

Our Ref: UID-73453  
Your Ref:



Port Hedland Dust Management Taskforce  
Department of Jobs, Tourism, Science and  
Innovation  
Level 6, 1 Adelaide Terrace  
**EAST PERTH 6004**

**ATTN:** Luke O'Donoghue

6 October 2017

Dear Sir/Madam

## **FORTESCUE COMMENT ON PORT HEDLAND DUST MANAGEMENT TASKFORCE REPORT TO GOVERNMENT**

Fortescue Metals Group ('Fortescue') appreciates the opportunity to provide comment on the Port Hedland Dust Management Taskforce – 2016 Report to Government ('The Report'). Please see below comments against the relevant report recommendation which are italicised.

### ***Recommendation 2: Air Quality Monitoring***

*The Taskforce recommends that the Port Hedland Industries Council (PHIC) continue operating and maintaining its air quality network, with responsibility for oversight of the network, including data verification, storage and publication, transferred to the Department of Environment Regulation. The Taskforce notes that the Department of Environment Regulation will consider a number of options, including regulations, to implement this recommendation.*

Fortescue supports this recommendation. The Taskforce approved Pilbara Ports Authority Dust Management Leading Practice Guidelines (A232535) states the objective of the Air Quality Monitoring Network is to measure compliance with the interim NEPM value of 70 µg/m<sup>3</sup> (24 hour PM<sub>10</sub> average concentration) at the Taplin Street monitoring station and to allow for reactive management response to high dust levels.

These two objectives can be achieved using a rationalised ambient network in tandem with individual operator's boundary monitors. Furthermore a recent independent review (PEL, 2016) of the ambient network identified numerous redundant or non-compliant monitors. Fortescue requests the PHIC air quality network be comprised of three monitors in order to satisfy the Pilbara Ports Authority Dust Management Leading Practice Guidelines.

### ***Recommendation 6: Non-industry sources***

*The Taskforce recommends that the Town of Port Hedland works with key stakeholders to identify and mitigate dust from non-industry sources, with a focus on identifying and mitigating dust from non-industry sources, with a focus on identifying and implementing dust mitigation options for the spoil bank; sealing unsealed roads and undertaking regular and effective street*

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*sweeping operations; considering greening options, including coastal dune revegetation and establishment of a green belt around the port; and reviewing and improving the efficacy of municipal services associated with dust control.*

Fortescue supports this recommendation that non-industry dust sources be identified and mitigated against. Section 3.2 of the report emphasises a key recommendation from the Health Risk Assessment (HRA); *to adopt a coordinated approach using various government sectors to reduce dust from all sources and not just industry.*

This HRA recommendation and the significance of the Wedgefield Light Industrial Area (LIA) as a dust source should also be considered in Recommendation 6.

The significance of the Wedgefield LIA is outlined below:

- Wedgefield ambient network monitor continues to record the largest number of annual interim NEPM exceedances.
- The polar plot (see Attachment 1) suggests localised, non-industry sources are responsible for the majority of 24 hour PM<sub>10</sub> exceedances at the Wedgefield monitoring station. The polar plot shows a regular occurrence of high dust loads shown in yellow and red which are impacting the Wedgefield LIA from the East. The plot also indicates low dust loads represented in blue are recorded at the Wedgefield monitoring station from the West i.e. Inner harbour direction.
- Port Hedland annual wind roses (see Attachment 2) show prevailing south-easterly winds occurring through Winter and Autumn and north-westerly winds in Spring and Summer making both the Wedgefield LIA and Spoil bank significant factors to any dust exceedances in the West End.

The findings of both the HRA and ambient network monitoring confirm there are significant background dust levels in Port Hedland however the taskforce report recommendations primarily address anthropogenic sources. Recommendation 6 which addresses non-industry related dust sources is non-prescriptive and is in direct contrast to Recommendation 3 which clearly outlines the role of the DER in enforcing ongoing reductions in industry-related dust.

Fortescue requests Recommendation 6 be revised to better align with Recommendation 3 to ensure this key HRA recommendation is achievable with a series of targets for non-industry dust sources.

