

8.7 WOODFIRE HEATING

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Attachments: Nil

EXECUTIVE SUMMARY

This report presents a proposed advocacy approach that Council will use to work with the Municipal Association of Victoria (MAV), Environment Protection Authority Victoria (EPA) and State Government in relation to the impacts of woodfire heaters and seek commitment from the authorities to provide further measures (educational and awareness) to reduce the associated health, amenity and environmental impacts on Glen Eira residents.

This report also presents the findings of a benchmarking exercise undertaken which determined what measures other Councils have implemented in relation to the use of woodfire heaters.

RECOMMENDATION

That Council notes the information presented in the report and endorses the advocacy approach.

BACKGROUND

At its Ordinary Council Meeting on 16 November 2021, Council resolved that officers prepare a report that:

1. *provides advice on an advocacy approach to the EPA and State Government that recognises the impact of wood heaters on health, amenity and the environment and seeks measures to reduce their impact; and*
2. *provides advice on what other councils are doing in relation to this matter.*

Woodfire heaters are a legal form of heating and, for some households, the main source of heating. However, if not operated or maintained properly, their use can impact health, amenity and the environment.

The EPA regulates the manufacture and supply requirements of solid fuel heaters. In Victoria, woodfire heaters must comply with Australian Standards AS 4012 and AS 4013 to minimise air pollution, health impacts, amenity concerns and the effects on the environment. Solid fuel heaters must be installed by a registered or licensed person with the Victorian Building Authority (VBA) in Mechanical Services.

According to the EPA, *'buying the right wood heater, using it correctly and maintaining it well can reduce wood smoke pollution. Burning firewood the right way can help you keep your house warm'*. However, even when woodfire heaters are operated correctly, the smoke is a contributor to environmental air pollution as very small particles and gases are released into the atmosphere and cause air pollutants.

The EPA's Waste Management Policy (Solid Fuel Heating) recommends ways to reduce smoke emissions:

- burn smaller logs and very dry wood (plant matter: wood or leaves. No household waste or wood or timber from building materials or furniture as it may contain chemicals);
- do not pack the heater too full;
- use pellet fuel heaters;
- purchase wood heaters which meet the Australian Standards AS 4012 and AS 4013; and
- have a licenced professional to install the wood heater.

The EPA currently monitors (in a limited capacity) air quality in Victoria by measuring particle size. Such measurements assist in assessing potential health impacts of smoke. An EPA radar classifies air quality within designated areas in metropolitan Melbourne as 'good' based on a 'good, fair, poor, very poor, extremely poor' scale.

At the time of assessment*, the closest suburb was Dandenong where a 'fair' measurement was detected.

*Note: the radar is live and does vary depending on air pollutants. If the air quality was assessed in colder months, it may change the rating.

Council's current position

Through the *Community Local Law 2019*, Council manages concerns with smoke which is generated from woodfire heaters, as follows:

38. Lighting fires

(3) *A person must not allow any-*

(a) *Fire lit for religious practices; or*

(b) *Barbecue; or*

(c) *fire pit, brazier or chiminea on any private land in a Residential Area-*

to discharge any dust, grit, ash, smoke, effluvium, substance or odour that constitutes a nuisance or is an unreasonable interference with the amenity of any other person.

For the 2021 calendar year, Council's Civic Compliance team received 67 complaints regarding fires. Of the 67 complaints, 10 related to woodfire heaters and fireplaces located within a dwelling.

Council has powers under the nuisance provisions of the *Public Health and Wellbeing Act 2008* to deal with woodfire heater complaints where the effects of the smoke is deemed to be dangerous or offensive to health.

For the same period, Council's Public Health team received four complaints, all which related to woodfire heaters and fireplaces located within a dwelling.

While Council cannot control the types of woodfire heaters which are installed in dwellings, the material used to fuel the wood heaters and the effects smoke causes is something Council can investigate and take enforcement action in accordance with the above-mentioned legislation.

