



Referral of a Proposal to the Environmental Protection Authority under Section 38(1) of the Environmental Protection Act.

Referral by the Proponent

PURPOSE OF THIS FORM

Section 38(1) of the *Environmental Protection Act 1986* provides that where a development proposal is likely to have a significant effect on the environment, a proponent may refer the proposal to the Environmental Protection Authority (EPA) for a decision on whether or not it requires assessment under the Act.

A referral to the EPA by a proponent under Section 38(1) must be made on this form.

Before completing this form, proponents are encouraged to familiarise themselves with the EPA's *General Guide for Referral of Proposals to the EPA under section 38(1) of the EP Act 1986* (accessed at the EPA's website at www.epa.wa.gov.au or by contacting the EPA on 9222 7186).

Proponents need to complete Parts A and B of the form by marking the appropriate boxes and providing explanatory or additional information where requested. Part B should be completed based on information known to the proponent. Only those sections of Part B that are pertinent to the proposal need to be completed. If space is insufficient, attach additional pages. Where information is contained in a report that is to be submitted with the referral form, the proponent may complete sections of the form by referring to the pertinent section of the report.

Proponents are encouraged to attach any other environmental information they consider may be relevant to the EPA for making a decision on whether or not to assess the proposal, and, if it is to be assessed, the level of assessment. In general, referrals should contain information on the potential environmental impacts of the proposal, the proposed management mechanisms to be implemented to minimise and mitigate for these impacts, and how the principles of the EP Act have been addressed by the proposal.

In addition to providing a hard copy of referral documentation, proponents are also requested to provide an electronic copy of the referral document, noting that section 39(2) of the EP Act provides for a proponent to request that matters of a confidential nature not be kept on the public record. If confidential matters are included in the referral, proponents are requested to submit this information in a separate hard copy attachment to the referral document. The electronic copy of the referral should be identical to the hard copy of the referral document, excluding any confidential attachment.

You may need to contact government agencies or local authorities to obtain information required by this form. A list of key agencies and their contact details is provided in Attachment 1.

Where the EPA decides that a proposal will be assessed at the level of Public Environmental Review or Environmental Review and Management Programme, it will also require the proponent to prepare an Environmental Scoping Document (refer *Environmental Impact Assessment (Part IV Division 1) Administrative Procedures 2002*).

Proponents should also be aware of the need to determine their obligations under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The EPBC Act is separate legislation to the Environmental Protection Act and it identifies a number of matters of national environmental significance which are subject to assessment and approval by the Commonwealth. The matters identified as triggers for the Commonwealth assessment and approval regime are World Heritage properties, Ramsar wetlands, nationally threatened species and ecological communities, migratory species, Commonwealth marine areas, and nuclear actions (refer to the Department of Environment and Heritage's website at www.deh.gov.au). Questions in this referral form that may be relevant to matters of national environmental significance are marked with a #.

- Yes No If yes, name all Agencies and Local Authorities from which any approval is required.

For full implementation the proposal may require the following approvals:

Agency	Legislation	Approval
Department of Environment and Water Resources (Cth)	<i>Environment Protection and Biodiversity Conservation Act (Cth) 1999</i>	Potential Federal environmental approval if deemed to be a controlled action.
Environmental Protection Authority	Part IV <i>Environmental Protection Act 1986</i>	Ministerial Approval
Department of Environment and Conservation	Part V <i>Environmental Protection Act 1986</i> <i>Conservation and Land Management Act 1984</i>	Works Approval and Licence Licence for use of DEC managed lands
Department of Indigenous Affairs	Section 18 <i>Aboriginal Heritage Act 1972</i>	Notice of Application for Minister's Consent to Use Land. Unlikely to need approval, but will confirm with DIA.
Department of Consumer and Employment Protection	<i>Dangerous Goods Safety Act 2004</i>	Storage of Dangerous Goods Licence for storage of chlorine and fluorosilicic acid.
Shire of Harvey	<i>Local Government Act 1995</i> District Planning Scheme No. 1	Development Approval
Western Australian Maritime Museum	<i>Maritime Archaeology Act 1973 (WA)</i> <i>Historic Shipwrecks Act 1976 (Cwth)</i>	Approval to alter, remove, destroy, damage, or in any way deal with, or assume the possession, custody or control of, any maritime archaeological site, ship, relic or thing. Unlikely to need approval, but will confirm with Museum.
Main Roads Western Australia	Utility Providers Code of Practice for WA (2002)	Approval to undertake works within the road reserve
Forest Products Commission	<i>Forest Products Act (2000)</i>	Approval to remove timber from Forest Product Commission managed forests.
Department of Water	<i>Rights in Water and Irrigation Act (1914)</i>	Bed and Banks permit for crossing Harvey River
Alinta Asset Management and Department of Planning and Infrastructure	Section 41 <i>Dampier to Bunbury Pipeline Act 1997</i>	Approval to cross Dampier to Bunbury Natural Gas Pipeline