### **Fortescue Dust Controls – Significant reduction achieved**

Fortescue is a foundation member of the PHIC and actively participates in the PHIC Dust Working Group focused on cooperative effort with Community to mitigate impact of Industry on the Port Hedland air shed. Fortescue has participated in numerous LiDAR surveys aimed at identifying dust hot spots in addition to conducting annual dust emissions source characterisation surveys ('point source surveys') to best understand effectiveness of site specific dust controls. Examples of site specific dust controls implemented by Fortescue are belt wash stations and under belt sprays on outload conveyors. Annual point source surveys over a three year period confirms these controls have significantly reduced dust emissions (see Attachment 3). Additional dust controls include triple impact roller frames at transfer points to reduce spillage, sealing trafficable areas and planting vegetation belts.

In summary, Fortescue welcomes the recommendations of the Taskforce Report to Government and remains committed to implementing leading practice dust management at the Herb Elliott Port Facility in Port Hedland.

Should you have any further queries, please contact Andrew Winzer (Senior Environmental Advisor) on 6216 8914 or [awinzer@fmgl.com.au](mailto:awinzer@fmgl.com.au).

Yours sincerely

**FORTESCUE METALS GROUP**



**FERNANDO PEREIRA**

General Manager, Port and Rail

**Enc.**

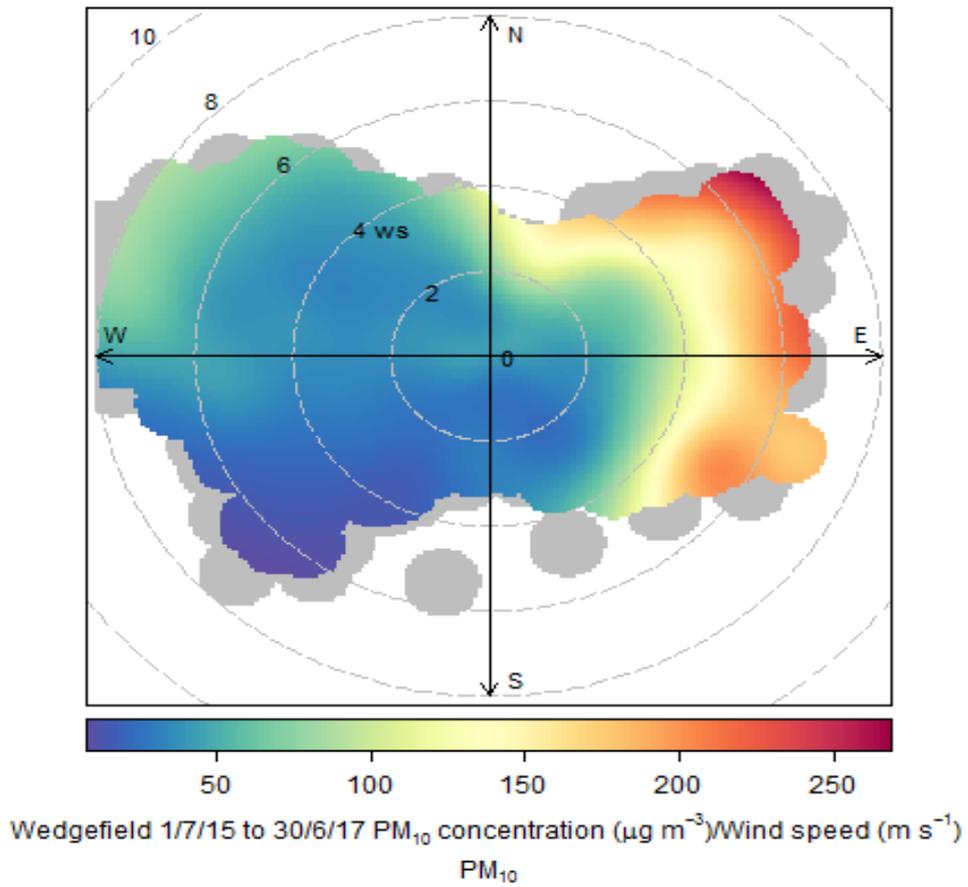
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|--------------|---|
| Attachment 1 | Polar Plot of Wedgefield Monitor from 1/7/15 to 30/6/17 |
| Attachment 2 | Port Hedland Annual wind roses from 2002 -2012          |
| Attachment 3 | Average emission rates from stockyard outload conveyors |

