# Review of Namoi Air Quality Data

July 2015 to July 2018



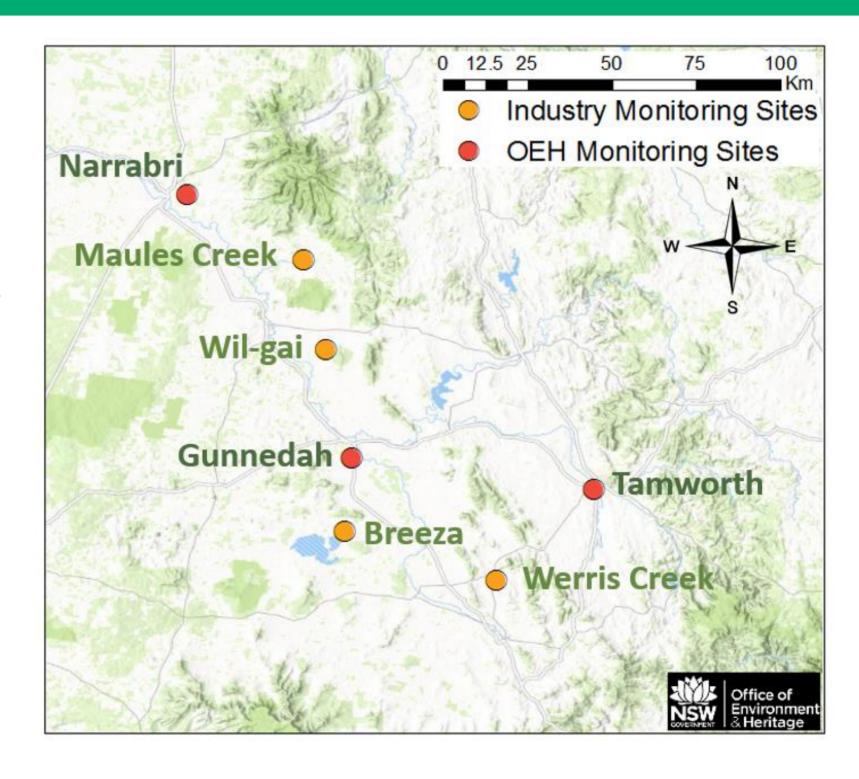
## What are we talking about today??

- 1. Monitoring site locations within the Namoi/Gunnedah basin...
- 2. Background to why and how ambient monitoring is carried out and how it is interpreted...
- 3. Review of data collected between July 2015 until May 2017...
- 4. Review of data collected between May 2017 and July 2018...
- 5. Namoi Air Quality Monitoring Network newsletter...



### Where are the monitoring sites?

- Three monitors established by OEH being at Narrabri, Gunnedah and Tamworth
- Four monitors established by industry being at:
  - Maules Creek
  - Wilgai
  - Breeza
  - Werris Creek





## What is the purpose of ambient monitoring?

- Ambient monitoring is used to collect data on general air quality within an airshed or air catchment.
- Data is used to help inform decisions and activities carried out in an airshed
- Ambient monitoring is <u>not used</u> to determine industry compliance with project approvals, development consents or environment protection licences

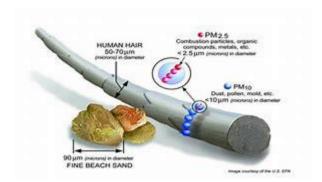


## What is meant by 'criteria' and 'goals'?

- "NEPM" stands for National Environment Protection Measure.
- Air quality criteria for PM10 and PM2.5

Pollutant	Averaging period	Max concentration	Allowable exceedances
Particles as PM10	1 day Annual	50μg/m <sup>3</sup> 25 μg/m <sup>3</sup>	Nil
Particles as PM2.5	1 day Annual	25 μg/m <sup>3</sup> 8μg/m <sup>3</sup>	Nil

° ....remember the hair follicle...?....





### What does the criteria mean for me?

#### ° The Air Quality Index....

AQI Category and Values	Air Pollution Level	Recommended Action
Very Good 0-33	0-33% of national standard	Enjoy activities
Good 34-66	34-66% of national standard	Enjoy activities
Fair 67-99	67-99% of national standard	People unusually sensitive to air pollution, plan strenuous activities when air quality is better
Poor 100-149	100-149% of national standard	Air Pollution Health Alert Sensitive groups: cut back or reschedule strenuous outdoor activities
Very poor 150-200	150-200% of national standard	Air Pollution Health Alert Sensitive groups: avoid strenuous outdoor activities Everyone: cut back or reschedule strenuous outdoor activities
Hazardous 200+	≥ 200% of national standard	Air Pollution Health Alert Sensitive groups: avoid all outdoor physical activity Everyone: significantly cut back on outdoor physical activities