- If yes above, have you lodged any of the necessary applications or have you discussed the proposal with any person(s) at the Agency or Local Authority?
- Yes No If yes, name all Agencies and Local Authorities for which applications have been submitted or with whom the proposal has been discussed.

At the time of this submission no approval applications have been lodged. However discussions and briefings have been held with the Environmental Protection Authority Services Unit, the Department of Environment and Conservation, Main Roads WA, Department of Planning and Infrastructure, Department of Industry and Resources and the Shire of Harvey.

- What is the current land use on the property, and the extent (area in hectares) of the property?

Lots 32 and 33 Taranto Road (40 hectares) is mostly vegetated and currently contains a small infiltration pond based wastewater treatment plant serving the towns of Binningup and Myalup. The potential pipe alignment from Taranto Road to the storage tanks has various uses including:

- Freehold - rural zoned land, predominantly grazing or market garden
- Crown land
- Reserve for water supply and wastewater
- Road reserve
- Pine plantation.

1.2 Proposal Description (Please attach extra pages where necessary)

- Provide a description of the proposal.

- A reverse osmosis seawater desalination plant powered by renewable energy at the Binningup wastewater treatment plant site with the ultimate capacity to produce up to 100 GL/year of potable water. Construction will be staged depending on water demand predictions with the vast majority of earth disturbing civil works (such as seawater inlet/outlet, seawater pumpstation and external buildings on the plant site) to be undertaken over a two year period ;
- Two seawater inlet (500m long, 2300mm diameter) pipes and two brine discharge pipes (700m long, 1600mm diameter) into the ocean;
- A seawater pumpstation;
- Either one 2000mm diameter or two 1400mm diameter potable water pipelines (either option requires the same corridor of 30m width x 25 km length = 75 ha) to a series 100 ML storage facility (up to 4 tanks) at RL 150m AHD and a 50 ML emergency storage sump (with a total footprint of approximately 2.5 ha) at the same location; and
- Potable water pipeline (30m corridor x 2 km = 0.6 ha) from the storage facility to the Stirling Trunk Main.

Figure 1 (attached) shows the location of infrastructure associated with the proposal. Pipeline routes, water storage facilities and the sump are not depicted on the map as these locations are subject to landowner negotiation and have yet to be finalised.

- What is the proposed ultimate extent (area in hectares) of the activity?

Approximately 20 hectares is needed for the plant at the full capacity of up to 100 GL/year, plus a construction laydown area of 5 hectares which will be revegetated when construction is completed, and approximately 77 hectares footprint for the pipeline corridor, tanks and sump. Priority will be given to a pipeline route and tank location that minimises native vegetation clearing and wetland buffer impacts, such as within roads and cleared agricultural land.

- Provide the timeframe in which the activity or development is proposed to occur. (Include start and finish dates where applicable)

July 2007	Refer proposal to EPA
February 2008	Environmental Impact Assessment document released for public review
June 2008	EPA's Bulletin released
September 2008	Ministerial Statement released
December 2008	Construction commences

December 2010	Commissioning
December 2011	Plant is in production

Please note that these dates are the best approximation that can be given now and are subject to change.

- Provide details of any staging of the proposal.

The plant and associated connecting infrastructure will begin construction in late 2008 (if all approvals are obtained) to deliver a minimum of 45 GL/year by 2011. However much of the earth disturbing civil works to enable the plant to deliver up to 100 GL/year will also be built at this time (for example, the seawater intake and outlet pipelines will be constructed to be able to produce up to 100GL/year). Further equipping of the plant to produce up to 100GL/year will occur as the water is required for the Integrated Water Supply System (IWSS).

- Indicate whether, and in what way, the proposal is related to other proposals in the region.

