

Review of coal fired power station environment protection licences - Consultation summary

The EPA publicly consulted on the statutory review of environment protection licences for Bayswater, Eraring, Mount Piper and Vales Point coal fired power stations. This report summarises the consultation process and the feedback we received.

Summary

This document summarises what the EPA heard during public consultation on the statutory review of environment protection licences for Bayswater, Eraring, Mount Piper and Vales Point coal fired power stations. This includes a summary of submissions and survey results, as well as details of other stakeholder engagement activities.

The EPA appreciates the time and thoughtfulness people and organisations put into their submissions and feedback. We considered all responses as we finalised the licence reviews. We will continue to consider how we can address feedback and opportunities in our work regulating impacts from coal fired power stations.

Our consultation

Consultation on the review of coal fired power station environment protection licences occurred over five weeks, from 23 October 2023 to 27 November 2023.

There were multiple opportunities for stakeholders to engage with the EPA, such as online meetings, a dedicated mailbox for enquiries as well as the opportunity to complete a survey or provide written feedback.

The EPA hosted six briefings with key stakeholders to provide an overview of the review of environment protection licences. These gave stakeholders an opportunity to discuss the review, ask questions and raise issues and concerns.

The EPA set up a dedicated Have Your Say webpage where they could provide a written submission or complete an online survey. This opportunity was advertised widely via targeted emails and media articles.

The EPA received 103 submissions in total, including 48 written submissions and 55 online surveys from individuals, community and environment groups and peak bodies.

Feedback and opportunities raised during consultation

We heard specific feedback and opportunities to consider on the four licences and on our broader regulation of power stations. The EPA has considered all of the feedback we received. The consultation has also helped us gain a deeper understanding of the community's priorities for our ongoing regulation of the power stations.

Across all the engagement approaches, most respondents provided feedback on matters they wanted the EPA to address or consider as we review the licences for Bayswater, Eraring, Mount Piper and Vales Point coal fired power stations.

Key sentiment was that:

 air concentration limits in the licences need strengthening to better protect the health and amenity of the surrounding community. Overarching sentiment included support to tighten air concentration limits for particles, nitrogen oxides (NOx), sulfur dioxide (SO2) and mercury in power station licences.

- strong, mandatory and enforceable greenhouse gas emission limits in power station licences and actions to be taken sooner.
- climate change mitigation and adaptation plans be added to the licences. This included plans to be made publicly available and actions to be further strengthened through monitoring, enforcement and review of climate change mitigation and adaptation plan requirements.
- more access to pollution monitoring data, presented in a meaningful way to satisfy the community's
 right to know and improved transparency of monitoring and reporting information for the community.
 A key sentiment from individuals, community and environment groups was that they wanted access
 to more data and information, to improve understanding of an operator's environmental performance.
 Access to more types of data and information, such as continuous emission monitoring data and
 reports prepared under licence conditions was also raised.
- water concentration limits in the licences need strengthening. Overarching sentiment included support to tighten concentration limits for metals, nutrients, chlorine and other pollutants in line with water quality guidelines. Stopping or reducing warm water discharges to better protect the aquatic ecosystem and human water uses and values in Lake Macquarie was also raised.
- coal ash must be carefully dealt with to prevent risk to the environment and human health.
- more opportunities for public participation in environment protection, including the establishment of a community consultative committee for each power station.

Consideration of community feedback and next steps

We are engaging with power station operators to examine feedback and opportunities raised as part of this review. The licence reviews are now finalised. Next, the EPA will make changes to the licences for Bayswater, Eraring, Mount Piper and Vales Point coal fired power stations. Changes will start in early 2024. Changes to environment protection licences will be reflected on the EPA's public register.

Changes to the licences for coal fired power stations we will be working through include:

- reviewing air emissions limits for certain metals
- reviewing the frequency of air and water monitoring
- reviewing and improving monitoring and public access to information
- increasing stakeholder engagement by power stations
- making administrative changes to the licences to increase readability and achieve consistency across the sector where appropriate.

The next section provides a summary of the EPA's response to key sentiment raised in the consultation.