ISSUES AND DISCUSSION

Council conducted a benchmarking exercise and wrote to the nine metropolitan Councils seeking information about their approach to woodfire heating, however only three responded to the following questions:

QUESTION	SUMMARY OF RESPONSES
<p>How many complaints relating to woodfire heaters were received for the 2021 calendar year?</p>	<p>The responses consisted of the following complaint statistics:</p> <ul style="list-style-type: none"> - 26 complaints (8 duplicates); - 175 complaints (didn't distinguish complaint types i.e., burning off and complaints relating to woodfire heaters); and - 38 complaints (didn't distinguish complaint types i.e., burning off and complaints relating to woodfire heaters).
<p>Does your Council have a Local Law which relates to woodfire heaters and the impacts on health and air quality? If not, is your Council looking to introduce a clause into the Local Law to deal with woodfire heaters and the effects on air quality and health?</p>	<p>All three (3) Councils who responded to the benchmarking exercise currently have a Local Law in place that deals with open air burning and a clause which outlines that a person must not allow any heating device including a fire pit, chiminea or chimney on the premises to discharge any dust, grit, ash, smoke, effluvium, substance or odour that constitutes a nuisance or is unreasonable.</p> <p>In addition, two Councils have clauses in the Local Law which specifically states that a person must only use gas or dry wood to fuel fires. No chemically treated, painted or unseasoned wood or other material is to be used or that a person must not burn any materials or substances that could be dangerous to the health or safety of a person or offensive to any person because the materials or substances being burnt are a prohibited or the wood is wet, treated or painted.</p> <p>The other Council further defines the clause which states a person must not burn any of the following materials:</p> <ul style="list-style-type: none"> - green or wet material; - non timber based building materials; - treated timber materials; - rubber or plastic, including plastic mulch, plant pots and packaging materials; - furnishings and carpet; - manufactured chemicals; - petroleum or oil products; - paint, including any container in which paint is kept; - food waste; - manure and straw; - carcasses of dead animals or birds, unless prescribed by the Department of Environment, Land, Water and Planning (or any other Department with operational responsibility for such matters) as the only means of disposal; or - other offensive, noxious or toxic matter as determined by an Authorised Officer and published on Council's website.

	<p>The same Council also has included that Council or an Authorised Officer when determining whether there has been a breach must have regard to:</p> <ul style="list-style-type: none"> - the nature of any complaint received; - any observations of the Authorised Officer or any other Authorised Officer, including the level of observable dust, grit, ash, smoke substance or odour; - any diary entries made by any person detailing the particulars of the complaint; - whether the chimney and any heating devices comply with any relevant Australian Standard; - the nature of the fuel used in the heating device; and - whether the chimney is used for personal comfort or heating.
<p>Does Council have an advocacy position on the use of woodfire heaters?</p>	<p>Two Councils stated they do not currently have an advocacy position on the use of woodfire heaters.</p> <p>One Council does and is also willing to support a joint advocacy position on the matter however has requested that the advocacy position remain confidential.</p>
<p>Has Council previously advocated to the EPA or State Government regarding the use of woodfire heaters? If so, are you willing to share the advocacy information?</p>	<p>One Council has however requested the information be kept confidential.</p> <p>The other two Councils have not previously advocated to the EPA or State Government.</p>
<p>Do you have statistics on how many households in the municipality use a woodfire heater?</p>	<p>No Council was able to provide statistics on how many households use a woodfire heater.</p>
<p>Has your Council undertaken any other activities in relation to woodfire heaters? For example, education campaigns</p>	<p>One Council has undertaken a direct educational approach via social media however has requested that the information be kept confidential. In addition, when complaints have been received that Council also provides education on the impacts and advises residents of their obligations pursuant to legislation.</p> <p>That approach is aligned with what education is provided to residents within Glen Eira.</p> <p>The two other Councils have not undertaken any other activities in relation to woodfire heaters.</p>

Proposed Advocacy Approach*Council Actions:*

- Provide an education and awareness campaign on all existing communication platforms (social media, GE News, website) regarding the health and environmental impacts from woodfire heaters and more appropriate ways to operate woodfire heaters. It will target known households that use woodfire heaters that have received past complaints.
- Create a dedicated website page regarding woodfire heaters and their impacts, ensuring alignment with the information provided on the EPA website.
- Work with the MAV and other Councils to advocate for change to woodfire heating by the State Government, as outlined below.
- Request that the MAV coordinates a formal offer for Council to work with EPA to enable Council land and assets to be used for air monitoring within Glen Eira.

