



Submission to EPA from Climate Action Newcastle (CAN)

EPA's proposed requirements for NSW's large greenhouse gas emitters

CAN's submission

Our submission covers all three draft policy documents currently on exhibition - the Climate Change Licensee Requirements, the Climate Change Mitigation and Adaptation Plans and the Greenhouse Gas Mitigation Guide for NSW Coal Mines.

We address a number of shortfalls in the proposed requirements plus the overarching shortfall that in almost all cases these large greenhouse gas emitters are let off the hook until "later".

If the EPA is to have any impact in this area, requirements need to come into effect NOW,

The requirements also omit consideration of emissions from trains – see below under *Other Emitters*

Overarching Shortfall of the Requirements

These proposed requirements, and the Greenhouse Gas (GHG) Mitigation Guide in particular, have no urgency about them reduce and limit greenhouse gas emissions from coal mines in NSW.

They effectively allow business as usual at NSW coal mines and will not deliver the urgent change that is needed to prevent NSW breaching legislated emissions reduction targets of at least 50% by 2030 and at least 70% by 2035. So it is hard to see the purpose of these proposed measures in their current form.

NSW has approved the last 7 coal mine expansions for applications which have been submitted and has not addressed methane emissions from existing coal mines which are predicted to increase to 2030.

These proposed requirements will not change that trajectory. They step over the urgency of containing the greenhouse gas emissions as though time were not of the essence.

Climate Change Licensee Requirements

The major failing of the Licensee Requirements is that the EPA states that it will not impose GHG emissions limits on facilities via Environment Protection Licences in the short term. It describes this as a long-term action, not a short term one.

Why the delay? The NSW EPA's own expert panel found that *"....the panel's view is that it will be hard for the EPA to ensure mines actually reduce emissions in the absence of emission limits."*

Enforceable, reviewable limits should be placed on emissions of greenhouse gases, especially methane, from NSW coal mines as a matter of urgency. These should be gross emissions limits that exclude offsets.

The NSW EPA also needs to work with the Net Zero Commission to establish a sectoral target for coal mine emissions reduction to 2030 and 2035 that are consistent with a 1.5 degree of warming pathway. These targets should then drive the limits on emissions included in Environment Protection Licences and the limits need to increase over time in accordance with the statewide sectoral target.

GHG Mitigation Guide for Coal Mines

The Mitigation Guide fails to drive any significant abatement of direct emissions from either methane pollution or diesel emissions in coal mines *this decade*, which is the critical period for avoiding dangerous tipping points.

Methane emissions from underground mines – The Guide proposes that the EPA *may* mandate ventilation air methane (VAM) abatement at high-emitting underground coal mines in NSW, but not until July 2030 and then only for mines that will operate beyond July 2032. It has also flagged uncertainty about VAM abatement safety issues which it doesn't plan to resolve until 2028. This means the best-case scenario is very little abatement by 2032, and the worst case scenario is very little at all well beyond 2032 if the EPA decides that 'safety issues' means it won't require VAM abatement.

Methane emissions from open cut mines -The Guide does NOT require gas drainage and destruction of methane at open cut coal mines, even though the EPA's own expert panel on this issue recommended 'adding surface mines to the gas drainage and flaring requirements'.

Emissions from diesel engines at coal mines – The EPA's does NOT require electrification of diesel engines at coal mines and proposed diesel actions place no pressure on coal miners to reduce Scope 1 diesel GHG emissions this decade. On this basis, the EPA Guide is likely to facilitate an increase in diesel emissions because, until 2035, the draft Guide's measures are based on shifting a percentage of fuel used to low carbon alternatives, but do not constrain total fuel use.

Other major failings of the Guide

Exemptions - The Guide sets out a pathway where a company can seek an exemption from a mitigation measure if it decides 'it is not feasible to implement'. This is a massive loophole which directly mimics the current requirements that measures 'must be reasonable and feasible' which has held back any action for the last 10 years. How will this help reduce greenhouse gas emission in a timely manner?