Air concentration limits in the licences need strengthening

The Protection of the Environment Operations (Clean Air) Regulation 2022 (Clean Air Regulation) is the main set of detailed laws controlling air pollution in NSW. Under the current Clean Air Regulation power station operators must transition to more stringent air emissions limits, including nitrogen oxides (NO_x).

The combustion of coal at power stations produces gases including nitrogen oxides (NO_x) and sulfur dioxide (SO₂). To further understand and reduce sulfur dioxide (SO₂), the EPA has recently progressed a new condition on all four coal fired power station licenses, requiring operators to routinely test and report on sulfur levels, as well as some metals and other components.

The EPA will review air emission limits in respect of some metals, as well as Type 1 and Type 2 substances (being groupings of various heavy metals defined in the Clean Air Regulation.

Within the EPA's regulation of coal fired power stations, dust management is a priority as it is vital for both the protection of the environment and human health. The EPA has recently required all coal fired power stations to develop and implement a dust trigger action response plan.

Key parts of trigger action response plans include:

- development of proactive and reactive trigger levels and guidelines for when to investigate and take further action to address dust,
- setting out personnel responsibilities,
- · regular reporting,
- incorporation of a regular review process.

Strong, mandatory and enforceable greenhouse gas emission limits

The NSW Government has an objective to achieve a 50% reduction in emissions on 2005 levels by 2030 and to reach net zero emissions by 2050. Emissions from the electricity generation sector are forecast to reduce significantly as existing coal fired power stations retire and the State shifts towards renewable generation.

The <u>NSW Electricity Strategy</u> is the NSW Government's plan for reliable, affordable and sustainable electricity. The <u>NSW Electricity Infrastructure Roadmap</u> is the NSW Government's 20-year plan to transform our electricity system into one that is affordable, clean and reliable. The strategy and the roadmap are designed to enable the orderly transition to renewables as existing coal fired power stations retire. These initiatives are now being progressed. The EPA has a role in supporting this transition and will be considering ways we can gather further information and understand the contribution of greenhouse gas emissions from coal fired power stations.

Variations to power station licences to reduce greenhouse gas emissions are not recommended as part of the licence reviews. This is because variations to licences to address greenhouse gas emissions are being managed within the wider context of the EPA's <u>Climate Change Action Plan 2023-26</u>. The EPA is supporting industry to de-carbonise and build their resilience to a changing climate. This includes setting sector-wide emission targets and site-specific licence limits and other requirements, where we can achieve the best environmental outcomes. We are ensuring we complement and do not duplicate other NSW and Commonwealth Government policies and initiatives. We are instead focusing on those sectors (or sub-sectors) where there is no explicit policy in place to reduce emissions, and where there are still significant opportunities for us to both influence and require emission reductions.

Climate change mitigation and adaptation plans be added to the licences

Under our <u>Climate Change Action Plan 2023-26</u>, the EPA will require industry to prepare and implement climate change mitigation and adaptation plans. These plans will complement NSW Government policies and programs that are supporting adaptation and the transition to a de-carbonised economy.

The EPA will progressively require and support our licensees to prepare, implement and report on climate change mitigation and adaptation plans and to report on the effectiveness of their plans over time. We will develop an EPA guideline for preparing climate change mitigation and adaptation plans, including templates, to support our licensees to develop, implement and report on these plans. We will include a placeholder note within each licence for relevant climate change conditions, including climate change mitigation and adaptation plans requirements, that are likely to be phased in for all licensees during 2024-25.

We will require plans (or sections of them) to be published on corporate websites, including progress updates. We will also consider using licence conditions to explicitly require practical mitigation and adaptation actions identified in plans to be implemented.

More access to pollution monitoring data

Currently, all power stations are required to meet strict monitoring and reporting conditions and publicly report on monitoring data as required in their licence. We want to ensure monitoring data is accessible and it increases community understanding of a licensee's activities.

Monitoring allows the EPA to know if a licensee is complying with its legal obligations, allows a licensee to demonstrate compliance to the EPA and their community and provides community with information on a licensee's activities. Each power station is required to monitor, by sampling and obtaining results by analysis, the concentration of each pollutant specified in their licence.

We currently require power station operators to make their monitoring data publicly available on their websites in accordance with section 66(6) of the *Protection of the Environment Operations Act 1997* and with the requirements for publishing pollution monitoring data issued by the EPA.

