National Environmental Law Association

Committee Secretary
Senate Standing Committee on Environment and Communications
PO Box 6100
Parliament House Canberra
ACT 2600

By email: ec.sen@aph.gov.au

6 July 2023

Dear Committee Secretary

RE: Environment Protection (Sea Dumping) Amendment (Using New Technologies to Fight Climate Change) Bill 2023 - call for submissions

The National Environmental Law Association Ltd ACN 008 657 761 (**NELA**) welcomes the opportunity to make a submission to the Senate Standing Committee on Environment and Communications on your inquiry into the Environment Protection (Sea Dumping) Amendment (Using New Technologies to Fight Climate Change) Bill 2023 (**Bill**).

1. NELA's objects and its interest in this Senate Inquiry

NELA is the national peak body for advancing Australian environmental law and policy. It is a multidisciplinary, member-based association focused on environmental law and sustainability. NELA is managed by a national board that includes Directors with expertise in international and domestic legal frameworks for biodiversity conservation, climate change and natural disasters, environmental regulation and regulatory theory and natural resource management.

One of NELA's core objectives is to provide a forum for, and to otherwise assist in, the discussion, consideration and advancement of environmental law across the legal profession and the wider community. When considering environmental legislative reforms, NELA considers several factors including whether the reform advances environment protection and restoration, the environment protection principles integral to environmental law,[1] and the integrity and transparency of the reform. NELA is also a member of the leadership committee of the Professional Bodies Climate Action Charter Australia and New Zealand Forum, which represents professional members in Australia across a wide range of sectors from finance, insurance, science, engineering, law, health, construction and the built environment.

The Bill would amend the *Environment Protection (Sea Dumping) Act 1981* (Cth) (**EPSD Act**), primarily to enable the granting of permits for:

- the export of carbon dioxide streams from carbon capture processes for the purposes of storage in sub-seabed geological formations (i.e. carbon capture and storage);[2] and

[1] The 'principles of environmental protection' are integration, proportionality, primacy of prevention, shared responsibility, polluter pays, the waste management hierarchy, evidence-based decision making, precautionary principle, equity, accountability, and conservation (see Part 2.3 *Environment Protection Act 2017* (Vic) for a recent formulation).
[2] See 2009 amendment to the London Protocol.

- the placement of wastes or other matter for a marine geoengineering activity for scientific research (e.g. ocean fertilisation).[3]

While these activities have the potential to provide environmental benefits through the sequestration of carbon dioxide, they also have the potential to significantly impact upon the natural environment, particularly marine ecosystems and processes. Therefore, the Bill is of significance to NELA and its members.

2. Summary of Submission

At the outset, NELA notes it supports the introduction of the Bill to implement the 2009 and 2013 amendments to the *1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972* (**London Protocol**), in that the Bill would establish a framework to facilitate and enhance the uptake of new technologies to facilitate and make progress towards:

- Australia's emission reduction targets under the *Climate Change Act 2022* (Cth) of a 43% reduction in greenhouse gas emissions by 2030 compared to 2005 levels, and net zero emissions by 2050;[4]
- Australia's international law commitments under the Paris Agreement to keep global temperature rise to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels;[5] and
- private sector emissions reduction efforts and targets.[6]

However, NELA makes recommendations with respect to the Bill to improve the robustness of assessments regarding the impacts of proposed activities on the marine environment, and to explicitly align the requirements of the EPSD Act with international best practice under the London Protocol. Underpinning NELA's submission are the findings of the 2021 State of the Environment Report, which highlight the importance of protecting the marine environment, delivering climate change mitigation, and providing opportunities for First Nations communities and Traditional Owners to be involved in environmental decision-making.

We set out below a summary of NELA's submissions:

- NELA *submits* that the current statutory requirements under the Bill to conduct environmental assessment and scientific testing are insufficient and should be strengthened. In addition to the requirements prescribed under the London Protocol, applicants for permits to load, transport, export, or sequester carbon dioxide, or to conduct marine geoengineering activities, should be required to conduct further research and monitoring, and ensure that any impacts on the environment are mitigated to the greatest extent practicable;
- NELA *submits* that the Bill should expressly require that an applicant for a permit conduct consultation with First Nations communities or Traditional Owners whose interests may be affected by the proposed activity;
- NELA *submits* that the Bill should expressly recognise where the proposed activities would integrate and interact with other legal frameworks, including Commonwealth, state and territory, and international laws. This would ensure that the EPSD Act is fit for purpose and provides sufficient regulatory certainty; and

[3] See 2013 amendment to the London Protocol.
[4] *Climate Change Act 2022* (Cth) s 10(1).
[5] *Paris Agreement*, art 2(1)(a).
[6] As recognised in the *Sharm El-Sheikh Implementation Plan*, the private sector has a key role to play in achieving the aims of the Paris Agreement.

