

THE EFFECTS OF PLANNED BURNING ON AIR QUALITY IN TASMANIA

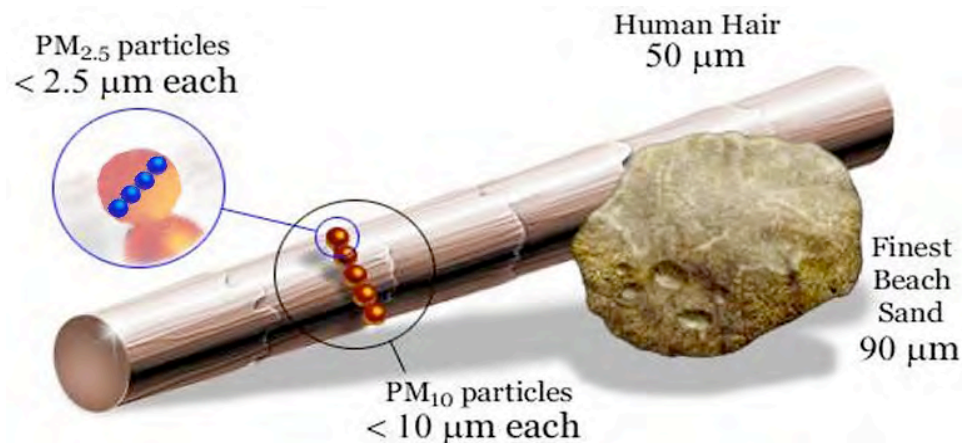
Warren Jones

Director, Environment Protection Authority



WHY IS SMOKE AN ISSUE?

- ❖ “Smoke” comprises fine to very fine particles.
- ❖ Particles have been rated one of the highest risk pollutants in Australia
- ❖ No threshold for health impacts
- ❖ Very fine particles (<PM_{2.5}) more closely associated with health impacts than PM₁₀
- ❖ Smoke can also have amenity impacts



PLANNED BURNING IS A SIGNIFICANT SOURCE OF PARTICLES

- ❖ National Pollutant Inventory estimated particles from planned burning as about 3% of total emissions in Tasmania
- ❖ Recent review suggests that this proportion is much higher, probably by an order of magnitude
- ❖ Mass emissions do not necessarily equate to health risk – exposure at ground level is an important factor.

STANDARDS FOR PARTICLES

- ❖ National Environment Protection Measure on Air Quality
 - Sets national standard for PM 10 at 50ug/m³ (24 hrs)
 - Sets “advisory reporting” standard for PM 2.5 at 25 ug/m³

