

Submission from Wild Darebin to Inquiry Clean Air for All

28 June 2018

Introduction

As members of the Darebin Community we have members who are qualified and experienced in environmental management, environmental education and health care.

State Forests are owned by the Victorian Government and controlled by the Department of Environment, Land Water and Planning (DEWLP). DEWLP regulates and managed the timber harvesting industries in Victorian State Forests (DEWLP 2018)

As the DEWLP web site states “As the environmental regulator DELWP monitors timber harvesting operations conducted on public land to ensure they are compliant with regulatory requirements. This is achieved through a mixture of investigations, field inspections and forest audits.”

However, VicForests was established in 2003 and since 2004 has become “responsible for managing and selling native forest timber resources and delivering long-term returns to the state. VicForests manages the commercial sale and supply of timber resources from Victorian state forests east of the Hume Highway. Through the Act, its Order in Council (2003) and the TIAP, VicForests is required to:

- estimate the available timber resources
- sell the harvested wood to timber mills through an open and competitive system
- manage the contracts with harvest and haulage operators to cut and deliver the
- timber to the mills
- manage forest regeneration” (Victorian Auditor-General’s Report (2013-2014 pg 22)

Regeneration involves burning large amounts of timber in situ on public land according to the Page 7 of the “The VicForests Procedures – Regulatory Handbook” that is based on the Sustainable Forests (Timber) Act 2004, the Conservations Forests and Lands Act 1987 and the Forest Act 1958.

VicForest Operating Procedures 3.0 April 2016 (Vic Forests 2016) state:

“Regeneration Burning

(e) NFSG #6 (Native Forest Silviculture Guideline) provides guidance on site preparation techniques (msp).

(f) All burn planning must be completed within FireWeb (vf).

(g) All burning must be conducted with an approved DELWP Burn Plan and contain an accompanying burn map (vf).

(h) Construction and/or maintenance of a secondary fire control line outside the gross TRP (Timber Resource Plan) boundary can only be undertaken if prior approval is formally granted by DELWP.

(i) Hard copy of all documentation must be filed within the Coupe Plan (vf). "(VicForests 2016)

Astonishingly there is no requirement for the burning procedure to require air quality monitoring, quantity of pollutants estimation, consideration of meteorological conditions that might impact on human health from air pollution. Costing of human health impacts is also not accounted for by Department of Finance and Treasury in costing logging industry operations.

There are alternative methods to regenerate cleared areas such as replanting by tubestock or direct seeding without burning.

Because of the total lack of data in Victoria reference is made to Tasmanian studies about "regeneration" burn

"Total annual PM (fine particulate matter) emissions from PB (planned regeneration burn) events (8900 t/y) were 70 times larger than total annual emissions from wood-fuelled heaters(120t/y)" (Meyer et al 2011 Pg 7)

One fact sheets states:

"In 2009 Professor David Bowman, from the University of Tasmania's School of Plant Sciences... stated that 'burning was an unsophisticated 20th century approach and the licence to do it was dropping away. Finding an alternative to regeneration burns should be a number one priority'. (5) Prof Bowman and 21 researchers have had their findings on the contribution of fire to carbon dioxide emissions published in the journal Science. The 2009 international study funded by the US National Science Foundation found that fire had been overlooked as a cause of climate change. Bowman says, 'Fires are one of the largest causes of increased carbon dioxide emissions in the atmosphere. There is also methane, aerosol particles in smoke and the changing reflectance of a charred landscape which contributes to changes in climate.' (6)

High intensity burns carried out by the forestry industry in Tasmania release a large amount of carbon in to the atmosphere. A Forestry Tasmania study in 2001 found that approximately 700 tonnes CO₂ is released into the atmosphere for each hectare of mixed forest that is burnt in the so-called "regeneration burns" after logging (7). More than 10,000 hectares of logged forest are burnt each year in this way, leading to more than 7 million tonnes of emissions annually. This is only slightly less than the emissions from all other measured Tasmanian sources combined!