- NELA *submits* the severity of the penalties that may be imposed under the EPSD Act should be increased. This would ensure the EPSD Act provides sufficient deterrence for any action taken without a permit.

3. Background to this Submission

NELA supports the introduction of the Bill by the Australian Government and the Government's announcement of its plans in the *Nature Positive Plan: Better for Business, Better for the Environment* (**Nature Positive Plan**) to reformulate federal environmental laws, in response to the findings of the Professor Graeme Samuel AC's independent review (**Samuel Review**) of the *Environment Protection and Biodiversity Conservation Act 1999* (**EPBC Act**) and the 2021 State of the Environment Report. Both reports, as acknowledged by the Government, present an alarming story of environmental decline.

NELA also welcomes the Australian Government's international leadership with respect to the environment, including:

- as a member of the 14-nation High Level Panel for a Sustainable Ocean Economy, the Australian Government has committed *to sustainably managing 100% of the ocean area under national jurisdiction, guided by a sustainable ocean plan, by 2025. This sustainable plan is to 'be in line with the 2030 Agenda for Sustainable Development, build on integrated ocean management and ecosystem knowledge, address pressures from all land and sea-based sources, and take account of the predicted impacts of climate change'*;[7] and
- as a Party to the Kunming-Montreal Global Biodiversity Framework, the Australian Government has committed to 23 global targets to be initiated immediately and achieved by 2030, notably:
    - protecting least 30 per cent of Australia's terrestrial, inland water and coastal and marine areas by 2030;[8]
    - effective restoration of at least 30 per cent of degraded terrestrial, inland water and coastal and marine ecosystems in Australia by 2030;[9] and
    - minimising the impact of climate change and ocean acidification on biodiversity and increase its resilience through mitigation, adaptation, and disaster risk reduction actions.[10]

Australia's commitments to these international initiatives will require addressing gaps in the coordination of many components of marine and coastal management and planning, and climate change mitigation and adaptation. This must be a key factor for the inquiry in considering the Bill and the EPSD Act more broadly.

[7] Rowan Trebilco et al, *2021 State of the Environment Report: Marine*, 14.
[8] Kunming-Montreal Global Biodiversity Framework, target 3.
[9] Ibid, target 2.
[10] Ibid, target 8.

4. Detailed Comments and Recommendations

4.1 NELA *submits* that the current statutory requirements under the Bill to conduct environmental assessment and scientific testing are insufficient and should be strengthened. In addition to the requirements prescribed under the London Protocol, applicants for permits to load, transport, export, or sequester carbon dioxide, or to conduct marine geoengineering activities, should be required to conduct further research and monitoring, and ensure that any impacts on the environment are mitigated to the greatest extent practicable.

The current statutory requirements relating to the granting of a permit for different types of activities relating to "controlled material" (e.g. carbon dioxide streams) by the Minister should be strengthened by explicitly setting out the aims of the London Protocol and the relevant obligations imposed on signatories therein, particularly in relation to mitigating the impacts of such activities on the marine environment. We note that to fulfil its international law commitments, Australia would be required to ensure that all activities are regulated under the EPSD Act in a manner consistent with the London Protocol. Notably, under the London Protocol, Australia is obliged to apply a precautionary approach to protect and preserve the marine environment from all sources of pollution, including when evaluating applications for permits to undertake legitimate marine geoengineering research for climate change mitigation purposes.[11] Despite this, an applicant is not expressly required to conduct research and monitoring with respect to the environmental impacts of a proposed marine geoengineering activity under the Bill.

Jurisdictional requirements for granting a permit – section 19(7C)

The Bill proposes to insert section 19(7C) to the EPSD Act to allow a new type of permit that could be granted under the Act. The permit relates to the placement of wastes or other matter into Australian waters from any vessel, aircraft or platform, or into any part of the sea from any Australian vessel or Australian aircraft, for a marine geoengineering activity for scientific research.