With a growing population and a drying climate, the Water Corporation has developed the Source Development Plan 2005-2050. This plan outlines improved and new sources, including (but not limited to) South West Yarragadee groundwater (which has since been shelved by the WA government), Harvey Irrigation Water Trading, desalination plant(s) and Wellington Dam Salinity Management. This desalination plant will be the only source available to deliver the required minimum of 45 GL/year to the IWSS by 2011. The Water Corporation has also referred the Southern Sources Integration Assets proposal as a Strategic Environmental Assessment to the EPA to obtain a strategic assessment of pipeline corridors for water and wastewater conveyance from the southern parts of WA to the south metropolitan area of Perth.

1.3 Location information

The proposed plant site is located in the locality of Binningup, Shire of Harvey LGA. The proposed pipeline route will be located in the localities of Binningup, Wokalup and Harvey (all in the Shire of Harvey).

- Please provide proposal location details in one of the following two ways:

EITHER

- a) Electronic spatial data (preferred)
- b) GIS or CAD on CD, depicting the proposal extent, geo-referenced and conforming to the following parameters:
 - datum: GDA94
 - projection: Geographic (latitude/longitude) or Map Grid of Australia (MGA)
 - format: Arcview shapefile, Arcinfo coverages, Microstation or AutoCAD.

OR

- b) Maps and/or directions (if no electronic spatial data is available)

Any maps or diagrams of the proposal, together with the following directions:

 - for urban areas: street address, lot number, the suburb and nearest road intersection;
 - for remote localities: the nearest town, together with distance and direction from that town to the proposal site.

Please also attach the following map/plans, clearly showing the location of the development in its regional and local context.

❖ Locality plan – Broad Scale

Provide a locality plan (preferably superimposed on an aerial photograph) to identify:

- proposed development site and any associated infrastructure

- main roads
 - urban centres
 - wetlands and watercourses
 - remnant native vegetation
 - adjoining land uses (including recreation)
 - sensitive marine areas
- ❖ Site Plan – Proposal Details
- Provide a site plan to scale and indicate the location of:
- lot boundaries
 - road frontages
 - extent of the proposed development area
 - extent of the proposed buffer area (if applicable)
- ❖ Site Plan – Existing Environment
- Provide a site plan to scale (the same scale as above) and indicate the location of:
- lot boundaries
 - road frontages
 - any information required to be shown from Section 2.2 of this form
 - extent of native vegetation of the site (the extent of overlap between the proposed development area and the area of native vegetation must be highlighted)
 - extent of hydrological features on the site (this includes wetlands, watercourses, creek lines, seasonal creeks and artificial drainage lines)
 - sensitive marine areas

PART B - ENVIRONMENTAL IMPACTS AND MANAGEMENT COMMITMENTS

2. ENVIRONMENTAL IMPACTS

Describe the impacts of the proposal on the following elements of the environment, through the questions below:

- (i) flora and vegetation #;
- (ii) fauna #;
- (iii) rivers, creeks, wetlands and estuaries;
- (iv) significant areas and/ or land features;
- (v) coastal zone areas;
- (vi) marine areas and biota #;
- (vii) water supply and drainage catchments;
- (viii) pollution;
- (ix) greenhouse gas emissions;
- (x) contamination;
- (xi) social surroundings; and
- (xii) risk.

These features should be shown on the site plan, where appropriate)

For all information, please provide:

- (a) the source of the information; and

(b) how recent the information is.

2.1 Flora and Vegetation

- Do you propose to clear any native flora and vegetation as a part of this proposal?
(A proposal to clear native vegetation may require a clearing permit under Part V of the EP Act (Environmental Protection (Clearing of Native Vegetation) Regulations 2004). Please contact the Department of Environment and Conservation for more information.

(please tick)

Yes

If yes, complete the rest of this section

If no, go to the next section

- How much vegetation are you proposing to clear (in hectares)?
For the full 100GL/year capacity plant, approximately 25 hectares (20 ha for the plant and 5 ha for construction laydown which will be rehabilitated) of native vegetation will be cleared. However if any adjacent lots become available to the Water Corporation at a later stage then the plant layout will be optimised to further minimise vegetation clearing and landscape disturbance so it is expected that 20 hectares represents a maximum final clearing area for the plant. Pipeline routes from the plant to storage facility near the Stirling Trunk Main are still to be negotiated. The location of the storage facility and sump has yet to be determined.
- Have you submitted an application to clear native vegetation to the Department of Environment and Conservation (unless you are exempt from such a requirement)?
- Yes No If yes, on what date and to which office was the application submitted of the Department of Environment and Conservation?

Vegetation clearing will be in accordance with Schedule 6 item 1 once Section 38 environmental approval is obtained.