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# **Attachment 1: Polar plot summarising Wedgefield monitoring station**

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Figure 1: Polar plot summarising Wedgefield monitoring station from 1/7/15 to 30/6/17

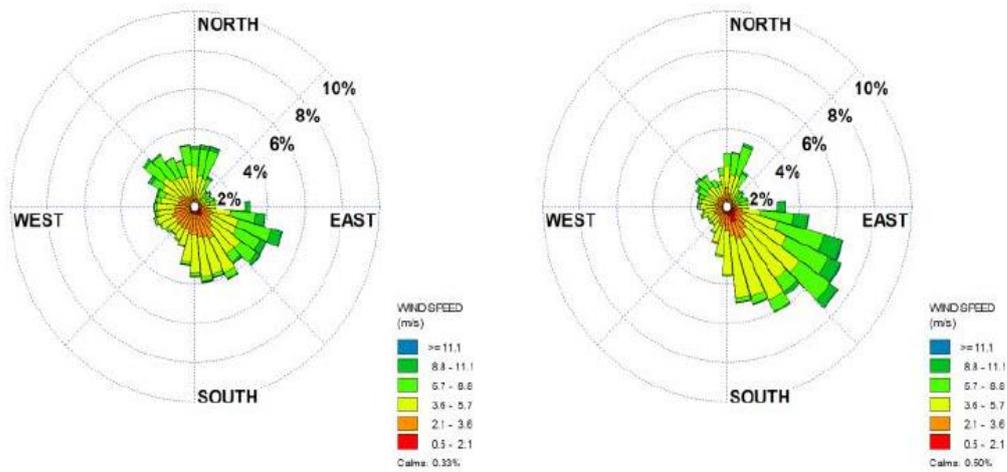


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## **Attachment 2: Port Hedland Annual wind rose**

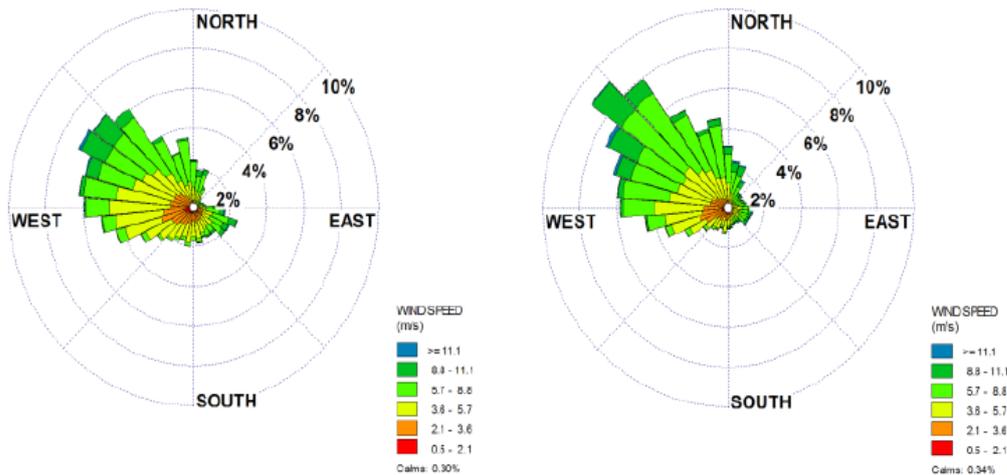
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**Figure 2: Port Hedland Annual wind rose from 2002 -2012**



Wind rose in Port Hedland (Autumn, 2002 – 2012)

Wind rose in Port Hedland (Winter, 2002 – 2012)