State Government Advocacy Approach:

Council calls on the State Government to:

- Expand the EPA Ambient Air Network (including sensors to provide more localised data for each Local Government area) which will enable further coverage across Glen Eira.
- Restrict the use of woodfire heaters in urban and built-up areas.
- Support households with no other main form of heating to promptly switch to electric heating options through the introduction of a bulk-buy, subsidy or other incentive scheme.

CLIMATE EMERGENCY RESPONSE STRATEGY IMPLICATIONS

Burning wood releases air pollutants into the atmosphere. These pollutants are a mixture of different size particles, water vapour and gases (including carbon dioxide, carbon monoxide, nitrogen oxides and volatile organic compounds).

The small airborne particles are measured in units called PM_{2.5} and PM₁₀. PM_{2.5} are smaller than 2.5 micrometres (µm) in diameter. PM₁₀ are smaller than 10 micrometres. This particulate matter is harmful to human health.

From a greenhouse gas emissions perspective, wood is not considered a fossil fuel – as the carbon dioxide captured from the air while a tree grows, will be released back into the atmosphere if left to die and decompose or if burnt as firewood.

However, burning of firewood in some older-style wood heaters may also produce methane and black carbon particles that increase global warming, when compared to electric heating powered by renewable energy.

Greenhouse gas emissions released from wood heaters in Glen Eira households is difficult to quantify. In 2014, Australian Bureau of Statistics *Energy Use and Conservation* survey suggested that 4 per cent of metropolitan Melbourne households' main source of energy for heating were wood heaters, with gas making up the majority of heaters at 69 per cent. If this rate was applied to Glen Eira, then approximately 2,600 households use wood heaters as their main source of heating. However, this does not factor in wood heaters that are a secondary heating source. Also to note is that these emissions are not currently included as part of the community emissions inventory in the [Snapshot tool](#), which Council relies on for this data.

Our Climate Emergency Response Strategy 2021-2025 includes the goal of net zero community emissions by 2030, and that Council is committed to empowering our community to reduce their emissions at home, work, school and as a community (objective 6.1). While it has not been quantified, it can be assumed that some older-style wood heaters are releasing methane and black carbon particulates into the atmosphere.

To reach this goal and objective within the Strategy, Council can support households to transition to electric heating options through an education program, which should also include the human health impacts of wood heaters. This can be incorporated into Council's work to encourage the transition away from gas heaters, which has a significantly higher emissions impact than wood heaters.

FINANCIAL, RESOURCE, RISK AND ASSET MANAGEMENT IMPLICATIONS

There are no financial, risk or asset management implications to administer the Advocacy Approach.

The proposed actions can be carried out by the Climate and Sustainability and Community Safety and Compliance departments within the existing operating budgets.

POLICY AND LEGISLATIVE IMPLICATIONS

Council's *Community Local Law 2019* which deals with woodfire heater smoke.

COMMUNICATION AND ENGAGEMENT

Information requests were sent to nine metropolitan Councils for the benchmarking exercise, with three responding.

LINK TO COUNCIL PLAN

Strategic Direction 5: A healthy, inclusive and resilient community

We support our residents to be healthy, strong and resilient and will embrace and celebrate our diverse community

OFFICER DECLARATION OF CONFLICT OF INTEREST

No officers involved in the preparation of this report have any general or material conflict of interest in this matter.

CONCLUSION

Internal woodfire heaters are legitimate form of heating and, for some households, the main source of heating. However, if poorly maintained or used incorrectly, they can have an adverse impact on the amenity of an area, the environment, and on the health and wellbeing of neighbours.

This report outlines the current State and local regulatory framework, and it is in response to this framework that the report proposes an Advocacy Approach. A key to the success of this approach will be the support from the State Government and other agencies and bodies such as the EPA and MAV.