NELA understands the potential value of legitimate scientific research into marine geoengineering activities, however, considers that the language of this new subsection does not sufficiently align with the aims of the London Protocol and the obligations imposed on signatories. To better fulfil these obligations, and provide more robust safeguards for the environment, NELA recommends that:

- section 19(7C)(b) be amended so that it reads:

  "that pollution of the marine environment from the placement of wastes or other matter for that activity would be **prevented, or mitigated to the greatest extent practicable**; and"

- section 19(7C)(d) be amended so that it reads:

  "that the placement of wastes or other matter for that activity is **consistent with** the aims of the Protocol **and international best practice**; and"[12]

Research and monitoring – section 19(9)

The Bill proposes to amend section 19(9) to the EPSD Act so that the Minister *may* require an applicant to enter into an agreement with the Commonwealth in relation to a permit for "placement of wastes or other matter into Australian waters or any other part of the sea for a marine geoengineering activity", in addition to permits for "dumping" or "artificial reef placement".

NELA submits that the Commonwealth should be *required* to enter into an agreement with an applicant that includes provisions of any, or all, of the kinds listed in section 19(9), such as that the

[11] London Protocol, arts 2-3.

[12] See for example, the various guidelines accompanying the London Protocol as set out on page 5 below.

applicant will undertake specified research and monitoring activities to assess the consequences of any releases (whether accidental or intended) of contaminants into the marine environment as a result of the proposed activities. This would strengthen the environmental safeguards in the EPSD Act by ensuring that research and monitoring activities are carried out, and provide regulatory certainty to applicants, the Minister, and the wider public with respect to the requirements for obtaining a permit under the Act. To this end, NELA recommends that:

- section 19(9) be amended so that it reads:

  "Before granting a permit for dumping, placement of wastes or other matter into Australian waters or any other part of the sea for a marine geoengineering activity, or artificial reef placement, the Minister **must enter into an agreement with the applicant** that includes provisions of any, or all, of the following kinds:"

- section 19(9)(g) be amended so that it reads:

  "a provision that the applicant will report to the Minister the results of any research, monitoring or investigation undertaken by him or her in accordance with the agreement, **and the steps proposed to be taken by the applicant to mitigate to the greatest extent practicable any potential consequences of the release into the marine environment through the proposed dumping, placement of wastes or other matter or artificial reef placement of any contaminants.**"

To assist with the implementation of these amendments, NELA submits that the Australian Government should develop guidelines for such research and monitoring that are consistent with international best practice under the London Protocol. In particular, these guidelines should be cognisant of the potential environmental impacts of the activities covered by the 2009 and 2013 amendments to the London Protocol, including:

- the potential for leakage of carbon dioxide from relevant infrastructure;
- uncontrolled releases of contaminants into the marine environment; and
- disturbance to marine ecosystems through noise, artificial light and air emissions.

We urge the Government to consider the two guidelines on the sequestration of carbon dioxide streams in sub-seabed geological formations developed by the technical working groups that oversee the London Protocol, namely:

- the 'Risk Assessment and Management Framework for CO2 Sequestration in Sub-seabed Geological Structures' and
- the '2012 Specific Guidelines for the Assessment of Carbon Dioxide for Disposal into Sub-seabed Geological Formations'.

Consistency with international guidance and Australia's domestic environmental regime regarding the export of carbon dioxide streams

The Bill proposes amendments to the EPSD Act that enable Australia to enter into carbon dioxide export agreements and establish a separate process for the grant of carbon dioxide export permits in accordance with the 2009 amendment to the London Protocol. The amendments require compliance with the London Protocol's permitting requirements and environmental safeguards for carbon dioxide export activities.

Given that the export of carbon dioxide streams will engage both domestic and international stakeholders and involve activities that diverge across international borders, NELA submits the current statutory requirements in respect of authorising the granting of a permit to export carbon

dioxide (and other controlled materials) are insufficient and that further safeguards should be introduced. In particular, the Bill should require that prior to granting a permit under section 19 of the EPSD Act in relation to the export of carbon dioxide streams, the responsible Minister take into account the London Protocol's accompanying 'Guidance on the implementation of Article 6.2 on the export of CO_2 streams for disposal in sub-seabed geological formations for the purpose of sequestration'.[13] NELA submits that this would strengthen the environment protection credentials of the EPSD Act and ensure alignment with international best practice, in a manner that is complementary to Australia's existing environmental impact assessment and permitting framework at the Commonwealth, state and territory level for similar activities occurring within Australia's offshore areas that may affect the marine environment.