Downstream Scope 3 emissions - The Guide does not contain any guidance on how to constrain the usually very large downstream Scope 3 emissions that occur when coal from mines is burnt in power stations either in Australia or overseas, despite a recent decision by the NSW Court of Appeal in relation to the Mt Pleasant Coal Mine which recognised downstream emissions as within scope of development assessments.

Scope 2 emissions - The Guide fails to include any requirements for reducing electricity emissions at coal mines (Scope 2 emissions), despite them being the easiest category to abate by requiring renewable energy be used. Instead, the Guide merely says that EPA will look at this issue 'later'.

The Guide, as it stands, does little to constrain greenhouse gas emissions from heavy emitters with any immediacy and requires the following amendments:

1. Strict requirements that prohibit venting of unabated methane from underground mines, mandate use of Ventilation Air Methane at highest-emitting underground mines from 2027 and at other underground mines from mid-2028.
2. Mandate pre-drainage of methane at all open cut mines.
3. Set an ambitious schedule for electrification of vehicles at coal mines that requires at least 50% electrification by 2030 and 70% by 2035 and require all mines to utilise renewable energy for electricity by 2030 at the latest.
4. Remove the proposed exemption to allow coal companies to avoid requirements because it will completely undermine the whole Guide and set strong penalties for failure to comply with it.

Other Emitters

Your proposed requirements focus on the 200 odd premises that each emit 25,000 tonnes or more of scope 1 and 2 emissions of CO₂ in any year.

However, there is at least one other large emitter that is entirely within the NSW Government's control to take action on emissions reduction.

The community is unaware of the high level of emissions and pollution caused by trains as most passengers only use electric services operating on urban rail corridors.

However, most modern freight trains are powered by big diesel motors driving generators to power electric traction motors that turn the wheels of locomotives. The fuel tanks of each locomotive can carry 3000 to 5000 litres of diesel fuel and can consume that fuel on a freight journey. Train speed, the size of the load and skill of the locomotive drivers can have a huge bearing on the fuel consumption, so too can be the efficiency of the engine. Locomotive engine design and maintenance can also play a very important role in the emission levels and types of pollutants emitted.

In 2013 the NSW EPA undertook a study to inform the ongoing discussion about diesel emissions and possible measures that could be considered to address them. The study was an exploratory work scoping possible measures to reduce particulate matter (PM) emissions less than 2.5 micrometres in diameter (PM_{2.5}) and less than 10 micrometres in diameter (PM₁₀) and NO_x emissions from new and in service locomotives in NSW and Australia.

Key components of the scoping study included:

- A review of local, national and international air emission regulations and policies for new and in-service locomotives;
- Characterisation of the locomotive fleet industry in NSW and Australia;
- Quantification of air emissions from locomotives in NSW and Australia; and
- Identification of potential cost-effective measures for reducing air emissions from new and in service locomotives in NSW and Australia.

This study resulted in the community and the EPA wanting to establish regulations and standards. However, the Government failed to deliver. The ball is clearly in the government's court to establish rules, regulations, standards and practices supported by legislation and licencing to make NSW and Australia a leader in reducing locomotive fossil fuel emissions.

A second action totally under the control of the Government relates to the procurement of rolling stock for operation on NSW rail corridors that are fuel efficient, environmentally friendly and aid in decarbonization. Four examples are:-

1 The Government should strongly back the concept of moving freight and passengers from road to rail transport.

2 Assisting rollingstock operators to acquire specialist equipment to suit freight tasks like wind farm and REZ developments to utilise rail instead of road from port to site.

3 The Government should purchase rolling stock that operate in tri mode for regional passenger services. The New R sets should be fitted with batteries before entering service to save major levels of diesel consumption and associated pollution.

4 Extending the overhead wiring network from Newcastle to Maitland, from Western Sydney to Canberra and from Southern Sydney to Nowra.

Finally, the Government is a major emitter of pollutants and a consumer of imported diesel fuel draining Australia's funds. The government has total control over these actions and should take steps to implement change.

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