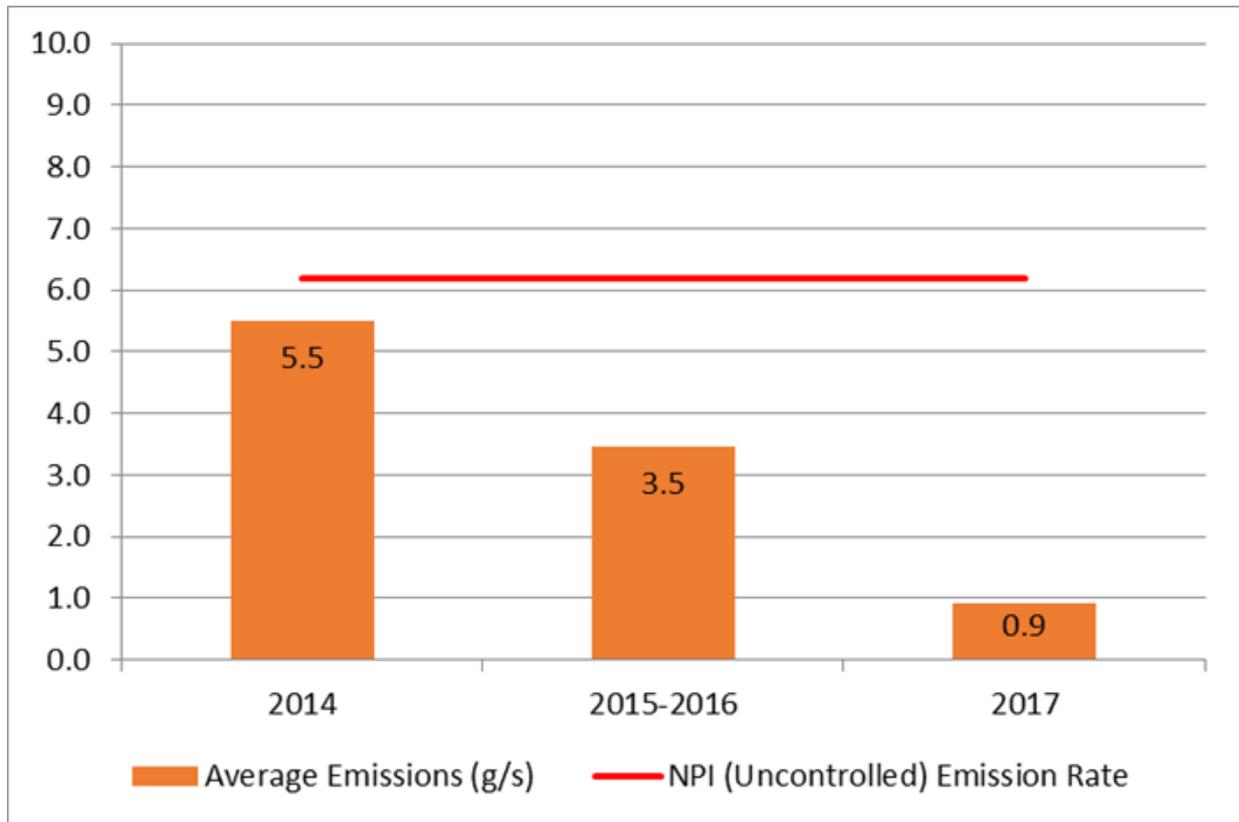
Wind rose in Port Hedland (Spring, 2002 – 2012)

Wind rose in Port Hedland (Summer, 2002 – 2012)

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## **Attachment 3: Calculated average emission rates from stockyard outload conveyors\***

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**Table 1: Calculated Average Emission Rates from Stockyard Outload Conveyors\***

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The average emissions rates provided above are based on a compilation of annual dust emissions source characterisation survey sample points taken at Fortescue's Herb Elliott Port Facility stockyard outload conveyors (CV913, CV914, CV917). These surveys are conducted under variable meteorological conditions and incorporate various product types.

NPI (Uncontrolled) Emission Rate is an emission estimation technique used to compare fugitive emissions in absence of site specific emissions data. (<http://www.npi.gov.au/about-npi/development-npi-nepm>)

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