# PM10 24 Hour Data trends.... July 2015-Dec 2016

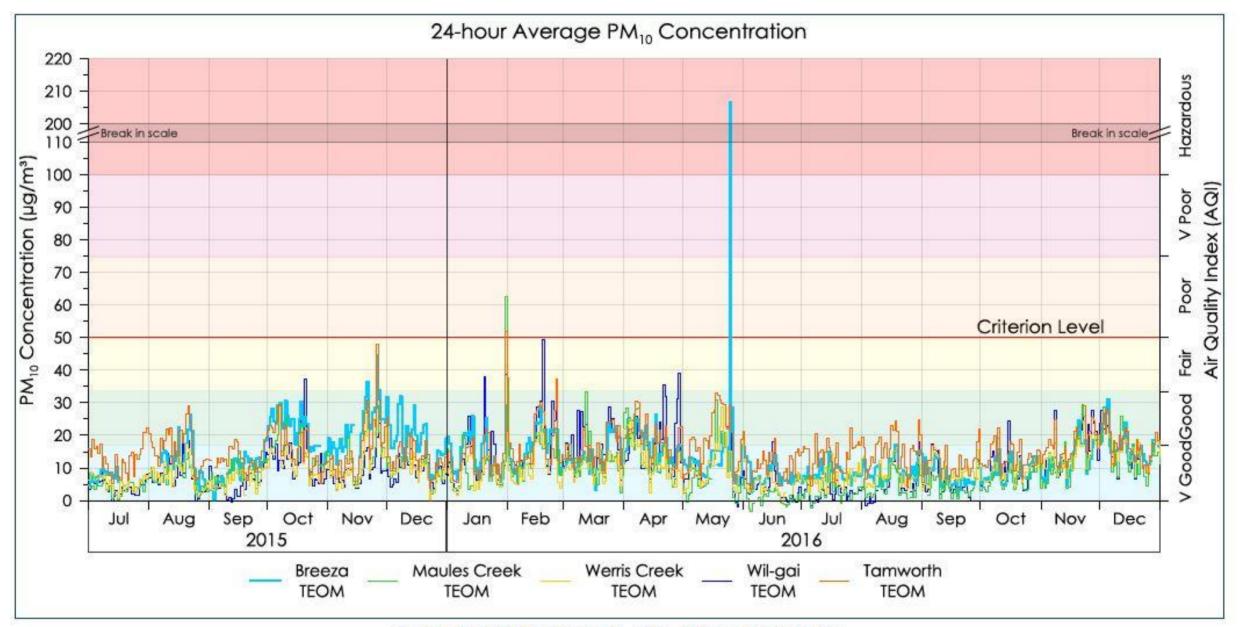


Figure 7-2: Namoi 24-hour average PM<sub>10</sub> levels - July 2015 to December 2016



