

Information Sheet - Kemerton to Ocean Brine Pipeline



July 2020

Updated October 2020

Revised January 2021

Pipeline route and construction

The brine pipeline is proposed to carry brine from the Kemerton Strategic Industrial Area (KSIA) to discharge into the ocean 2.5 kilometers north of Buffalo Road, Leschenault. The pipeline will be 9.5 kilometers in length and be made of black poly-ethylene which is 315 millimeters in diameter with a wall thickness of 15 millimeters. It will be buried in road reserves and along firebreaks in Crown and private land.

In July during public consultation, the pipe was proposed to be 200 millimeters in diameter. Harvey Water is now proposing (October 2020) to increase the pipe diameter to 315 millimeters for efficiency in terms of operating costs, and to provide flexibility for use into the future, even though the projected brine discharge volume has not changed. The EPA Section 38 application (submitted January 2021) proposes a 315 millimeter pipe.



Proposed pipe size - 315 millimetres, which is the larger pipe compared to the 200 millimetre pipe.

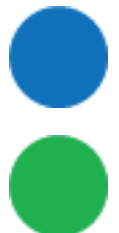
To Summarize pipeline construction and materials:

The 315 millimeter pipe will be buried to a depth of approximately 1000mm to protect the pipe and minimize excavation footprint. Access points and air valves will be designed along the pipeline at low and high points respectively. These will allow access to important sections of the pipeline for maintenance and upkeep. These fittings will remain below ground level, with no impact on visual amenity.

Investigations and consultation have taken place to find the best possible pipeline path that minimizes cultural, archaeological, vegetation, wildlife, soil and habitat impacts. The consultation process included discussions with the following stakeholders:

- Binningup and Australind Community members;
- Private landowners;
- Development WA;
- Department of Jobs, Tourism Science, and Innovation (JTSI);
- The Department of Water and Environmental Regulation (DWER);
- Department of Planning, Lands and Heritage (DPLH);
- Department of Biodiversity, Conservation and Attractions (DBCA).

The route requires clearing a 380 meter section of road shoulder regrowth along Rosamel Road. Harvey Water intends to apply for a permit to clear this strip for a working width of 3 meters from the edge of the sealed road surface. This is the only vegetation clearing required by the project.



The pipe runs through firebreaks, road verges and across cleared farmland. Pipe will be installed using an excavator to dig a 3 x 1 meter trench. The pipe comes in 250 meter lengths with sections being joined by poly welding. The trench will be backfilled and returned to the natural ground contour within the same day.

All trenching and pipe laying work will be completed by Harvey Water staff and our local contractors who are very experienced in this type of work.

Sensitive areas will have the pipe installed via the horizontal directional drilling (HDD) method. Generally, pits approximately 1.5meters deep are dug at 200-meter intervals and the pipe is pushed underground from pit to pit, so that surface habitats are not disturbed, potential areas of acid sulphate spoils are not exposed, and tree root disturbance is minimized.

For the dune and marine sections, the pipe will be installed using the HDD method. The pipe will extend under the dunes, under the beach and continue below the seabed out to a distance approximately 400 meters from the shoreline where the water is 8 meters deep. The pipe will terminate with a diffuser that rises on a 30-degree angle to be approximately 0.5m above the seabed.



Rosamel Road - 380meters section road clearing (re-growth) proposed.