- Are you aware of any recent flora surveys carried out over the area to be disturbed by this proposal?
- Yes No If yes, please attach a copy of any related survey reports and provide the date and name of persons / companies involved in the survey/s. (If no, please do not arrange to have any biological surveys conducted prior to consulting with the DoE.)

The 2006 spring survey conducted by 360 Environmental is attached.

- Has a search of CALM records for known occurrences of rare or priority flora or threatened ecological communities been conducted for the site? #
- Yes No If you are proposing to clear native vegetation for any part of your proposal, a search of Department of Conservation and Environment records of known occurrences of rare or priority flora and threatened ecological communities will be required. Please contact the Department of Conservation and Environment for more information.
- Are there any known occurrences of rare or priority flora or threatened ecological communities on the site? #

Yes No If yes, please indicate which species or communities are involved and provide copies of any correspondence with CALM regarding these matters.

- If located within the Perth Metropolitan Region, is the proposed development within or adjacent to a listed Bush Forever Site? (You will need to contact the Bush Forever Office, at the Department for Planning and Infrastructure)

Yes No If yes, please indicate which Bush Forever site is affected (site number and name of site where appropriate).

No infrastructure associated with this project is located within the Perth Metropolitan Region.

- What is the condition of the vegetation at the site?

Vegetation condition varies from excellent to good to poor. The 2006 spring reconnaissance survey is attached.

2.2 Fauna

- Do you expect that any fauna or fauna habitat will be impacted by the proposal?

(please tick)

Yes

If yes, complete the rest of this section

No

If no, go to the next section

- Describe the nature and extent of the expected impact.

The fauna impacts are associated with vegetation clearing. Western Ringtail Possums are believed to frequent the site. Plant layout will be optimised so that vegetation clearing will be minimised on the site in particular with regards to tuart and peppermint trees. An environmental and social offset package will also be proposed. Some impacts may be caused from noise emissions and potentially hazardous trenches during construction. Management plans will be developed, assessed by the EPA and implemented by the Water Corporation to ensure no native animal is harmed during construction.

- Are you aware of any recent fauna surveys carried out over the area to be disturbed by this proposal?

Yes

No

If yes, please attach a copy of any related survey reports and provide the date and name of persons / companies involved in the survey/s. (If no, please do not arrange to have any biological surveys conducted prior to consulting with the DoE.)

See attached.

- Has a search of DEC records for known occurrences of Specially Protected (Threatened) fauna been conducted for the site?

Yes

No

(please tick)

The 2006 spring reconnaissance survey is attached.

- Are there any known occurrences of Specially Protected (Threatened) fauna on the site? #

Yes

No

If yes, please indicate which species or communities are involved and provide copies of any correspondence with DEC regarding these matters.

Evidence of Specially Protected fauna (see table below) was predicted to occur during fauna surveys in spring 2006.

Common Name	Scientific Name	Act	Risk Level
Western Ringtail Possum	<i>Pseudocheirus occidentalis</i>	EPBC 1999 WC Act 1950	Schedule 1 (State) Vulnerable (Cth)
Southern Brown Bandicoot or Quenda	<i>Isodon obesulus fusciventer</i>	WC Act 1950	P4
Carnaby's Black-Cockatoo	<i>Calyptorhynchus latirostris</i>	EPBC 1999 WC Act 1950	Endangered Vulnerable
Baudin's Cockatoo	<i>Calyptorhynchus baudinii</i>	EPBC 1999 WC Act 1950	Vulnerable Vulnerable
Chuditch	<i>Dasyurus geoffroii</i>	EPBC 1999 WC Act 1950	Vulnerable Vulnerable

(360 Environmental, 2006).

2.3 Rivers, Creeks, Wetlands and Estuaries

- Will the development occur within 200m of a river, creek, wetland or estuary?
(please tick) Yes If yes, complete the rest of this section
 No If no, go to the next section

The pipeline alignment which is yet to be finalised as consultation with affected landowners has not yet occurred. The potential corridor for the final pipe alignment will be selected so that minimal impacts on these wetlands will occur. A wetland study will be undertaken as part of this assessment. There will be a small amount of clearing in wetland buffers and in these areas the corridor width will be reduced to 20m. The pipeline will cross the Harvey Drain and the Harvey River.

- Will the development result in the clearing of vegetation within the 200 m zone?
 Yes No If yes, please describe the extent of the expected impact.

Temporary clearing will occur as part of the pipeline construction.