# PM10 24 Hour Data trends.... Dec 2016 – May 2017

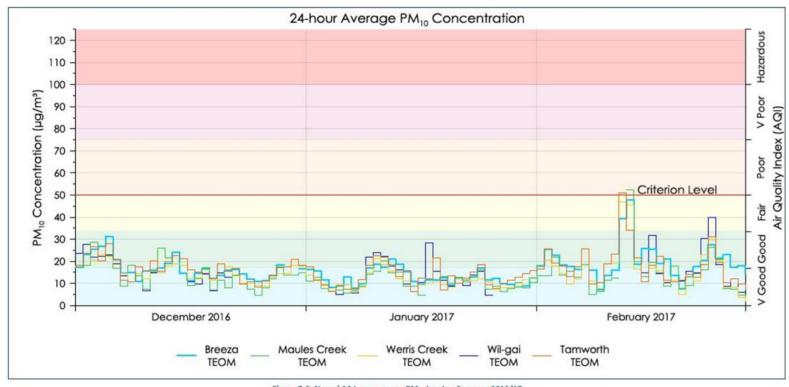


Figure 7-2: Namoi 24-hour average PM<sub>10</sub> levels – Summer 2016/17

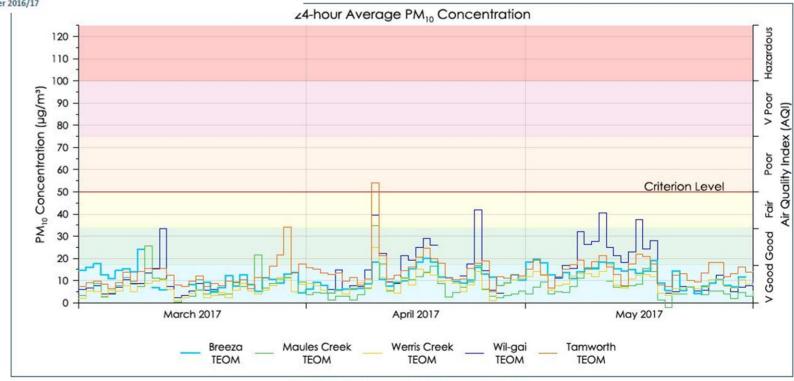




Figure 7-2: Namoi 24-hour average PM<sub>10</sub> levels - Autumn 2017

# PM2.5 24 Hour Data trends.... Dec 2016 – May 2017

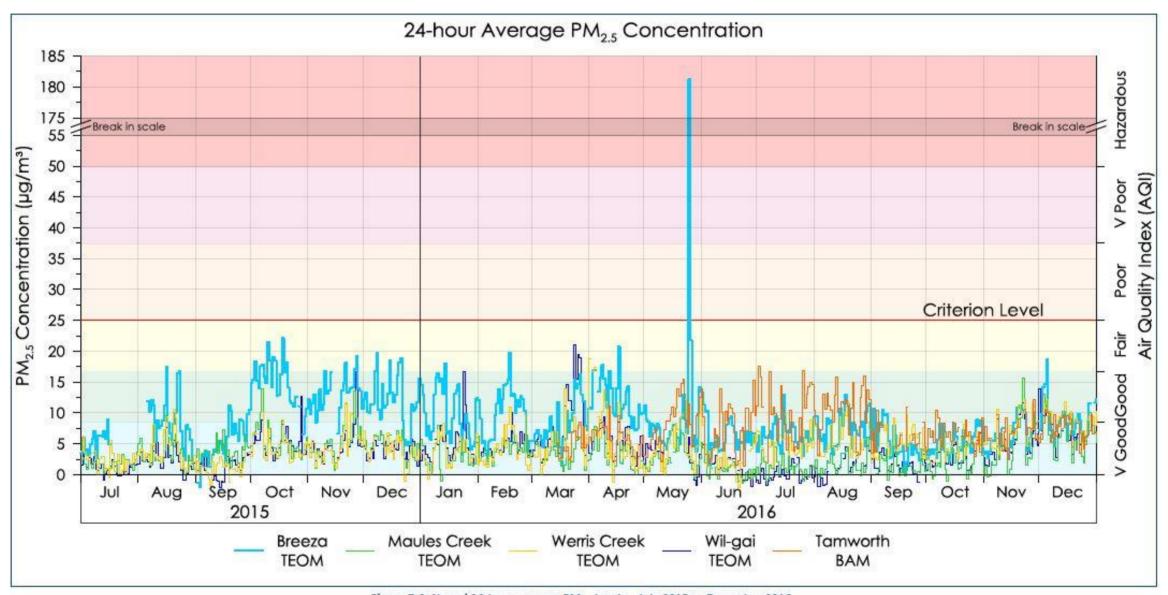


Figure 7-3: Namoi 24-hour average PM25 levels - July 2015 to December 2016



# PM2.5 24 Hour Data trends.... Dec 2016 - May 2017

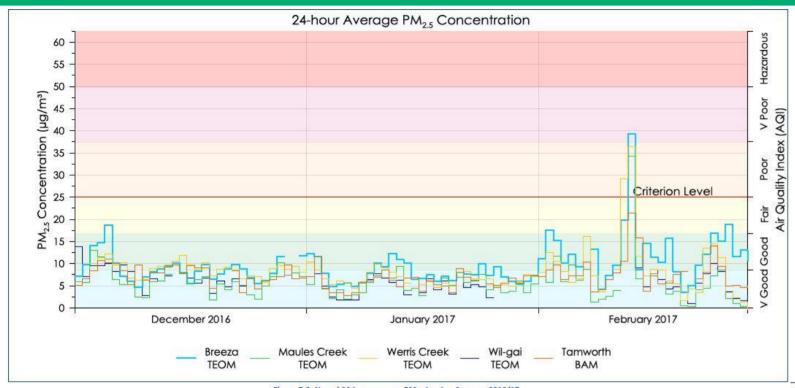


Figure 7-3: Namoi 24-hour average PM<sub>2.5</sub> levels - Summer 2016/17

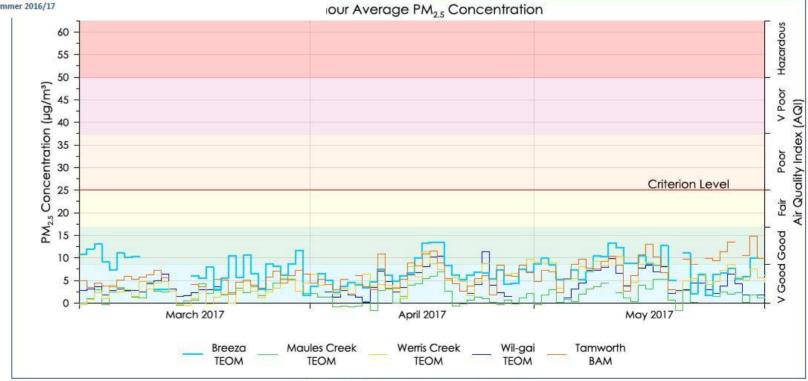




Figure 7-3: Namoi 24-hour average PM25 levels - Autumn 2017

### What are windroses??...

#### Narrabri Windrose January – July 2018