4.2 NELA submits that the Bill should expressly require that an applicant for a permit conduct consultation with First Nations communities or Traditional Owners whose interests may be affected by the proposed activity.

The EPSD Act is silent on consultation with First Nations communities or Traditional Owners. Failing to address this through the Bill would be a missed opportunity for the Australian Government to give effect to the findings of the Samuel Review and the 2021 State of the Environment Report, which called for greater inclusion of First Nations communities and Traditional Owners knowledge in environmental decision-making. Notably, the 2021 Statement of the Environment Report found that:

> *It is crucial that Indigenous people are involved in national and international climate forums and decision-making processes.*[14]
>
> ...
>
> *As a nation, Australia can benefit greatly from using Indigenous knowledge in environmental management practices, and from enabling Indigenous people to care for Country.*[15]

First Nations communities and Traditional Owners have longstanding spiritual connections with sea and marine resources in the sea which may be affected by activities that can and are proposed to be permitted under the EPSD Act. This intrinsic relationship of Traditional Owners with 'Sea Country' was recognised in December 2022 by the Full Federal Court in *Santos NA Barossa Pty Ltd v Tipakalippa* [2022] FCAFC 193.[16]

NELA submits that the recognition of the interests of Traditional Owners in marine resources and the marine environment more broadly, such as in connection with traditional hunting and gathering practices, would be consistent with the definition of "environment" under federal environmental law (such as under the EPBC Act – where the "environment" is defined to include "*people and communities*" and "*social, economic and cultural*" aspects).[17]

The Bill should be amended to explicitly provide opportunities for First Nations knowledge to be incorporated into planning and permitting processes, such as introducing a requirement to consult with appropriate or relevant First Nations communities and Traditional Owners on proposed permitted activities as part of the application process under section 18 of the EPSD Act. To this end, NELA submits that the following subsection be inserted into section 18 of the EPSD Act:

> **"(2A) An application for a permit shall include evidence of the consultation that has been conducted with persons whose interests may be affected by the proposed activity,**

---

[13] LC 35/15 Annex 6 (2013) 'Guidance on the Implementation of Article 6.2 on the Export of CO2 Streams for Disposal in Subseabed Geological Formations for the Purpose of Sequestration, Report of the Thirty-Fifth Consultative Meeting and the Eighth Meeting of the Contracting Parties'.

[14] Blair Trewin, Damian Morgan-Bulled, and Sonia Cooper, *2021 State of the Environment: Climate*, 9.

[15] Terri Janke et al, *2021 State of the Environment: Indigenous*, 8.

[16] *Santos NA Barossa Pty Ltd v Tipakalippa* [2022] FCAFC 193 [35].

[17] *Minister for the Environment v Sharma* [2022] FCAFC 35 [196]; EPBC Act ss 3(1)(a) and 528.

and a description of the measures to be undertaken by the applicant to mitigate any adverse effects on such interests."

Enshrining consultation requirements into the EPSD Act would bolster the Australian Government's commitment to empowering First Nations communities and Traditional Owners to participate in environmental decision making and align with recommendations made in the Samuel Review that:

> *Indigenous Australians are empowered to be engaged and participate in decision making, and their views and knowledge are respectfully and transparently considered in the legislative and policy processes that support the protection and management of the environment [under the EPBC Act].*[18]

NELA has outlined in 4.1 above recommendations to strengthen the language of the Bill in relation to environmental assessment and monitoring of permitted activities. In addition to those submissions, the introduction of a consultation requirement would substantiate the research and analysis of the effects that the proposed activity might have on the marine environment by allowing the decision-maker to take into account a wider set of considerations (such as social, economic and cultural considerations) in determining whether to grant a permit.

NELA accepts that a proponent seeking to inject carbon dioxide streams into sub-seabed geological formations would also be required to obtain the relevant approvals under the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (Cth) (**OPGGS Act**), and may be required to consult with First Nations communities or Traditional Owners under this regime. However, there is insufficient integration and consistency between these two frameworks under the current and proposed iterations of the EPSD Act. NELA's submissions in relation to this lack of integration are set out in more detail in 4.3 below.

4.3 NELA submits that the Bill should expressly recognise where the proposed activities would integrate and interact with other legal frameworks, including Commonwealth, state and territory, and international laws. This would ensure that the EPSD Act is fit for purpose and provides sufficient regulatory certainty.