Based on Forestry Tasmania's estimation of the quantity of carbon released in regeneration burns, and their own figures from 2010 that the average area of forest burnt would be 45 hectares, taking in to account some areas would be much larger, though not really much smaller. (8) For 2012 it is estimated that approximately 7.8 million tonnes of CO₂ will be released to the atmosphere from the annual season of burns, as Forestry Tasmania's estimated 245 burns would be conducted." (Huon Valley Environment Centre 2012)

(Quotes from article above:(5) Bowman, D., in Scientist warns on forest burns, By Clark, N. in The Mercury Newspaper 29 April 2009 (6) David M. J. S. Bowman, et al, Fire in the

Earth System, in Science 324, 481 (2009);

<http://firecenter.berkeley.edu/docs/bowmanetalscience.pdf>

(7) A. Slijepcevic, Forestry Tasmania, Loss of carbon during controlled regeneration burns in Eucalyptus obliqua forest Tasforests Vol. 13 No. , December 2001,

http://www.forestrytas.com.au/assets/0000/0208/281_290.pdf

(8) Forestry Tasmania 2010, The forest industry's regeneration burning and re-seeding program, http://www.forestrytas.com.au/uploads/File/pdf/pdf2010/planned_burns_lea...)

DEWLP currently has the following responsibilities:

- “managing the forest estate—including forest management planning, biodiversity
 - management, and monitoring and reporting on sustainable forest management
 - regulating commercial forest uses—including timber harvesting across the state
 - developing policy for forest industries
 - managing the allocation and vesting of timber harvest areas to VicForests
 - monitoring, along with the Department of Treasury and Finance (DTF),
 - VicForests' corporate governance, compliance with legislative obligations and
 - commercial functions
 - managing the limited commercial timber operations in state forests in western
 - Victoria
 - managing public safety zones for timber harvesting operations across the state.”
- (Victorian Auditor-General's Report 2013-2014)

Again, it is astonishing that there is no reference in this list of responsibilities to public health interests, air quality monitoring or reporting to the EPA on air pollution from “regeneration” burns conducted with DEWLP's specific approval.

The Department of Treasury and Finance in Victoria (DTF) has the following responsibilities in relation to VicForests:

- “DTF undertakes functions on behalf of the Treasurer as the shareholder of VicForests.
- It monitors the financial performance of VicForests and oversees VicForests' corporate
- governance, compliance with financial legislative obligations and commercial functions.” (Victorian Auditor-General's Report 2013-2014)

An article by Chris Taylor and David Lindenmayer in 2018 “ “ points to the serious contribution “regeration” burns made to the poor air quality in Melbourne

“Earlier this year, Melbourne and large areas of Central Victoria, experienced days of smoke haze and poor air quality warnings as a result of. It's a regular event occurring every autumn.

This smoke has been reported by both government and media outlets as largely the result of planned burns to reduce bushfire risk, along with agricultural burn-offs and increased use of wood heaters.

But this is only part of the story. A good proportion of the smoke this autumn has actually come from **the intensive burning of debris left behind after clearfell logging**. This is essentially industrial pollution.” (Lindenmayer and Taylor 2018)

Are there particular areas of air quality (either pollution sources or geographic regions) you think the government should target for improvement? Why?

1. VicForests must immediately stop the practice of burning logged coupes for regeneration of state forests.
2. VicForest Board should be tasked with seeking regeneration of logged coupes by other methods (such as planting tube stock). If this is not financially viable then logging of public forests in Victoria should cease. The Victorian Department of Treasury and Finance should oversee this action.
3. DEWLP should require monitoring of all burning on public land to estimate both the quantity of pollution and the air quality. This should be reported to the EPA and the Health Department and be publicly available in real time. Any public health concerns about air pollution should require cessation of burning.
4. The Department of Finance and Treasury should cost the public health costs of air pollution events and any air pollution from “regeneration” burns as part of the accounting of VicForests.
5. All legislation related to the timber industry on public land in Victoria should be reviewed to ensure strict accountability for any “regeneration” burning. This should require “regeneration” burns to be classed as an industrial air pollution requiring full accountability, measuring, monitoring and accountability.

