



# NSW DIVISION TECHNICAL MEETING

## EPA DISCUSSION PAPER Validation of Inversion Strength Estimation Method

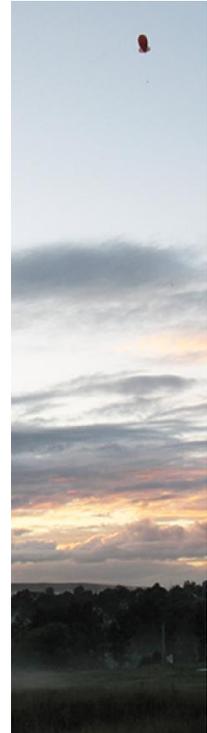
**Date:** Tuesday 29 July 2014

**Venue:** **The Australian Hearing Hub, Macquarie University, North Ryde**  
Location 'T14' on attached campus map.  
**Parking** is available underneath the building on **LEVEL B2** (Lower Level). Take the car park lift to Level 4.  
**NOTE:** security doors to the building and parking shut at **7 pm**. Don't be late!

**Time:** 6:30 pm for 7:00 pm start (refreshments prior to talk)

**Speaker:** Larry Clark, Manager Noise Assessments Unit, NSW EPA

**RSVP:** Friday 25<sup>th</sup> July to Tracy Gowen by email [tgowen@renzotonin.com.au](mailto:tgowen@renzotonin.com.au)  
AAS members (and guests upon request – numbers are limited) are welcome to attend.



The NSW Industrial Noise Policy includes an expectation that noise limits will apply under weather conditions characteristic of an area, including atmospheric temperature inversions that can increase noise levels, particularly at night when people are most sensitive to noise.

Inversion strengths are expressed in terms of the change in temperature of the atmosphere, in degrees Celsius (°C), over the first 100m from ground level vertically up (degC/100m, or °C/100m). For this it is necessary to measure or have an estimate of the temperature at 100m above ground level (agl), which can be costly and difficult to obtain directly. This project investigated some methods for estimating inversion strengths from measurements at heights less than 100m agl.

Two separate reports were commissioned by the EPA as part of the Environmental Trust project 'Validation of Inversion Strength Estimation Method'. The two reports demonstrate that significantly different inversion strength estimates can be calculated depending on the heights from which the temperature values are taken. This has implications for environmental regulators, community and industry. The discussion paper prepared by the EPA makes a number of policy, technical and regulatory recommendations which the EPA is considering. The Discussion Paper can be downloaded at: <http://www.epa.nsw.gov.au/noise/140011invstrength.htm>.

Larry Clark is the Manager of the Noise Assessments Unit at NSW EPA. Larry has headed the team investigating inversions strength estimation. In this technical talk he presents some of the findings of the Discussion Paper and puts forward the recommendations being considered by the EPA for discussion.