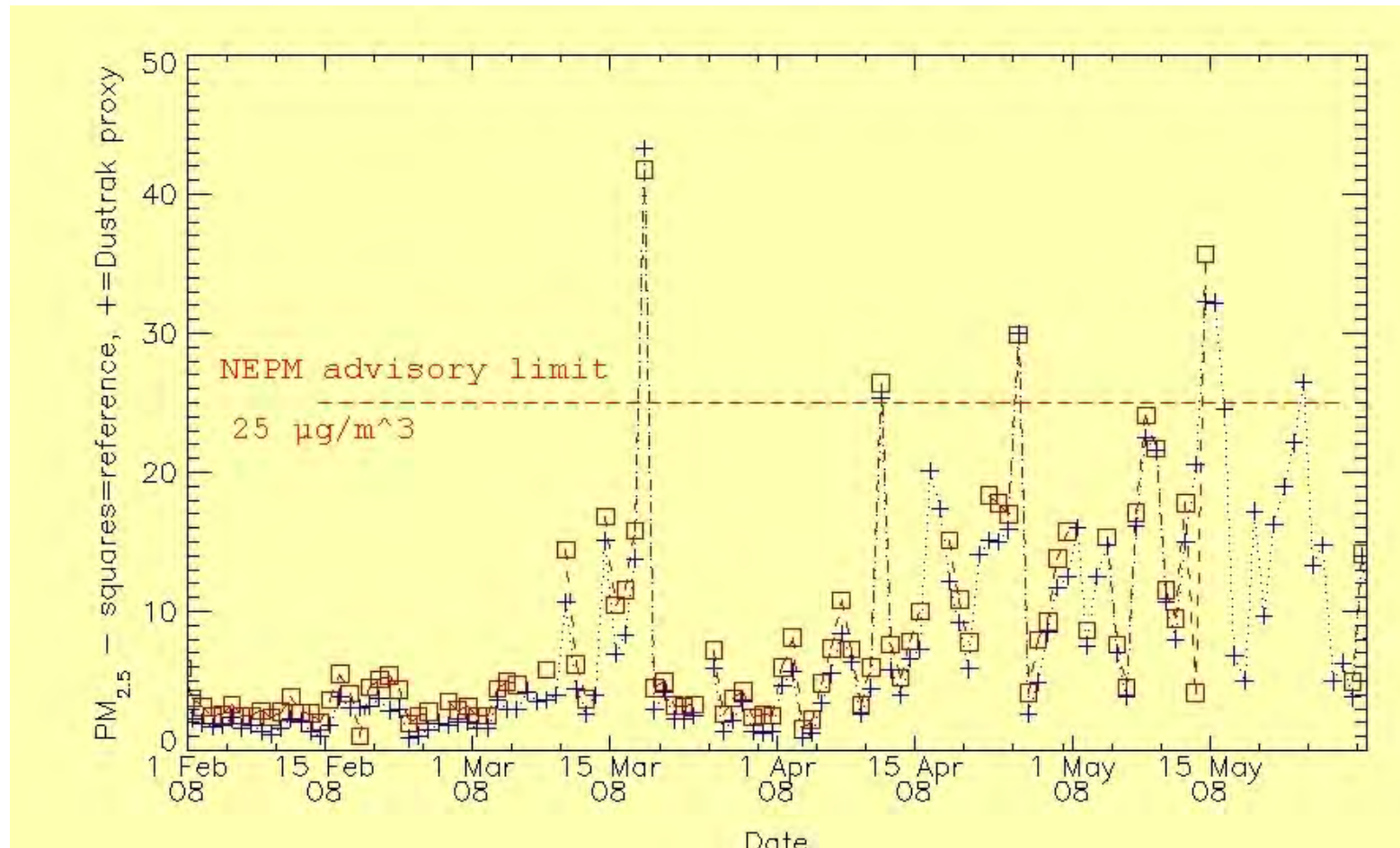
- ❖ Currently no national standards for shorter term exposure

EPA'S MONITORING FOR PARTICLES

- ❖ Currently monitor PM10 and PM2.5 at Launceston, Hobart, Rowella and George Town.
- ❖ Will commence in Devonport this year
- ❖ Monitoring during summer/autumn 2008 showed levels above the PM2.5 advisory reporting standard at all stations due to planned burning.
- ❖ In Launceston – estimated about 25 days above PM2.5 advisory 2008
 - 4 or 5 were due to planned burning
 - 1 due to a bushfire
 - the remainder due to woodheaters



AIR QUALITY IN LAUNCESTON FEB – MAY 08



POLICY FRAMEWORK

❖ EMPCA

- environmental nuisance and environmental harm.
- it's a defence if using “reasonable and practicable means”.
- does not apply in the fire permit period.

❖ Environment Protection Policy on Air Quality 2004

- Recognised planned burning as a significant air quality issue
- Health and amenity must be taken into account
- Best practice to be employed
- Monitoring should be carried out by “big burners”



POLICY FRAMEWORK

- ❖ Tasmanian Air Quality Strategy (2006)
 - Better smoke management procedures
 - Incorporating these into the Forest Practices Code
 - Improving coordination
 - Improving complaint management and response

- ❖ Forest Practices Code
 - Smoke to be minimised by burning in appropriate conditions or using alternatives

REDUCING SMOKE POLLUTION

- ❖ Recognition of the issue in formal policy – EPP.
- ❖ Smoke Management Working Group
- ❖ Air Quality Strategy
- ❖ EPA commissioned review of monitoring methods
- ❖ University project to look at the health impacts of smoke
- ❖ Development and trialling of new Smoke Management Standard
- ❖ Review of application and effect of standard in 2008
- ❖ Need better
 - prediction,
 - better coordination, and a way of limiting smoke
 - monitoring

EPA MONITORING FOR 2009

- ❖ Coverage of current monitoring network limited
- ❖ EPA proposal for a network of particle monitors in two air sheds (northeast and south)
- ❖ Results will be available on the web
- ❖ Monitoring will
 - provide an objective measure of air pollution against standards
 - provide feedback to help refine the management system
 - inform policy development and evaluation