In April and May 2018 in some areas of Melbourne the Poor Air Quality Index reached 901. This was largely caused by “regeneration” burns. The list of planned burns on Forest Fire Management Victoria's website showed that, at the beginning of May, 77 of the 119 burns either lit or planned to be lit across the Central Highlands of Victoria and surrounding areas were “regeneration” burns on logging coupes.

9 tonnes/hectare is burnt in fuel reduction burns, but a much higher amount of up to 400 tonnes per hectare is burnt in “regeneration” burns.

The locations this is occurring in are forest areas such as the Central Highlands and the Strathbogie Ranges as well as East Gippsland. Regeneration must be done by other methods such as planting of tube stock.

The amount of wood burned in “regeneration” burns is very large “VicForests estimated in 2012-2013 at least 250,000 cubic metres of residual wood-16 percent of the total harvest was left on the forest floor and burnt in regeneration burns” (Page 46 Auditor General's Report 2013).

The Auditor General's report of December 2013 it is stated “Vic Forests is responsible for regenerating coupes so that they meet the standards for successful regeneration set by the regulatory framework.... Vic Forests prepares the coupes for regeneration by burning and

follows with aerial seeding.” (Auditor-General's Report Pg 27 2013). Coupes that have deemed to have regenerated are then handed back to DEWLP.

No research could be found in Victoria on the amount of air pollution this yearly burning on public land produces which appears to be grossly negligent and totally the responsibility of the Victorian Government. The only study that could be found was from the Huon Valley in Tasmania (Geeveston and Grove) where “regeneration” burning of timber was shown to contribute significantly more to air pollution than the large number of wood heating fires in the area:

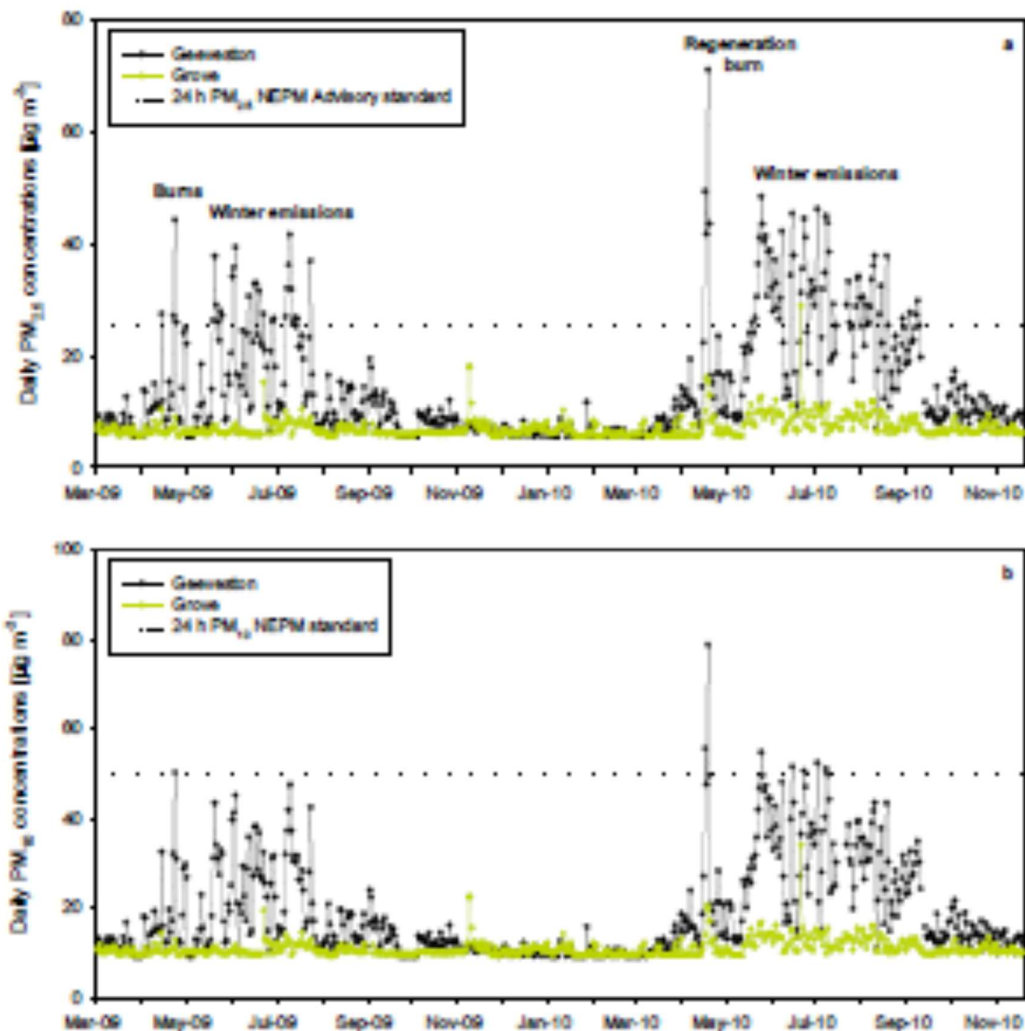


Figure 8 Daily averaged PM_{2.5} and PM₁₀ concentrations measured at Geeveston (a) and Grove (b) between March 2009 and November 2010

The spikes on both graphs are emissions from “regeneration” burns.

How would you build on or vary these actions?

As asthma and respiratory management are very much the responsibility of the individual (or a responsible adult in the case of children) then quick and direct information on air pollution events should be sent through to those who wish to register for such a service. This should also include Health Care Practitioners.

Do you have any suggestions for further actions?

All areas of Victoria near to public land which is logged and have “regeneration” burns are under threat of serious air pollution. This includes East Gippsland, the Strathbogie Ranges, the Rubicon and the Central Highlands.

The Regional Forest Agreements that are due for renewal in 2020 should be suspended and consideration be given to moving from native forest harvesting to timber plantations as a source of timber in Victoria.

The yearly Timber harvesting plans for state owned forests in Victoria should be suspended.

The “Management Standards and Procedures for timber harvesting operations in Victoria’s State forests 2014” should be amended to exclude “regeneration” burning of timber as an option for management.

Are you able to provide any data or information that will help government assess the feasibility and cost-effectiveness of air quality management actions?

Data on the amount of air pollution and CO₂ emissions from any wood burning (especially “regeneration” burns in Victorian Government controlled/public forest should be researched and made publicly available before any further mass burning is allowed. The CSIRO or another independent scientific body should be tasked with providing data on “regeneration” burns.

Do you have other suggestions on how to secure a clean air future?

Do not allow wood to be used as a source of power generation in Victoria.

References

Victorian Auditor-General’s Report (2013-2014) Managing Victoria’s Native Forest Timber Resources, Victorian Government, Melbourne.

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Huon Valley Environment Centre (2012), Code Green and Still Wild Still Threatened. Quoted on Fact Sheet <https://observertree.org/category/fact-sheets/>

Lindenmayer D., and Taylor C., (2018) The Conversation “Logging burns conceal industrial pollution in the name of ‘community safety’” https://theconversation.com/logging-burns-conceal-industrial-pollution-in-the-name-of-community-safety-96712?utm_source=facebook&utm_medium=facebookbutton accessed 28 June 2018

Meyer C.P, Reisen F., Keywood, M., Crumeyrolle S. (2011) Impacts of smoke from regeneration burning on air quality in the Huon Valley, Tasmania. The Centre for Australian Weather and Climate Research

VicForests 2016 accessed 29/6/2018
(<http://www.vicforests.com.au/static/uploads/files/vicforests-operating-procedures-regulatory-handbook-v3-0-final-wfmieghmrzeh.pdf>)