

## Submission on the Armidale-Dumaresq Draft Local Air Quality Policy

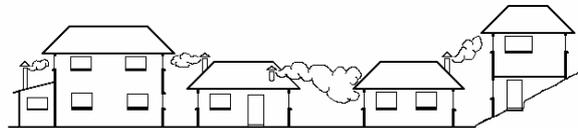
It is good that the Council is tackling this important issue for Armidale as outlined in the policy objectives. Unfortunately the policy is still projecting the same ambiguous message that although woodsmoke is harmful, and quote the Australian Lung Foundation that there is no safe level of exposure to the particulate pollution which makes up woodsmoke, it is still alright to continue to install more woodheaters in residential areas.

Since the aim of the Air Quality Policy is to reduce woodsmoke, it is sensible to limit the installation of new woodheaters. Each new woodheater just adds to the problem, and could be in use for 15 to 20 years.

Setting a limit of 2g/kg for new woodheaters is a step in the right direction. One problem with the current standard process has been that the veto by industry has prevented improvements in the national standard being adopted. New Zealand jointly agreed on the AS/NZS 4013 standard in 1999, and has already set its own emission limit of 1.5g/kg for properties less than 2 hectares, with stricter limits of 1g/kg and 0.7g/kg in some areas. Some councils in Sydney also prohibit the installation of woodheaters altogether.

Another problem acknowledged in the policy is the deficiency in the current testing method. Auditing and real-life testing have demonstrated that woodheaters in practice have much greater particle emissions than their certified rating. It is therefore questionable how meaningful setting a limit of 2g/kg would be, until the test method is revised.

Woodsmoke is very similar to cigarette smoke, consisting of PM2.5 particles and many of the same chemicals as cigarettes, some of which are carcinogenic. Having a woodheater next door is effectively like living with a smoker. The average AS4013 woodheater can produce around 350g of fine particles over 24 hours. This is equivalent to the smoke from over 1000 packets of cigarettes. On a still night under an inversion, how much of this smoke will accumulate in and around neighbouring houses?



For new energy efficient houses the health risk from woodheating is completely avoidable since a woodheater would be impractical and unnecessary. The Council has an obligation in considering an application for approval under section 68 of the LGA to take into account the protection of the environment and of public health, safety and convenience. Council should also be mindful of the precautionary principle - "Activities that present an uncertain potential for significant harm should be prohibited unless the proponent of the activity shows that it presents no appreciable risk of harm".

I think therefore the policy should include a moratorium on the installation of woodheaters in new houses on blocks less than 1 hectare until an effective standard for woodheater emissions and testing is formulated. At the very least the lowest practical emission limit should be set for new houses. This also gives a choice to people wanting or needing to avoid smoke in Armidale. It might be less practical to implement for existing houses. In that case the policy needs to advise people about the current status of the AS4013 standard, and recommend not installing current models of woodheaters if a cleaner alternative is available.

Education is important as described in the policy. One problem with education is it requires an ongoing effort, eg whenever a new owner moves in, in rented houses and flats, or if a visitor is left to operate the heater.

Fast-tracking of applications to install new woodheaters is not a good idea if it results in a hurried evaluation of the situation where the heater is to be installed, ie distances to property boundaries, in-line with neighbouring windows. The policy needs to make clear what conditions would make an application not be approved.

Clean air should be regarded as a valuable asset for Armidale. There are very few industrial sources of pollution in Armidale. Air quality in Armidale is generally very good apart from during winter, and occasional burn-offs or bush fires (and the dust storms last year). If the woodsmoke problem could be solved, Armidale could be an attractive place for "tree changers", retirees, or people just escaping the pollution and overcrowding of major centres.

Improving energy efficiency in homes, and reducing energy demand is also important, to minimise the amount of smoke produced by burning wood or the pollution caused by energy extraction and generation industry. Council could look at more ways of encouraging practical energy efficient solutions in homes such as insulation, draft-proofing of windows, doors, insulating curtains, and even suitable clothes for winter. Something along the lines of the Community Energy Action (cea.co.nz) in New Zealand might be worth considering.

Another issue raised at the forums was the question of complaints as a measure of whether woodsmoke was a problem. The number of complaints is useful for the Council in terms of cost and resources which need to be allocated to deal with them. However they cannot be used as a criterion for the local air quality policy. The effect of particulate air pollution on health has been determined by large-scale epidemiological studies and laboratory studies, based on measurements of particle levels. Obviously we can tell visually and by smell that woodsmoke is a problem, but to quantify it we need scientific measurements of air quality, and to relate them to the published health effects.

How sustainable is wood collection in Armidale? What we have told at the forums is that a lot of wood is obtained from trees which have fallen in local properties, and that the farmers replant new trees. This doesn't sound too reliable as a source of renewable energy. If wood is to be relied on as a renewable energy source for Armidale, we need information on how much wood is currently used, and projected requirements, and look at how it can be sourced without harm to the environment. Importantly, it must be ensured that burning the wood generates little pollution or greenhouse gas emissions.

We need a review of the predicted energy requirements for Armidale, and how the energy can be produced sustainably. What are the options:- synthetic natural gas, gas pipeline, combined heat and power using local biomass supply, electricity, solar, wind, wood gasification, pellet heaters.

There was concern at the forums and in the press regarding fines. Details of the fines applicable for excessive smoking and the process need to be clarified. Probably there are many other regulations which can incur a fine, but which don't cause a similar reaction, possibly because most people are unaware of them. To make it clear that fines are a last resort maybe the ultimate decision could be passed to Council rather than left up to council officers.

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