- Will the development result in the filling or excavation of a river, creek, wetland or estuary?
 Yes No If yes, please describe the extent of the expected impact.

Temporary bunding and/or diversion of watercourses may be required for pipeline installation. Environmental impacts will be temporary and in accordance with approvals under the Rights in Water and Irrigation Act (1914) approval from the Department of Water.

- Will the development result in the impoundment of a river, creek, wetland or estuary?
 Yes No If yes, please describe the extent of the expected impact.

- Will the development result in draining to a river, creek, wetland or estuary?
 Yes No If yes, please describe the extent of the expected impact.

Temporary dewatering for the pipeline installation may locally affect watertables. Impacts will be temporary for the construction period only. Stormwater at the plant will be collected and disposed of locally.

- Are you aware if the proposal will impact on a river, creek, wetland or estuary (or its buffer) within one of the following categories? (please tick)

Conservation Category Wetland	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Unsure
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Draft Environmental Protection (Swan Coastal Plain Wetlands) Policy 2004	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unsure
Environmental Protection (South West Agricultural Zone Wetlands) Policy 1998	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unsure
Perth's Bush Forever site	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unsure
Environmental Protection (Swan & Canning Rivers) EPP 1998	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unsure
The management area as defined in s4(1) of the Swan River Trust Act 1988	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unsure
Which is subject to an international agreement, because of the importance of the wetland for waterbirds and waterbird habitats (e.g. Ramsar, JAMBA, CAMBA) #	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unsure

2.4 Significant Areas and/ or Land Features

- Is the proposed development located within or adjacent to an existing or proposed National Park or Nature Reserve?

Yes No If yes, please provide details.

Although not yet determined, the pipeline route may be close to Byrd Swamp Nature Reserve.

- Are you aware of any Environmentally Sensitive Areas (as declared by the Minister under section 51B of the EP Act) that will be impacted by the proposed development?

Yes No If yes, please provide details.

- Are you aware of any significant natural land features (e.g. caves, ranges etc) that will be impacted by the proposed development?

Yes No If yes, please provide details.

2.5 Coastal Zone Areas (Coastal Dunes and Beaches)

- Will the development occur within 300m of a coastal area?

(please tick) Yes If yes, complete the rest of this section
 No If no, go to the next section

- What is the expected setback of the development from the high tide level and from the primary dune?

The seawater inlet and brine outlet pipes will traverse the dunal system 500 m and 700 m respectively (approximately) into the ocean. All pipelines will be buried. The closest part of the plant will be located eastward of the primary dune, approximately 250m from the high tide mark.

- Will the development impact on coastal areas with significant landforms including beach ridge plain, cusped headland, coastal dunes or karst?

Yes No If yes, please describe the extent of the expected impact.

The coastal area in the immediate vicinity of the plant is neither a beach ridge plain nor cusped headland. The coastal area does exhibit relatively tall and steep primary dunes. Temporary disturbance to primary dunes will be required to enable burial of the seawater intake and brine

outlet, although using existing roads, tracks and blowouts will be preferable to traversing a sand dune. There will be the potential for karst to be disturbed during construction, although this will be temporary, allowing for burial.

- Is the development likely to impact on mangroves?
 Yes No If yes, please describe the extent of the expected impact.

2.6 Marine Areas and Biota

- Is the development likely to impact on an area of sensitive benthic communities, such as seagrasses, coral reefs or mangroves?
 Yes No If yes, please describe the extent of the expected impact.

There are no coral reefs or mangroves in the proposal area, however the extent of seagrasses will not be known until the completion of benthic habitat mapping. Any impacts on the seagrasses will be limited to temporary construction impacts while inlet and outlet pipes are being buried. Once the plant is operating and discharging brine (approximately twice the salinity of seawater) no impact on benthic communities is expected.

- Is the development likely to impact on marine conservation reserves or areas recommended for reservation (as described in A Representative Marine Reserve System for Western Australia, CALM, 1994)?
 Yes No If yes, please describe the extent of the expected impact.

- Is the development likely to impact on marine areas used extensively for recreation or for commercial fishing activities?
 Yes No If yes, please describe the extent of the expected impact, and provide any written advice from relevant agencies (e.g. Fisheries WA).

There are active commercial fisheries along the coast from Cape Naturaliste to Mandurah, including a bait and crab fishery. The bait fishery is a beach fishery targeting smaller fish such as whitebait and bluebait using purse seine nets. The crab fishery is marine based using pots. In suitable seasons, the salmon fishery will operate from the beach also.