It is necessary to take a holistic, adaptative, and integrated approach to monitoring and management of Australia's marine environment.[19] The 2009 and 2013 amendments to the London Protocol involve activities in the marine environment that straddle not only Commonwealth, and state and territory boundaries, but also intra-state and territory boundaries, and international borders. As a consequence, the introduction of these amendments would not only impact the EPSD Act but also:

- the EPBC Act;
- the OPGGS Act;
- the *National Greenhouse and Energy Reporting Act 2007* (Cth); and
- other relevant legislation, including those governing the obtaining of necessary environmental approvals and permits under state-based legislation and applicable foreign laws.

Clarifying overlapping regulatory roles and responsibilities

The Bill provides an opportunity for the Australian Government to provide greater regulatory certainty by expressly recognising the various regulatory approvals that would be required in respect of the injection of carbon dioxide streams into sub-seabed geological formulations. For example, under the current regime and that proposed by the Bill, there is likely to be an overlap in the regulatory approvals required under the EPSD Act and the OPPGS Act for the injection of carbon dioxide streams into sub-seabed geological formulations.

---

[18] Samuel Review, 225.
[19] Rowan Trebilco et al, *2021 State of the Environment Report: Marine*, 157.

In the context of the Bill's proposed carbon dioxide stream export provisions, NELA submits that the regulatory roles and responsibilities of the relevant authorities should be clarified, given that the export activities would involve both domestic and international stakeholders. The implementation of the EPSD Act would be simplified and provide greater regulatory certainty to applicants, regulatory authorities, and the public if the regulatory oversight responsibilities of the relevant state agencies in Australia were defined. This clarity becomes even more critical in light of the range of environmental and regulatory approvals that may be required under various Commonwealth, state and territory legislation as well as under foreign legislation.

4.4 NELA *submits* the severity of the penalties that may be imposed under the EPSD Act should be increased. This would ensure the EPSD Act provides sufficient deterrence for any action taken without a permit.

The Bill would amend section 10D(1) of the EPSD Act to insert new offences in connection with the activities covered by the 2009 and 2013 amendments to the London Protocol in Australia. These offences are supplemented by provisions that outline the penalties that may be imposed for carrying out activities in relation to "controlled material" (as defined the EPSD Act) without a permit, relevantly:

- if it is proved that the waste or other matter is "seriously harmful material" in accordance with section 4(1) of the EPSD Act, the maximum penalty for an individual would be 10 years imprisonment, a fine equivalent to 2,000 penalty units, or both; or
- in any other case (i.e. where the waste is not characterised as "seriously harmful material"), the maximum penalty for an individual would be 12 months imprisonment, a fine equivalent 250 penalty units, or both.

Unfortunately, the definition of "seriously harmful material" under the EPSD Act is extremely narrow, including only "radioactive material" because the *Environment Protection (Sea Dumping) Regulations 1983* (Cth) do not prescribe any further material. This means that the carrying out of activities regulated under the EPSD Act without a permit, such as the dumping of carbon dioxide streams and other matter involved with geoengineering activities (to the extent not radioactive), would only attract the lower degree of penalty, where the maximum fine that could be imposed is $78,250.00.[20] Therefore, the proposed penalties are incommensurate to the nature and extent of the harm that may be caused to the marine environment, especially in the context of new technologies that may have unintended impacts or unregulated impacts.

In consideration of the above, NELA submits that the severity of the penalties that may be imposed for carrying out activities regulated under the EPSD Act without a permit that are not defined as "seriously harmful material" should be increased to provide the basis for sufficient deterrence of potential offenders. Given the dire state of the environment in Australia and the potential negative environmental impacts that may be caused by carrying out the activities proposed to be introduced by the Bill, it is essential that the penalties available to the regulator are commensurate with the nature and extent of the harm that may be caused.

[20] As of 1 July 2023, the value of a penalty unit is prescribed as $313 under the *Crimes Act 1914* (Cth).

5. Conclusion

NELA emphasises the need to ensure that the proposed amendments to the EPSD Act do not negatively impact upon Australia's natural environment. By strengthening the environmental protections within the Bill and recognising the fundamental importance of First Nations knowledge and involvement in environmental decision-making, the Australian Government can promote the implementation of new technologies to fight climate change in a way that better upholds environment protection principles that are integral to environmental law, particularly the precautionary principle, evidence-based decision making, equity, and conservation.

Tom Webb, NELA Director and National Secretary

with Shannon Peters (NELA Publications Officer) and Nabeela Raji (NELA Education Officer)

On behalf of the NELA Board