

Healthy Environment Healthy Community Healthy Business

Lower Hunter Dust Deposition Study

Fact sheet 1

What is a dust deposition study?

A dust deposition study examines:

- how much visible dust is deposited in the environment
- what is in the dust
- the likely sources of the dust.

Why is a dust deposition study being conducted in the Lower Hunter?

Lower Hunter residents have expressed concern about the amount of visible black dust in the area, and have requested more information on what is in the dust and where it comes from. As a result, the EPA has commissioned a study to examine deposited dust in key areas where complaints have been received.

Who is managing the study?

To ensure that the views of the community are fully considered, the EPA has established the Lower Hunter Dust Deposition Project Reference Group. The reference group comprises eight members: two community representatives, two industry representatives, two independent technical experts and two EPA staff members. The reference group acts as a conduit between the broader community and the EPA regarding the study, and advises and guides the EPA on project design and delivery including the selection of a consultant to conduct the study.

How will dust samples be collected?

AECOM Pty Ltd has been commissioned to conduct the Lower Hunter Dust Deposition Study and will use various techniques to collect dust samples from sample sites. Techniques will include dust deposition gauges, petri dishes and swabs. Samples will be analysed to assess the quantity and composition of the dust and identify likely sources of deposited dust.

Will the study tell me where the dust comes from?

The analysis of dust samples may point to likely or potential sources of the dust. However, it is beyond the scope of the study to identify specific facilities as the sources of the dust. The study is concerned with visible dust and will not examine fine particles, PM_{10} and $PM_{2.5}$, as this is the focus of the Lower Hunter Particle Characterisation Study.

How are sample sites being selected?

AECOM is looking for sites to locate dust deposition gauges for 12 months of monitoring. The sample sites will be selected based on the distribution and intensity of complaints received by the EPA regarding air quality over the last two or three years, as well as sites along the rail corridor.



Dust deposition gauge

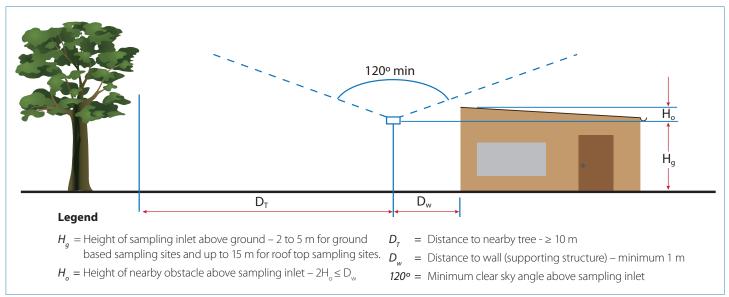
Using this data, sample sites will be selected in the following suburbs:

- Stockton Tighes Hill Mayfield West Newcastle
- Carrington Mayfield East Waratah Newcastle East

Wickham Mayfield Hamilton North

The sample sites will be located in accordance with Australian Standards (AS/NZS 3580.1.1 2007, *Methods for sampling and analysis of ambient air – Guide to siting air monitoring equipment*).

Figure 1: Ground-level sampling site



Source: AS/NZS 3580.1.1:23007 Figure 1 - Reproduced with permission from SAI Global Ltd under Licence 1408-C007

How can I get involved?

If you think your residence is suitable as a sampling site, contact Catharina Boer, Senior Community Projects Officer, EPA:

- by phoning 9995 6197
- by emailing catharina.boer@epa.nsw.gov.au

The dust deposition gauge would need to be in place for 12 months with access for AECOM researchers to collect samples and check the equipment.

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