Offshore, the area is popular for recreational rock lobster fishing during the November – June season and popular all year round for beach line recreational fishers.

Impacts on fishing activities are expected to be temporary during pipeline burial and marine infrastructure construction. Intake and outlet facilities will be in 10 m of water and as such no impacts are expected.

2.7 Water Supply and Drainage Catchments

- Are you in a proclaimed or proposed groundwater or surface water protection area?
(You may need to contact the Water and Rivers Commission (WRC) for more information on the requirements for your location, including the requirement for licences for water abstraction. Also, refer to the WRC website)

Yes No If yes, please describe what category of area.

The proposal is in a Proclaimed Groundwater Area under the Rights in Water Irrigation Act - Myalup Sub Area in the South West Coastal Groundwater Area and not in a proclaimed surface water area.

- Are you in an existing or proposed Underground Water Supply and Pollution Control area?

(You may need to contact the WRC for more information on the requirements for your location, including the requirement for licences for water abstraction. Also, refer to the WRC website)

Yes No If yes, please describe what category of area.

- Are you in a Public Drinking Water Supply Area (PDWSA)?

(You may need to contact the WRC for more information or refer to the WRC website. A proposal to clear vegetation within a PDWSA requires approval from WRC.)

Yes No If yes, please describe what category of area.

- Is there sufficient water available for the proposal?

(Please consult with the WRC as to whether approvals are required to source water as you propose. Where necessary, please provide a letter of intent from the WRC)

Yes No Not applicable

- Will the proposal require drainage of the land?

Yes No If yes, how is the site to be drained and will the drainage be connected to an existing Local Authority or Water Corporation drainage system? Please provide details.

Dewatering activities may be required during construction to facilitate burial of pipe work. A Dewatering and Acid Sulfate Soils Management Plan will be developed, assessed by the EPA and implemented by the Water Corporation to manage such impacts. The rate of dewatering will not affect subterranean fauna.

- Is there a water requirement for the construction and/ or operation of this proposal?

(please tick) Yes If yes, complete the rest of this section

No If no, go to the next section

- What is the water requirement for the construction and operation of this proposal, in kl/year?

Operation of the plant will require up to 200 GL/year of seawater per year plus minor domestic water usage associated with industrial premises (e.g. toilets and office use). Small amounts of water may be needed for dust suppression during construction.

- What is the proposed source of water for the proposal? (eg dam, bore, surface water etc.)

If water is required for dust suppression, water will be carted in on trucks. Indian Ocean seawater (up to approximately 200 GL/year) will be used for the plant's production of potable water.

2.8 Pollution

- Is there likely to be any discharge of pollutants from this development, such as noise, vibration, gaseous emissions, dust, liquid effluent, solid waste or other pollutants?

Yes No If yes, complete the rest of this section

- Is the proposal a prescribed premises, under the Environmental Protection Regulations?

(Refer to the EPA General Guide for Referral of Proposals to the EPA under section 38(1) of the EP Act 1986 for more information)

Yes No If yes, please describe what category of prescribed premise.

Environmental Protection Regulations 1987, Schedule 1

Category 54A: Water desalination plant. Premises at which salt is extracted from water if — (a) waste water is discharged into marine waters; and (b) the discharged waste water has a density greater than the average ambient density of the marine water at the discharge site.

Will the proposal result in gaseous emissions to air?

Yes No If yes, please briefly describe.

Some minor dust emissions will occur as a result of construction activities, primarily dust. There will be no gaseous emissions from the direct operation of the desalination plant. There will be no greenhouse gas emissions associated with power supply for the plant as the plant will be powered from renewable energy sources.

Have you done any modelling or analysis to demonstrate that air quality standards will be met, including consideration of cumulative impacts from other emission sources?

Yes No If yes, please briefly describe.

Will the proposal result in liquid effluent discharge?

Yes No If yes, please briefly describe the nature, concentrations and receiving environment.

During operation of the plant up to approximately 100 GL/year of brine at approximately twice the salinity of seawater will be returned to the ocean via a pipeline and diffuser.

If there is likely to be discharges to a watercourse or marine environment, has any analysis been done to demonstrate that the State Water Quality Management Strategy or other appropriate standards will be able to be met?

Yes No If yes, please describe.

Preliminary analysis of the marine environment has been conducted, indicating water quality parameters can be met. Further marine modelling and diffuser design will be undertaken as part of the current environmental impact assessment.

