

Update January 2013: Changes in Tasmania's Air Monitoring

Air Section, EPA Division, DPIPWE

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The Air Section of the EPA Division is responsible for carrying out Tasmania's air monitoring program. The EPA Division has operated major air stations at Hobart (New Town), at Launceston (Ti Tree Bend), at George Town (in partnership with Rio Tinto, TEMCO, Aurora Energy, George Town Council, West Tamar Council, and the Department of Health and Human Services), and at Rowella in the lower Tamar. It also operates the BLANKET¹ network of smaller air monitoring stations distributed over Tasmania, and carries out some specific short-term monitoring programs as needs arise.

Recently some reconfiguration of the monitoring program has occurred. This note summarises the main changes.

- Reconfiguration at the 'Air NEPM'² stations at New Town and Ti Tree Bend: These stations operate reference-quality air monitoring instruments, consisting of low-volume air samplers (LVAS) for PM₁₀ and PM_{2.5}³, and a tapered element oscillating microbalance (TEOM) for PM₁₀. Data from these instruments are used to report against the Air NEPM. The LVAS instruments require significant resources to operate. The decision has been made to cease operation of the LVAS PM₁₀ instruments at Ti Tree Bend and New Town. Formal reporting of Tasmania's air quality data against the Air NEPM standards will be achieved using TEOM measurements for PM₁₀ and LVAS measurements for PM_{2.5}.
- Rowella station: The station at Rowella was established by the Regional Planning and Development Council (RPDC) in 2006 to obtain a year of base-line air quality data in the lower Tamar valley prior to construction and operation of the proposed Long Reach pulp mill. The Environment Division (now the EPA Division) formally took over operation of Rowella station in December 2007. The station had continued to operate to obtain further base-line air quality data for particle concentration (by TEOM) and several gas species. In September 2012 the decision was made to cease operation of this station. The Rowella station is currently being

¹Base-Line Air Network of EPA Tasmania

²shorthand for the National Environmental Protection (Ambient Air Quality) Measure

³PM₁₀ refers to particle matter up to 10 μm in effective aerodynamic diameter. PM_{2.5} refers to particle matter up to 2.5 μm in effective aerodynamic diameter. PM_{2.5} consequently forms a subset of the PM₁₀ measurements.

dismantled. If circumstances change in the future an assessment will be made of the need for a resumption of monitoring in the lower Tamar.

- George Town Air Monitoring Station (GAMS): The partnership station was commissioned in mid 2007 with instruments to measure the gases sulfur dioxide (SO_2) and oxides of nitrogen (NO_x) using gas analysers, and PM_{10} and $\text{PM}_{2.5}$ by low-volume air sampler (LVAS) instruments. The EPA Division has operated the station on behalf of the GAMS steering committee.

In September 2012 the decision was made to cease operation of the resource-intensive LVAS instruments. TEOM instruments have been installed by the EPA Division to measure PM_{10} and $\text{PM}_{2.5}$. A dustrak (optical particle counter) also provides an indicative $\text{PM}_{2.5}$. The GAMS committee will likely take a much greater operational role in managing the station.

- Devonport: The infrastructure for the new major (Air NEPM) air station at Devonport has been installed, and instruments are being commissioned. Devonport station will be equipped with reference quality low-volume air samplers (LVAS) for PM_{10} and $\text{PM}_{2.5}$ and a tapered element oscillating microbalance (TEOM) for PM_{10} .
- BLANKET: The BLANKET network will generally continue to operate unchanged. A few additional stations will be deployed to support the domestic woodsmoke management program. Additionally, some minor reconfiguration of the network (moving a small number of existing stations to new locations) may take place in the next few months in support of EPA Division objectives.