

# Upper Hunter Air Quality Monitoring Network



## What is the Upper Hunter Air Quality Monitoring Network?

The NSW Government, in partnership with the Upper Hunter coal and power industries, will establish a high-quality ambient-air monitoring network in strategic locations around Upper Hunter mining areas and populated centres, including Muswellbrook and Singleton. The Upper Hunter Air Quality Monitoring Network (the Network) will continuously measure dust particulates in the air at up to 14 sites throughout the region. Air quality data from the Network will be accessible around the clock via an online website.

## Why is DECCW, in partnership with the Upper Hunter coal and power industries, proposing the Network?

The proposed Network will provide credible, reliable and relevant information on current air quality, and trends in air quality, within the Upper Hunter Valley airshed. The Network will allow access to information that can be used to identify the causes of changes in air quality and to help identify the major sources of the monitored pollutants. In addition, regional air-quality data from the Network will be compared with relevant national air-quality goals.

## How will the Network monitor dust levels in the Upper Hunter Region?

The Network will include up to 14 monitoring stations that will operate continuously to monitor the concentration of dust with a particle size of 10 microns; one micron is equal to one thousandth of a millimetre. The Network will also monitor wind speed and wind direction. The data will be stored in a central database and will be continuously available to the community, industry and government through the DECCW website.

## How does the Network relate to National Environment Protection Measures guidance?

The National Environment Protection Measures (NEPM) provides guidance for the design, operation and reporting standards of air-quality monitoring networks across Australia. In designing the Network to monitor ambient dust levels, the NEPM guidelines have been closely referenced.



D. Barnes/Dill



## How and where will the air-quality information be reported?

Information from the Network will be made freely available to the community and industry. DECCW will integrate the Network data into the established NSW Regional Air Quality Index, which is reported through the DECCW website [www.environment.nsw.gov.au/aqms/](http://www.environment.nsw.gov.au/aqms/). This website currently provides many useful tools for the community including:

- Real-time reporting of air quality (reported as a 24 hour rolling average as recommended by NEPM).
- Health alerts, issued by NSW Health, on days when pollution levels are potentially unhealthy or very unhealthy.
- Advice on whether the air quality is considered very good, good, fair, poor, very poor and hazardous.
- Daily email and SMS air quality alerts.

## When will the Network be up and running?

The NSW government and industry stakeholders are planning a staged roll-out of the Network from the completion of the design stage. The focus will be to establish monitoring sites at major population centres, and then at other locations to utilise, where practicable, existing monitoring sites that satisfy the objectives of the Network.

## How will the Network be funded and coordinated?

The Network will be funded by contributions from the major dust-contributing industries in the Upper Hunter Region under an agreed funding formula with DECCW. DECCW will establish an operations committee to oversee the construction, operation and administration of the Network.

## Where will the monitors from the Network be located?

DECCW has worked with air assessment and meteorology experts to identify the best locations to establish network monitors. In determining where the monitors should be located, consideration was given to the location of industry, population centres and local meteorology that influence dust dispersion in the Upper Hunter Region.

## What will the Network monitor?

Dust from all sources including agriculture, cars, bush fires and industry will be monitored by the Network. Each station will use Taper Element Oscillating Microbalance (TEOM) monitors to measure dust with a particle size of 10 microns or less ( $PM_{10}$ ). In addition, three of the TEOM monitors will monitor dust with a particle size of 2.5 microns or less ( $PM_{2.5}$ ). Each station will also record wind direction and wind speed to provide an indication of the movement of dust throughout the Upper Hunter Region. For further information on TEOMs,  $PM_{10}$  and  $PM_{2.5}$  visit the air-quality monitoring web page on the DECCW website [www.environment.nsw.gov.au/aqms](http://www.environment.nsw.gov.au/aqms).

## Where can I get more information about the Upper Hunter Air Quality Monitoring Network?

Information about the Upper Hunter Air Quality Monitoring Network will be displayed on the DECCW website [www.environment.nsw.gov.au](http://www.environment.nsw.gov.au).



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