Why the National Environmental Protection Authority (NEPA) should reject the Port of Townsville Ltd (PoTL) application and require an independent and comprehensive assessment of the environmental costs and benefits of alternative Dredge Material Placement Areas (DMPAs).

- The proposed DMPA adjoins and is surrounded by the Great Barrier Reef Marine Park (GBRMP), and is within the Great Barrier Reef World Heritage Area (GBRWHA) and the Cleveland Bay Dugong Protected Area. It is also part of the GBR Region, so covered by the objectives of the GBRMP Act. For all these reasons, clear environmental advantages of the current site over alternative sites must be demonstrated. The application fails to demonstrate that the existing DMPA site is the best long term option for dumping the spoil.

- Despite extolling the environmental and social values of Cleveland Bay and Magnetic Island, the protection of these values through improved dredge management is not considered within this application.

- Community concerns about the current DMPA have been consistently ignored and requests for important information deflected. The public opposition to the current site has been rejected by PoTL and the application proposes no change to its current location.

- The current DMPA was selected despite warnings of "chronic leakage" due to re-mobilisation of the dumped spoil, with raised concentrations of suspended sediment to the south-west of the DMPA likely for "weeks to years". Independent sediment modelling by Sinclair Knight Merz in 2013 confirmed the likelihood of significant sediment impacts on Magnetic Island and Cleveland Bay.

- There are no improvements proposed in this application, so it fails to meet basic and crucial environmental obligations under legislation and policy that were established to improve environmental outcomes. These include:

  Obligations under the Transport Infrastructure Act 1994 to “reduce adverse environmental impacts”

  Principles in Decision Making in the Reef 2050 Plan, such as the principles of ecologically sustainable development, including the precautionary principle, avoiding impacts, and fostering actions that restore ecosystem health and resilience to deliver an overall improvement in the Reef’s condition.

  The aims of the 2016 Maintenance Dredging Strategy for GBRWHA Ports to better manage and lessen the impacts of maintenance dredging, and ensure minimal impact on the Reef and other marine environments.

  The objectives of the Long Term Maintenance Dredging Management Plan for the Port of Townsville to maintain the Outstanding Universal Value (OUV) of the GBRWHA and sensitive receptors surrounding the Port Townsville.

- The “reduced likelihood” of spoil mobilisation from the current site claimed by the application only exists in comparison to shallower sites. Increasing windiness due to global warming will make re-suspension more frequent, and the impacts will be exacerbated by the increased quantities of spoil proposed to be dumped. The comparison needs to be made between the current DMPA and deeper alternatives.

- Since 1965 PoTL has systematically moved the DMPA into ever deeper waters in response to environmental damage and community outcry. It has now decided for logistical reasons that it will move no more, despite continuing environmental harm and community objections.

- While sea-dumping of dredge spoil is not a preferred option, the current amount of spoil (up to 575,000 m3 annually) makes land based solutions unlikely. If proper modelling of alternative deeper dump sites shows a reduced environmental impact, and less siltation in the channel, a deeper site may also make land-based options more viable.

- Magnetic Island once supported coral reefs equal to anything on the outer reef, and water clarity often exceeded 10m. It is now rarely more than 2 or 3m. Previous Port publications show the bay floor has been dominated by a surface layer of dredge spoil for many years. The Port doesn't acknowledge the origin of this layer so denies the continuing impacts of its dredging and dumping regime.

- The application provides no evidence that the environmental benefits of alternative deep water sites have been comprehensively assessed, or logistical solutions sought, despite a desktop exercise in 2024 that showed clear environmental benefits in moving to deeper water. Despite this the application claims the current DMPA provides "the best balance between environmental outcomes, operational efficiency and long-term viability".

- Despite the original assessment of the current DMPA raising concerns about "chronic" leakage from the site PoTL now claims that "the material placed in the area largely remains in the Cleveland Bay DMPA" and dumping there "protects the marine environments in Cleveland Bay." There is substantial evidence to the contrary.

- For example the 2013 Environmental Impact Study for the Port Expansion project says of the current DMPA: "ambient waves and currents have the potential to re-suspend the dredge material and distribute the sediment more widely", citing modelling and tracing experiments including:

  > "The 3D modelling study undertaken by Bode et al (1994) showed that particles released from the DMPA tend to drift towards Magnetic Island under prevailing south-easterly and southerly winds."
  >
  > "The fluorescent tracer experiments conducted by Sinclair Knight Merz (1995) indicated that sediments at the DMPA are highly mobile…. possibly 80-90% of silt-sized material was dispersed beyond the 1.5km square sampling grid within the DMPA."
  >
  > "The recent fluorescent tracer experiments undertaken by ETS Worldwide confirmed that the existing DMPA is dispersive and found that tracer particles were transported and deposited in almost all directions."

- **The PoTL hydrological models for the application predict very different outcomes from this earlier modelling. Transparency and public confidence require that independent modelling be done so that the environmental impacts of the current DMPA and alternative deep water sites can be properly compared.**

- The PoTL Long-Term Maintenance Dredging Management Plan (LTMDMP) will need to be reviewed within the next two years. This application ties the "review" of the "new" LTMDMP to this application to further support another 10 years of business as usual. **By doing so the Port is avoiding focussed scrutiny of this important management instrument**.