Will the proposal produce or result in solid wastes?

Yes No If yes, please briefly describe the nature, concentrations and disposal location/ method.

There will be some solid wastes created as part of water treatment process, including redundant membranes and treatment precipitate. These will be disposed of at the nearest capable landfill facility.

Will the proposal result in significant off-site noise emissions?

Yes No If yes, please briefly describe.

The plant is not expected to operate with offsite noise impacts. Noise emissions will be minimised by utilising best practice acoustic design, the quietest available equipment and by ensuring equipment is serviced adequately and using engineered attenuation methods. Background noise studies are currently underway so that maximum noise limits can be determined for the operation of the plant.

There will be general construction noise during construction. Construction is expected to be in compliance with Australian Standard for Construction Noise.

Will the development be subject to the Environmental Protection (Noise) Regulations 1997?

- Yes No If yes, has any analysis been carried out to demonstrate that the proposal will comply with the Regulations?

Please attach the analysis.

The plant will be designed and engineered as to comply with the Environmental Protection (Noise) Regulations during operation. Noise modelling will be undertaken as part of optimising the acoustic design for the plant.

- Does the proposal have the potential to generate off-site, air quality impacts, dust, odour or another pollutant that may affect the amenity of residents and other "sensitive premises" such as schools and hospitals (proposals in this category may include intensive agriculture, aquaculture, marinas, mines and quarries etc.)?

- Yes No If yes, please describe and provide the distance to residences and other "sensitive premises".

The closest resident is approximately 850 m from the boundary of the Water Corporation site. Minimal dust emissions may occur during normal construction conditions. No dust or odour emissions are expected during operation.

The plant will be designed and engineered as to comply with the Environmental Protection (Noise) Regulations during operation. Noise modelling will be undertaken as part of optimising the acoustic design for the plant.

- If the proposal has a residential component or involves "sensitive premises", is it located near a land use that may discharge a pollutant?

- Yes No Not Applicable If yes, please describe and provide the distance to the potential pollution source

2.9 Greenhouse Gas Emissions

- Is this proposal likely to result in substantial greenhouse gas emissions (greater than 100 000 tonnes per annum of carbon dioxide equivalent emissions)?

- Yes No If yes, please provide an estimate of the annual gross emissions in absolute and in carbon dioxide equivalent figures.

The plant will be powered by renewable energy.

- Further, if yes, please describe proposed measures to minimise emissions, and any sink enhancement actions proposed to offset emissions.

2.10 Contamination

- Has the property on which the proposal is to be located been used in the past for activities which may have caused soil or groundwater contamination?

- Yes No Unsure If yes, please describe.

The plant is proposed to be located at the Binningup Wastewater Treatment Plant which uses infiltration ponds to treat and evaporate wastewater.

- Has any assessment been done for soil or groundwater contamination on the site?

- Yes No If yes, please describe.

Preliminary desktop analysis indicates that the site is not contaminated. However on-site soil and groundwater sampling and analysis will be undertaken and summarised in the environmental impact assessment document.

- Has the site been registered as a contaminated site under the Contaminated Sites Act 2003? (on finalisation of the CS Regulations and proclamation of the CS Act)
- Yes No If yes, please describe.

2.11 Social Surroundings

- Is the proposal on a property which contains or is near a site of Aboriginal ethnographic or archaeological significance that may be disturbed?
- Yes No Unsure If yes, please describe.

Based on desktop investigations, no registered Aboriginal sites will be disturbed by the proposal. Water Corporation will undertake an ethnographic and archaeological survey of the proposal area to confirm this in consultation with the Gnaala Karla Booja Native Title claimant group, the South West Aboriginal Land and Sea Council and the Department of Indigenous Affairs.

- Is the proposal on a property which contains or is near a site of high public interest (for example, a major recreation area or natural scenic feature)?
- Yes No If yes, please describe.
- Will the proposal result in or require substantial transport of goods, which may affect the amenity of the local area?
- Yes No If yes, please describe.

There will be a temporary impact during the construction period (pipes, personnel and typical construction machinery).

No significant changes in existing traffic will result from this proposal once the plant is operating.

2.12 Risk

- Is the proposal located near a hazardous industrial plant or high-pressure gas pipeline?
- Yes No If yes, please describe.

The plant site is not located near either hazardous industrial plant or high pressure gas pipelines. However the water supply pipeline may need to traverse the Dampier to Bunbury Natural Gas Pipeline.