Power station operators must either make their pollution monitoring data available in a prominent location on their website or provide the pollution monitoring data at no charge to members of the public who request it in writing.

Links to pollution monitoring data as a result of coal fired power station licences:

- Bayswater power station monitoring data licence 779
- Eraring power station monitoring data licence 1429

- Mount Piper power station monitoring data licence 13007
- Vales Point power station monitoring data licence 761

Acknowledging community feedback, the EPA considers that greater transparency around monitoring data (air and water) is required. The EPA undertakes to engage with power station licensees to review their publishing of monitoring data and how it is presented to make data more readily accessible and meaningful to the public.

Water concentration limits in the licences need strengthening

The EPA has varied power station Licences to require operators undertake a contemporary characterisation of the discharges to waters from coal ash repositories. These studies will inform future licensing requirements for coal-fired power station water discharges.

The EPA has engaged Department of Planning and Environment to monitor the environmental conditions near power stations in Lake Macquarie. This assessment will provide an understanding of the current condition and provide a basis for comparison as well as being used to inform a future review of licence limits (including thermal) for water discharges from coal-fired power stations and their ashrepositories.

The Department of Planning and Environment has deployed a smart buoy near Wyee Point, to track water quality in Lake Macquarie. The custom-built buoy, uses pumps to automatically sample water from different depths, passing through a variety of water quality sensors and transmits the data to the cloud for real time access. The buoy provides baseline data as well as assessing salinity, turbidity (how clear or murky the water is), oxygen, temperature and pH levels. Importantly, this data is publicly accessible on the <u>EPA website</u>, which means the community is always up to date on the water quality of Lake Macquarie.

Ensure risks from coal ash are appropriately managed

When it comes to coal ash and coal ash dams the EPA has been listening to concerns and working hard to ensure the health of the community and environment is guiding regulation. The EPA acknowledges ongoing environmental risks exist at coal ash dams and is engaging with each power station operator to ensure these risks are appropriately managed.

The requirements on coal ash dam discharges include limits on the pollutants that can be discharged, and the monitoring of surface and groundwater. The EPA will act (and has acted) where environment protection requirements are not met.

In March 2021, the NSW Legislative Council's Public Works Committee published its report on the Costs for remediation of sites containing coal ash repositories. It contained 16 recommendations. The Government responses to 8 of the 16 recommendations have been implemented. Work is underway across Government to implement the other half. The Inquiry made comment about a lack of publicly accessible information and, among other things, called for greater rates of recycling of coal ash.

The EPA has already implemented new conditions on all power station licences that will require licence holders to monitor and report on the annual quantities of coal ash generated, deposited and/or stored on the premises, and transported from the premises for reuse. Transparent reporting on the generation and reuse of coal ash is a practical measure to help manage risks to the environment and human health. It also ensures that the community has access to relevant information and encourages reuse of coal ash where appropriate.

More opportunities for public participation in environment protection

We will consider using licence conditions to increase opportunities for public participation, including ways power station operators can engage with the community. The new Hunter Environment Advisory Group will be finalised early 2024 and will be an important forum to engage with community.

The EPA has recently installed new air monitors around Lake Macquarie to provide a better picture of outdoor air quality, help identify areas of concern and to help inform future initiatives to protect the environment and human health. The community can access air quality data from the sensors in near real time using the PurpleAir interactive map. The map identifies an approximate location of the sensor, as well as providing a public display of the data. You can see other sensors installed around Lake Macquarie in real time on the interactive map.

What next

The licence reviews are now finalised. Next, the EPA will make changes to the licences for Bayswater, Eraring, Mount Piper and Vales Point coal fired power stations. We are engaging with power station operators to examine feedback and opportunities raised as part of this review. Changes will start in early 2024. Changes to environment protection licences will be reflected on the EPA's public register.

The EPA is committed to providing the community with up to date information about its regulation of power stations. Power station licences and changes made to conditions of the licences are publicly available on the EPA's public register. We will publish regular updates about our regulation of power stations on our website and engage further through the Hunter Environment Advisory Group as we explore opportunities for the licences.