

Carol Davies

From: alan joynt [adjoynt@gmail.com]
Sent: Monday, 12 April 2010 3:56 PM
To: Council
Subject: Submission regarding Council's draft policy POL134
Attachments: Submission - Policy for Sustainable Energy Use & Local Air Quality.docx

Hi,

Please find attached my submission regarding Council's draft policy POL134 – Policy for Sustainable Energy Use and Local Air Quality. The text is reproduced below in case of problems.

Regards,
 Alan Joynt

Submission regarding Council's draft policy POL134 – Policy for Sustainable Energy Use and Local Air Quality

The draft policy needs to be strengthened in order to give more power and options to the Council staff charged with cleaning Armidale's air.

Armidale's pollution levels understated

The draft policy acknowledges that *"in winter 2009, Armidale was still experiencing significant air pollution, well above national recommended levels for fine air particle (...PM2.5) concentrations."*

This grossly understates the situation. For approximately six months of the year Armidale has amongst the worst air pollution in Australia. High levels of woodsmoke pollution from wood heaters continue to be experienced much of the time for a further three months of the year. It is only in the summer months that the air is generally clean (apart from bush fires and dust storms).

Health effects of woodsmoke

PM2.5 particles cause severe health effects. Studies by NSW Health in Sydney showed that PM2.5 particles are the pollutant most strongly correlated with premature death and increased hospital admissions for heart and respiratory illness. The California Air Resources Board reviewed several hundred studies and concluded that death rates increase by 10% for every additional 10 micrograms per cubic metre exposure to PM2.5 air pollution. A study published in June 2009 concluded: *"In Europe PM2.5 pollution is associated with more than 492,000 premature deaths, corresponding to a loss of almost 4.9 million years of life"*.

In the light of the above, countless more research studies, and national and international recommendations, Armidale Dumaresq Council should be allocating **significant** resources to reducing woodsmoke pollution.

Lack of progress in combating the woodsmoke problem

Up to the present Council has failed to make much, if any, impact on cleaning up Armidale's air. This is due to several factors:

- Insufficient funding from Council
- Lack of staff resources (the responsible staff are overburdened)
- Low priority for Council
- Lack of Council willingness to enforce its own policy/regulations (no-one has ever

been fined for producing excessive woodsmoke and few, if any, Smoke Abatement Notices have been issued)

Council needs to get serious about reducing air pollution. The draft policy states that “*Council will aim to bring about a reduction of PM2.5 levels by at least 10% averaged over each year...*” It is unclear whether this means a 10% reduction per year or a 10% reduction over an unspecified period. [This should be clarified.] At any rate, based on past performance, and with little change of substance in the new policy (compared to the old), no reduction is likely to occur. In fact, continuing to allow wood heaters to be installed in new homes points to a likely **increase** in air pollution.

Why wood heaters pollute

Ironically, tests show that many new wood heaters are more polluting than models on sale years ago. Australian wood heater expert Professor John Todd noted that the current generation of wood heaters emit about 10g of fine particles per kilogram of firewood. Based on this, calculations show that a typical new wood heater in Armidale will have annual PM2.5 emissions equivalent to the pollution from approximately 250 typical passenger cars.

A large part of the problem stems from the fact that wood heaters are rarely operated at their rated emission level (which is a theoretical minimum obtained from a laboratory test where all parameters are ideal – that is, in a completely unrealistic situation.)

Even the best wood heater will pollute if not used correctly. Failure to follow best practice in any of the following will result in significantly increased woodsmoke emissions from a wood heater:

- quality, seasoning and storage of the firewood used
- proper maintenance of the wood heater and flue
- adjustment of controls at various stages of the fire
- lighting, loading and running of the fire

Armidale has a large number of wood heaters that are not operated correctly. Many people keep their wood heaters smouldering day and night throughout the cold months, polluting the whole time.

Fallacious argument

It may be argued that there is no need to take stronger action on woodsmoke reduction because there are few complaints and these are mostly from the same few people. This argument is fallacious for the following reasons:

- government legislation requires Council to monitor and control woodsmoke pollution
- The vast majority of the population are ignorant of just how dangerous woodsmoke is to the health
- There is minimal publicity on how to complain
- There is no encouragement to complain
- when people do complain they do not receive feedback on what action was taken
- Complaining has no discernible effect – excessively smoking chimneys that have been reported to Council year after year for many years continue to smoke excessively.

People who have complained in the past have been educated not to complain!
Why take the trouble to report a smoking chimney when you have learnt from experience that nothing happens as a result?

