

Breakwater Construction

Dust Management Fact Sheet

February 2022

This fact sheet provides information about dust management and mitigation during the construction of the breakwaters at Ocean Reef Marina.

Dust management

Dust on construction sites can come from a number of activities including truck movements, clearing and earthworks and stockpiling of material. This fact sheet outlines how we are working to manage dust at the Ocean Reef Marina.

Dust prevention and suppression

Every site and project are different, so it is important to use the most effective methods to the specific conditions within a construction site. Ocean Reef Marina is located within a unique coastal environment surrounded by dunes and frequently high winds.

To manage dust within these unique conditions, the following dust suppression measures have been selected:

- hydro-mulch/gluon regularly applied to the northern breakwater sand stockpile and dune. The Contractor is required to monitor the effectiveness of the hydro-mulch on a regular basis and re-apply as required. Whilst this product typically lasts for a minimum of six months in standard conditions, the contractor has been applying it more frequently to account for the unique site characteristics. The most recent coating was on 31 January 2022;
- two wheel washers are in use for trucks and vehicles leaving the sites;
- nearby roads and entrances are cleaned fortnightly by a street sweeper;
- truck loads are dampened when exiting the quarry at Neerabup;
- a water cart is used to dampen accessible work areas and limestone stockpiles.

Dust impacts at Ocean Reef Marina are also being monitored using temporary dust monitors and through regular spot checks of the site. The data from these monitors helps the Contractor monitor and measure dust changes in real time.

Construction Management Plan

The Contractors undertaking the works, the WA Limestone and Italia Stone Group Joint Venture (WALISJV), submitted a Construction Management Plan to the City of Joondalup which was approved prior to works commencing. The plan outlines how dust will be managed during construction.

Additionally, management of dust is governed by the Department of Environment and Conservation's *Guidelines for Managing the Impacts of Dust and Associated Contaminants (March 2011)*. These guidelines provide recommended limits for dust to provide protection against adverse health or amenity impacts.



Hydro-mulch/gluon applied to dune at the northern site



Truck exiting the southern breakwater site via a wheel washer

Community feedback

Community feedback about dust is reported to the Contractor and Project Team. All enquiries and complaints received are managed on a case by case basis, recognising the individual circumstances of our neighbours. DevelopmentWA work closely with the site managers and the joint venture partners to understand and identify any dust issues and explore ways to resolve them where reasonable and practicable.

Since the beginning of works in early 2021, DevelopmentWA have continued to respond to community feedback by implementing additional measures to manage dust, including:

- Installation of three additional temporary dust monitors at the northern breakwater site, a property on Gloriana Way and a reference point off site – these were installed mid-February 2022.
- One-off offers for cleaning of homes for eligible residents within an immediate proximity to the two work sites.
- Installation of a bore for dust suppression water supply at the southern site – this was approved in late January 2022 and is now in use. Additional bores may be considered to support future construction dust mitigation.
- More frequent application of hydro-mulch/gluon on dunes and stockpiles.

A range of other dust suppression and prevention measures are used at other construction sites, however those in place at Ocean Reef Marina have been tailored to the specific conditions (i.e. weather, construction methodology and topography). Additional measures that were investigated and assessed as ineffective for the specific conditions at Ocean Reef Marina were:

- 1.8m dust fencing on sections of the site boundary along Ocean Reef Road, off Resolute Way – it was determined that this would be ineffective in mitigating any potential dust at nearby residences due to the height of the dunes/stockpiles, and installation would be challenging due to the proximity to Bush Forever.
- Investigating alternatives to hydro-mulch/gluon and installing coir matting on the exposed dunes/stockpiles at the northern site – technical specialists advised these are not viable due to

the high winds and the unique coastal environment.

- Relocation/cutting down of the stockpiles – this is not being considered as part of the breakwaters contract however it will form part of future construction contracts.

Given the windy conditions at Ocean Reef Marina, we recommend that residents consider taking some extra steps during construction to reduce potential dust impacts on homes and property, including:

- closing windows and doors where possible, particularly during high winds
- covering or storing outdoor furniture while it is not in use.

DevelopmentWA will continue to work closely with its joint venture partners and future contractors to manage dust impacts on the local community.

Contact the project team

We will continue to provide regular updates to surrounding residents on the breakwater works and what to expect as construction progresses. The breakwater construction webpage is updated regularly as new information becomes available. Please visit yoursay.developmentwa.com.au/ocean-reef-marina

To speak with a member of the project team, or to report any concerns contact us:



1800 943 121



oceanreefmarina@developmentwa.com.au



Water cart wets down tracks and limestone stockpiles at the northern site

KEEP IN TOUCH

Please contact our community information line or get in touch by email if you have any questions or concerns regarding construction works. Register to stay informed on our website and get in touch through our Ocean Reef Marina project channels.



1800 943 121



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