- Does the proposal have the potential to generate off-site risk?
- Yes No If yes, will the proposal be a major hazardous facility regulated under the Explosives and Dangerous Goods Act?

Chlorine and fluorosilicic acid will be used in post treatment processes. Chlorine will be stored onsite in 900 kg drums. Storage and management of chlorine will be in accordance with the Explosives and Dangerous Goods Act.

3. MANAGEMENT

3.1 Principles of Environmental Protection

- Have you considered how your project gives attention to the following Principles, as set out in section 4A of the EP Act? (For information on the Principles of Environmental Protection, please see EPA Position Statement No. 7, available on the EPA web.)

- | | | |
|---|---|-----------------------------|
| 1. The precautionary principle. | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 2. The principle of intergenerational equity. | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |

- 3. The principle of the conservation of biological diversity and ecological integrity. Yes No
- 4. Principles relating to improved valuation, pricing and incentive mechanisms. Yes No
- 5. The principle of waste minimisation. Yes No

- Is the proposal consistent with the EPA's Position Statements (available on the EPA web)?
 Yes No

3.2 Management Commitments

- How has the proposal been developed to avoid, minimise and manage potential impacts? Please describe any specific commitments you make as the proponent to minimising the potential environmental impacts of this development.

At this early stage of the proposal the Water Corporation makes the following commitments:

- ◆ Native vegetation clearing on the plant site will be minimised to under 25 hectares and the pipe route option chosen to ensure priority is given to route selection that minimises impacts on wetlands and their 200m buffers.
- ◆ Plant acoustic design will ensure that no resident will hear the plant operating above the sound of the ocean.
- ◆ The brine diffuser will be designed to ensure no impact on marine fauna or flora.
- ◆ Further details of specific management commitments and strategies will be expanded upon in the Environmental Review.

3.3 Consultation

- Has public consultation taken place (such as with other government agencies, community groups or neighbours), or is it intended that consultation shall take place?
 Yes No If yes, please list those consulted and attach comments or summarise response on a separate sheet.

The Water Corporation is in the early stages of consultation on the proposal. Preliminary briefings have been given to:

EPA Service Unit
 Department of Environment and Conservation
 Conservation Council
 Shire of Harvey
 Binningup Residents' Association
 Myalup Residents' Association
 Department of Planning and Infrastructure
 Department of Industry and Resources
 Main Roads WA

Concerns raised so far include:

- ◆ Native vegetation clearing
- ◆ Loss of fauna habitat
- ◆ Brine discharge impacts
- ◆ Wetland impacts
- ◆ Operating noise of the plant
- ◆ Loss of visual amenity from the beach and the town of Binningup
- ◆ Property value reduction
- ◆ Beach access restriction
- ◆ Suitability of the site for a desalination plant and general impact on community amenity

Tours of the Kwinana desalination plant have been conducted and more are planned. More briefings and consultation with stakeholders (including community members, government agencies and environmental groups) will be undertaken over the coming months to inform the impact assessment process.

CHECKLIST AND DECLARATION

Before you submit this form, have you:	<u>YES</u>	<u>NO</u>
Completed all the questions on this form?	✓	<input type="checkbox"/>
Have you attached any extra information, such as:		
Site plans?	✓	<input type="checkbox"/>
Detailed explanations?	✓	<input type="checkbox"/>
Comments obtained during consultation?	✓	<input type="checkbox"/>
Any other relevant information?	✓	<input type="checkbox"/>

Following a review of the information presented in this form, please consider the following question. (Your response is Optional)

DO YOU CONSIDER THE PROPOSAL REQUIRES FORMAL ENVIRONMENTAL IMPACT ASSESSMENT?
 (Information on the levels of environmental impact assessment is available on the EPA website at www.epa.wa.gov.au)

YES
 NO
 NOT SURE

IF YES, WHAT LEVEL OF ASSESSMENT?

ASSESSMENT ON REFERRAL INFORMATION
 ENVIRONMENTAL PROTECTION STATEMENT
 PUBLIC ENVIRONMENTAL REVIEW
 ENVIRONMENTAL REVIEW AND MANAGEMENT PROGRAMME
 STRATEGIC ENVIRONMENTAL ASSESSMENT

I,Suzanne Ena Brown..... (full name) declare that I have completed all of the questions in this form and attached the requested information and declare that the information contained in this form is, to my knowledge, true and not misleading.

Signature	
Name	Suzanne Brown
Position	Project Environmental Manager
Date	13 th July 2007