dissolved materials (particularly salt) than intake seawater due to the salt concentrating effect of the reverse osmosis system
Salinity	The dissolved salt content of a body of water
Sandstone	A sedimentary rock consisting of sand consolidated with some cement
SARDI	South Australian Research and Development Institute
SA Water	South Australian Water Corporation
SCADA	Supervisory Control and Data Acquisition
Scope 1 Emissions	(or direct emissions) includes direct emissions from sources within the boundary of an operation
Scope 2 Emissions	(or indirect emissions) includes indirect emissions from the consumption of purchased electricity, steam or heat produced by another organisation
Scope 3 Emissions	(other indirect emissions) covers all indirect emissions that are a consequence of an organisation's activities but are not from sources owned or controlled by the operation
Seawater Discharge	(or saline concentrate) is the waste stream that will be emitted from the outfall pipe into the Gulf St Vincent
Seismic surveys	A means of estimating the structure and different features, such as faults, in the ground below the seabed surface
SIDRA	Sidra Solutions - Traffic Engineering Software
Siltstones	A sedimentary rock composed of silt-sized particles
State Listed Species	plant and animal species considered Endangered, Vulnerable or Rare within South Australia in accordance with the <i>National Parks and Wildlife Act 1972</i>

STP	Standard Temperature and Pressure
Subtidal Reef Zone	The area defined as the medium to low profile reef that extends from the low water mark to a depth of 12 metres
TBM	Tunnel boring machine
Terrestrial Environment	The land environment
Tertiary sands	Sands deposited during the Tertiary period of geological time (63 to 2 million years ago)
Thermocline	A transition layer of water in the ocean, with a steeper vertical temperature gradient than that found in the layers of ocean above and below
Transfer pipeline	the pipeline built by the TPS Contractor which transfers treated water from the Desalination plant to the Happy Valley Waste Water Treatment Plant
Trophic Webs	The feeding relationships of organisms in a community. A 'food chain' is a simplification of a trophic web
Turbidity	A measure of water cloudiness caused by suspended solids