Widespread ignorance of dangers of woodsmoke

It is well established that woodsmoke is at least as harmful to our health as cigarette smoke. Scientific reports come out all the time linking fine particles and the chemicals found in woodsmoke with such things as asthma, bronchitis, emphysema, cancer, heart disease, heart attacks, low birth weight and reduced life span. The fact that the general population are ignorant of this is something that Council should be remedying through a proper education program, rather than using this ignorance as a reason for inaction.

It is not so long ago that the general population was equally ignorant of the hazards of cigarette smoke, and an even shorter time since the dangers of second-hand cigarette smoke became widely known. This was remedied by government education programs and accompanying legislation.

Woodsmoke can even enter homes that are very tightly sealed. This is true even when there is no wood heater in close proximity. Therefore it is imperative to reduce the amount of woodsmoke in the air. Otherwise the whole community is breathing air containing elevated levels of fine particles and dangerous chemicals, for very significant periods during the cooler months of the year.

Stricter controls on wood heaters

Professor Todd has stated that the next generation of wood heaters must emit 1g per kilogram (1.0 g/kg) or less in order to achieve acceptable air quality in areas with a high proportion of wood- users, and ideally we should aim for a further order of magnitude improvement to 0.1 g/kg.

Numerous communities overseas with colder winters than ours have banned the installation of wood heaters due to their health effects. Closer to home, several local councils in Sydney do not permit the installation of solid fuel heaters (Waverley and Holroyd, for example). Others require non-polluting heating in new developments (Manooka Valley, Oran Park and Turner Road Growth Precincts, for example).

Armidale Dumaresq Council could follow suit, notwithstanding legal advice to the contrary. Council should bite the bullet and ban installation of wood heaters in new homes. If council lacks the will to do that, it could stipulate that wood heaters cannot be installed unless they meet the standard of 1.0 g/kg emissions (preferably lower. A level of 0.1 g/kg would achieve the desirable effect of a de facto ban). Council must emphasise at every opportunity that it strongly recommends and desires that non-polluting alternatives should be installed, rather than wood heaters.

Council should recognise that every wood heater installed is adding to the pollution problem, now and for potentially decades to come.

Local approvals for wood heaters

The *Pre Application* section in Part 3 of the draft policy includes a paragraph outlining situations where “...home owners should consider alternatives to solid fuel heating.” This skirts around the issue. Smoke from **any wood heater** installed on the higher ground above Armidale or lower within the Armidale city valley will affect other residents; the smoke flows downhill and pools in the basin.

The *Pre Application* section should commence with the new paragraph below:

“Woodsmoke causes serious health and environmental problems. The World Health Organisation has stated that ‘There is no safe level of particulate air pollution.’ Wood heaters should not be installed unless there is no suitable alternative.”

Application forms to install wood heaters should include a **prominent, integrated (i.e. non-detachable) section** with a strong, detailed health warning regarding the hazards of woodsmoke and also a statement that council strongly recommends and desires that non-polluting heating should be used whenever possible.

More resources needed

Whatever the final form of the policy, Council must increase the budget allocated to woodsmoke reduction to give Council officers the time and resources they need to achieve some progress in cleaning the air. A good community education program must be commenced. The complaints telephone service and alternative complaints methods should be publicised. There should be more resources allocated to resolving complaints, including feedback to the complainant. More resources would enable Council officers to be more proactive. For example, they could conduct woodsmoke patrols, which have been few and far between in the past.

Desirable alterations to the policy

- Clarify the statement in the *Air Quality Monitoring and Reporting for Armidale, including Targets* section in Part 2 “Council will aim to bring about a reduction of PM2.5 levels by at least 10% averaged over each year...” the statement should read:
Council will aim to bring about a reduction of PM2.5 levels by at least 10% a year averaged over each year...
- Ban wood heaters in new homes. Failing that, restrict new wood heaters to an emissions level of 1.0 g/kg (preferably 0.1 g/kg to achieve a de facto ban)
- Restrict all replacement wood heaters (those replacing existing wood heaters) to an emissions level of 1.0 g/kg (preferably 0.1 g/kg to achieve a de facto ban)
- The *Pre Application* section in Part 3 should commence with the paragraph:
Woodsmoke causes serious health and environmental problems. The World Health Organisation has stated that “*There is no safe level of particulate air pollution.*” Wood heaters should not be installed unless there is no suitable alternative.
- Application forms to install wood heaters should include a prominent, integrated (i.e. non-detachable) section with a strong health warning regarding the hazards of woodsmoke and also a statement that council strongly recommends and desires that non-polluting heating should be used whenever possible.

Submitted by Alan Joynt, Armidale